This document provides an archival record of the academic programs offered during the 2009-10 academic year. It is a printable option of the online catalog for accreditation organizations, agencies and university offices for data collection, evaluation purposes and referencing. Academic advisors, faculty and students should refer to the online version of the academic catalog.

To navigate this document version of the Academic Catalog 2009-10, refer to the Table of Contents and the bookmarks provided. Most undergraduate degrees have a corresponding major map that includes the critical requirements, order of courses and grade requirements for that degree. The major maps are provided in the final sections of this document.

Corrections or additions to the Academic Catalog Archive 2009-10 program information and major maps, as of July 31, 2009, may be provided in a future addendum. For inquiries or questions please contact academic.catalog@asu.edu.
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HIGHER LEARNING COMMISSION
30 N LA SALLE ST
SUITE 2400
CHICAGO IL 60602-2504

Programs in the various colleges, schools, divisions, and departments are accredited by, affiliated with, or members of national bodies as described in the

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<tr>
<td>BSP, MUEP</td>
<td>Planning Accreditation Board</td>
</tr>
<tr>
<td>MArch</td>
<td>National Architectural Accrediting Board</td>
</tr>
</tbody>
</table>

#### Mary Lou Fulton College of Education

<table>
<thead>
<tr>
<th>Unit or Program</th>
<th>Accredited By</th>
</tr>
</thead>
<tbody>
<tr>
<td>MC, Counseling</td>
<td>Council for Accreditation of Counseling and Related Educational Programs</td>
</tr>
<tr>
<td>PhD, Counseling Psychology; Educational Psychology with a concentration in school psychology</td>
<td>American Psychological Association</td>
</tr>
<tr>
<td>Sandra Day O'Connor College of Law</td>
<td>American Bar Association</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td><strong>College of Liberal Arts and Sciences</strong></td>
<td></td>
</tr>
<tr>
<td>JD</td>
<td></td>
</tr>
<tr>
<td><strong>College of Liberal Arts and Sciences</strong></td>
<td></td>
</tr>
<tr>
<td>BS, Clinical Laboratory Sciences</td>
<td>National Accrediting Agency for Clinical Laboratory Sciences</td>
</tr>
<tr>
<td>MS, Communication Disorders, AuD</td>
<td>American Speech-Language-Hearing Association</td>
</tr>
<tr>
<td>PhD, Psychology, with a concentration in clinical psychology</td>
<td>American Psychological Association</td>
</tr>
<tr>
<td><strong>Ira A. Fulton School of Engineering</strong></td>
<td></td>
</tr>
<tr>
<td>BS, Computer Science</td>
<td>Computing Accreditation Commission of the Accreditation Board for Engineering and Technology, Inc.</td>
</tr>
<tr>
<td>BS, Construction</td>
<td>American Council for Construction Education</td>
</tr>
<tr>
<td>BSE, Aerospace Engineering; Bioengineering; Chemical Engineering; Civil Engineering; Computer Systems Engineering; Electrical Engineering; Industrial Engineering; Materials Science and Engineering; Mechanical Engineering</td>
<td>Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology, Inc.</td>
</tr>
<tr>
<td><strong>Katherine K. Herberger College of the Arts</strong></td>
<td></td>
</tr>
<tr>
<td>School of Music</td>
<td>National Association of Schools of Music</td>
</tr>
<tr>
<td><strong>W. P. Carey School of Business</strong></td>
<td></td>
</tr>
<tr>
<td>All programs</td>
<td>AACSB International—The Association to Advance Collegiate Schools of Business</td>
</tr>
<tr>
<td>MHSM, School of Health Management and Policy</td>
<td>Accrediting Commission on Education for Health Services Administration</td>
</tr>
<tr>
<td>School of Accountancy</td>
<td>AACSB International—The Association to Advance Collegiate Schools of Business</td>
</tr>
<tr>
<td><strong>Walter Cronkite School of Journalism and Mass Communication</strong></td>
<td></td>
</tr>
<tr>
<td>All programs</td>
<td>Accrediting Council on Education in Journalism and Mass Communications</td>
</tr>
</tbody>
</table>

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**Academic Accreditation at the West Campus**

<table>
<thead>
<tr>
<th>Unit or Program</th>
<th>Accredited By</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>College of Human Services</strong></td>
<td></td>
</tr>
<tr>
<td>BS, Recreation and Tourism Management</td>
<td>National Recreation and Park Association/American Association of Physical Activity and Recreation Council on Accreditation</td>
</tr>
<tr>
<td>School of Global Management and Leadership</td>
<td></td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>--</td>
</tr>
<tr>
<td>All business and accountancy programs</td>
<td>AACSB International—The Association to Advance Collegiate Schools of Business</td>
</tr>
</tbody>
</table>
Fall 2009 Semester Calendar
University Registrar's Office

February 27, 2009
Schedule of Classes Available - Online
Registration & Tuition Guide Available - Online
Enrollment Appointments Begin (tentative)
Students can drop/add courses starting from the assignment of their Enrollment Appointment through the Drop/Add Deadline Date.

March 2, 2009
Suggested Postmark to Meet Tuition/Fee Payment Deadlines
$50.00 Late Registration Fee Begins for all registration from today through the end of the term
Tuition/Fee Payment Deadline - for registration from March 2 - August 16, 2009
Students with unpaid tuition charges automatically enrolled in tuition installment plan on 08/19/09.

March 2, 2009
Enrollment Appointments Beginning (tentative)

Students can drop/add courses starting from the assignment of their Enrollment Appointment through the Drop/Add Deadline Date.

August 4, 2009
TBD
Extended Hours (Registration Sites Only)
First Day of Classes

August 17, 2009
Reg
Late Registration & Drop/Add Deadline - In Person

August 24, 2009
Tuition & Fees 100% Refund Deadline
Tuition and certain registration fees are subject to 100% refund through September 6, 2009 - (applicable to classes held in sessions longer than eight weeks). Tuition and fees are nonrefundable thereafter and students are required to pay all tuition and fees for drops and withdrawals occurring on or after September 6, 2009. Certain registration fees are nonrefundable on or after the first day of the semester. Visit Student Business Services at www.asu.edu/sbs for additional information.

August 18, 2009
Enrollment Appointments Beginning (tentative)

Students can drop/add courses starting from the assignment of their Enrollment Appointment through the Drop/Add Deadline Date.

August 24, 2009
Suggested Postmark to Meet Tuition/Fee Payment Deadline

August 24, 2009
First Day of Classes

August 24-30, 2009 Late Registration & Drop/Add Deadline - Online

August 28, 2009
Suggested Postmark to Meet Tuition/Fee Payment Deadline
Students with unpaid tuition charges automatically enrolled in tuition installment plan on 09/15/09.

September 6, 2009
Tuition/Fee Payment Deadline - for registration from August 16 - September 6, 2009
Students with unpaid tuition charges automatically enrolled in tuition installment plan on 09/15/09.

September 7, 2009
Labor Day Observed

September 14, 2009
University 21st Day

September 14, 2009
Tuition/Fee Payment Deadline - for registration from September 7-14, 2009
Students with unpaid tuition charges automatically enrolled in tuition installment plan on 09/15/09.

September 21-28, 2009
Academic Status Report #1

September 28, 2009
University 35th Day

October 2, 2009
Deadline for Appealing Residency Classification Decision

October 15, 2009
Graduation Filing Deadline

October 26-28, 2009
Academic Status Report #2

November 6, 2009
Course Withdrawal Deadline - In Person

November 6, 2009
Course Withdrawal Deadline - Online

November 11, 2009
Veterans Day Observed

November 26-28, 2009
Thanksgiving Holiday Observed

December 8, 2009
Complete Withdrawal Deadline -Online & In Person
(Beginning the First Day of Classes, Undergraduate Students Must Request a Complete Withdrawal InPerson)

December 8, 2009
Last Day of Classes and Last Day to Process Transaction

December 9, 2009
Reading Day

December 8-16, 2009
Final Exams

December 17, 2009
Commencement

December 14-21, 2009
Final Grades Due

December 22-29, 2009
End of Semester Processing (tentative)

Arizona State University Registration Sites:
Downtown Phoenix  Enrollment Services, University Center Bldg., Suite 116 602-496-4372
Polytechnic  Registration Services, QUAD 2 Bldg. 350 480-727-3278
Tempe  Records Information Office, SSV Room 140 480-965-3124
West  Registration Services, University Center Bldg. Room 120 602-543-8203

Update: June 8, 2009

Dates in yellow indicate changes or updates since the last published date of the semester calendar.
All dates are tentative and subject to change without notice.

Academic Catalog Archive 2009-10  24
September 30, 2009
October 5, 2009 – December 29, 2009
October 15, 2009
TBD
December 22, 2009
December 24-25, 2009 & January 1, 2010
TBD
December 29, 2009
December 29, 2009
December 29, 2009
December 30, 2009 - January 6, 2010
December 30, 2009 - January 14, 2010
TBD
January 14, 2010
January 14, 2010
January 14, 2010
January 15, 2010
February 2, 2010

Class Schedules Available
Open Registration and Drop/Add
Graduation Filing Deadline
Suggested Postmark to Meet Tuition/Fee Payment Deadline
$50.00 Late Registration Fee Begins for all registration from today through the end of the term

Registration Sites are closed; Holiday Observed
Tuition/Fee Payment Deadline
First Day of Classes
Drop Add Deadline
Residency Classification Petition Deadline
Course Withdrawal Deadline
Complete Withdrawal Deadline
Tuition & Fees 100% Refund Deadline
Last Day to Process Transactions
Last Day of Classes
Degree Conferral Date
Final Grades Due
Deadline for Appealing Residency Classification Decision

Arizona State University Registration Sites:

Downtown Phoenix
Enrollment Services University Center Bldg., Suite 116
602-496-4372

Polytechnic
Enrollment Services QUAD 2 Bldg. 350
480-727-3278

Tempe
Records Information Office Student Services Building, Room 140
480-965-3124

West
Enrollment Services University Center Bldg. Rm 120
602-543-8203

Updated: June 8, 2009

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This document is updated and published on the web at http://students.asu.edu/registrar-semester-calendar
## Spring 2010 Semester Calendar

**University Registrar’s Office**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 21, 2009</td>
<td>Schedule of Classes Available - Online <em>(tentative)</em></td>
</tr>
<tr>
<td>November 2, 2009</td>
<td>Registration &amp; Tuition Guide Available - Online</td>
</tr>
<tr>
<td>November 2-22, 2009</td>
<td>Enrollment Appointments Begin</td>
</tr>
<tr>
<td></td>
<td>Students can drop/add courses starting from the assignment of their Enrollment Appointment through the Drop/Add Deadline Date.</td>
</tr>
<tr>
<td>November 11, 2009</td>
<td>Veterans Day Holiday Observed</td>
</tr>
<tr>
<td>November 26-27, 2009</td>
<td>Thanksgiving Holiday Observed</td>
</tr>
<tr>
<td>TBD</td>
<td>Suggested Postmark to Meet Tuition/Fee Payment</td>
</tr>
<tr>
<td>January 1, 2010</td>
<td>New Year’s Day Holiday Observed</td>
</tr>
<tr>
<td>January 12, 2010</td>
<td>$50.00 Late Registration Fee Begins for all registration from today through the end of the term</td>
</tr>
<tr>
<td>January 18, 2010</td>
<td>Martin Luther King Jr Holiday Observed</td>
</tr>
<tr>
<td>January 19, 2010</td>
<td>First Day of Classes</td>
</tr>
<tr>
<td>January 19 -22, 2010</td>
<td>Late Registration &amp; Drop/Add Deadline - In Person</td>
</tr>
<tr>
<td>January 19-24, 2010</td>
<td>Late Registration &amp; Drop/Add Deadline - Online</td>
</tr>
<tr>
<td>January 22, 2010</td>
<td>Residency Classification Petition Deadline</td>
</tr>
<tr>
<td>TBD</td>
<td>Tuition &amp; Fees 100% Refund Deadline</td>
</tr>
<tr>
<td></td>
<td>Tuition and certain registration fees are subject to 100% refund through TBD - (applicable to classes held in sessions longer than eight weeks). Tuition and fees are nonrefundable thereafter and students are required to pay all tuition and fees for drops and withdrawals occurring on or after TBD. Certain registration fees are nonrefundable on or after the first day of the semester.</td>
</tr>
<tr>
<td>February 8, 2010</td>
<td>University 21st Day</td>
</tr>
<tr>
<td>February 22 - March 1, 2010</td>
<td>Academic Status Report #1</td>
</tr>
<tr>
<td>February 22, 2010</td>
<td>University 35th Day</td>
</tr>
<tr>
<td>February 26, 2010</td>
<td>Deadline for Appealing Residency Classification Decision</td>
</tr>
<tr>
<td>March 14-21, 2010</td>
<td>Spring Break</td>
</tr>
<tr>
<td>March 29, 2010 - April 5, 2010</td>
<td>Academic Status Report #2</td>
</tr>
<tr>
<td>April 9, 2010</td>
<td>Course Withdrawal Deadline - In Person</td>
</tr>
<tr>
<td>April 11, 2010</td>
<td>Course Withdrawal Deadline - Online</td>
</tr>
<tr>
<td>March 31, 2010</td>
<td>Graduation Filing Deadline</td>
</tr>
<tr>
<td>May 4, 2010</td>
<td>Complete Withdrawal Deadline - Online &amp; In Person</td>
</tr>
<tr>
<td></td>
<td>(Beginning the First Day of Classes, Undergraduate Students Must Request a Complete Withdrawal InPerson)</td>
</tr>
<tr>
<td>May 4, 2010</td>
<td>Last Day of Classes and Last Day to Process Transaction</td>
</tr>
<tr>
<td>May 5, 2010</td>
<td>Reading Day</td>
</tr>
<tr>
<td>May 6-9, 10-12, 2010</td>
<td>Final Exams</td>
</tr>
<tr>
<td>May 13, 2010</td>
<td>Commencement</td>
</tr>
<tr>
<td>May 10-17, 2010</td>
<td>Final Grades Due</td>
</tr>
<tr>
<td>May 18, 2010</td>
<td>End of Semester Processing</td>
</tr>
</tbody>
</table>

### Arizona State University Registration Sites:

<table>
<thead>
<tr>
<th>Location</th>
<th>Address</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Downtown Phoenix</td>
<td>Enrollment Services, University Center Bldg., Suite 116</td>
<td>602-496-4372</td>
</tr>
<tr>
<td>Polytechnic</td>
<td>Registration Services, QUAD 2 Bldg. 350</td>
<td>480-727-3278</td>
</tr>
<tr>
<td>Tempe</td>
<td>Records Information Office, SSV Room 140</td>
<td>480-965-3124</td>
</tr>
<tr>
<td>West</td>
<td>Registration Services, University Center Bldg. Room 120</td>
<td>602-543-8203</td>
</tr>
</tbody>
</table>

**Update: July 15, 2009**

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**All dates are tentative and subject to change without notice.**

**Drop/withdrawal deadlines are based on a regular 16-week term.**

**If a class is scheduled in a session that is less than 16 weeks, the deadlines are prorated.**

**Dates in yellow indicate changes or updates since the last published date of the semester calendar.**

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This document is updated and published on the web at http://students.asu.edu/registrar-semester-calendar
Summer 2010 Semester Calendar
University Registrar's Office

Summer 2010: June 1 - August 6, 2010

February 16, 2010
Schedule of Classes Available - Online (tentative)
February 17, 2010
Registration Begins (tentative)
TBD
Tuition/Fee Payment Deadline
   Students with unpaid tuition charges automatically enrolled in tuition installment plan
June 2, 2010
Residency Classification Petition Deadline
July 1, 2010
Graduation Filing Deadline
July 7, 2010
Deadline for Appealing Residency Classification Decision
August 6, 2010
Degree Conferral Date

1st Summer Session
(5 week session: June 1 - July 2, 2010)
(8 week session: June 1 - July 23, 2010)

February 17, 2010 - June 2, 2010
Open Registration & Drop/Add
May 24, 2010
$50.00 Late Registration Fee Begins for all registration from today through the end of the term
June 1, 2010
First Day of Classes
June 2, 2010
Drop Add Deadline
TBD
Tuition & Fees 100% Refund Deadline (both the 5 week & 8 week sessions)
June 18, 2010
Course Withdrawal Deadline (5 week & 8 week sessions)
July 2, 2010
Complete Withdrawal Deadline (5 week session)
July 2, 2010
Last Day to Process Transactions (5 week session)
July 2, 2010
Last Day of Classes (5 week session)
July 5, 2010
Independence Day Observed
July 6, 2010
Final Grades Due (5 week session)
July 23, 2010
Complete Withdrawal Deadline (8 week session)
July 23, 2010
Last Day to Process Transactions (8 week session)
July 23, 2010
Last Day of Classes (8 week session)
July 27, 2010
Final Grades Due (8 week session)

2nd Summer Session
(5 week session: July 6 - August 6, 2010)

February 17 - July 7, 2010
Open Registration & Drop/Add
June 28, 2010
$50.00 Late Registration Fee Begins for all registration from today through the end of the term
July 6, 2010
First Day of Classes
July 7, 2010
Drop Add Deadline
TBD
Tuition & Fees 100% Refund Deadline (2nd 5 week only)
July 7, 2010
Residency Classification Petition Deadline
   (For students only registered in the 2nd summer session)
July 23, 2010
Course Withdrawal Deadline
August 6, 2010
Complete Withdrawal Deadline
August 6, 2010
Last Day to Process Transactions
August 6, 2010
Last Day of Classes
August 6, 2010
Degree Conferral Date
August 10, 2010
Final Grades Due
August 11, 2010
Deadline for Appealing Residency Classification Decision
   (For students only registered & that petition for the 2nd summer session)
## Arizona State University Registration Sites:

<table>
<thead>
<tr>
<th>Location</th>
<th>Department</th>
<th>Address</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Downtown Phoenix</td>
<td>Enrollment Services</td>
<td>University Center Bldg., Suite 116</td>
<td>602-496-4372</td>
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<td>QUAD 2 Bldg. 350</td>
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</tr>
<tr>
<td>Tempe</td>
<td>Records Information Office</td>
<td>Student Services Bldg, Room 140</td>
<td>480-965-3124</td>
</tr>
<tr>
<td>West</td>
<td>Registration Services</td>
<td>University Center Bldg. Rm 120</td>
<td>602-543-8203</td>
</tr>
</tbody>
</table>

Update: July 7, 2009

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University Policies

Undergraduate

Admission Requirements

Freshman Admission Requirements, Preferential Deadlines and Steps

Fall Semester 2009

After March 1, 2009, ASU will accept freshman applications by exception only. Qualified students will be initially admitted to University College.

A freshman is a student who is applying to ASU while enrolled in high school or a student who has not attended college since high school graduation.

Admission Requirements
Students applying for freshman admission must meet graduation, aptitude and competency requirements.

Graduation Requirement
Students must be high school graduates.

Home School students, upon completion of secondary school education, should complete the Affidavit of Completion of Secondary School Education. The affidavit must be completed by parent/guardian and notarized. Laboratory sciences must be conducted in real labs. (If you have questions about the laboratory sciences requirement, please call 480.965.7788.) Home School students with a GED score of 500 or above may be admissible without transcripts.

Aptitude Requirement
Students must meet one of the following aptitude requirements:

- 3.0 GPA in competency courses (2.5 - 2.99 considered)
- Top 25% (top 26-50% considered)
- ACT 22 (24 nonresidents)*
- SAT Reasoning 1040 (1110 nonresidents)*

*ASU does not require the writing portion of these tests.

Competency Requirement
Admission may be granted with one deficiency in no more than two competency areas. Deficiencies in both math and laboratory science are not acceptable. Students must earn a minimum 2.0 in any subject area. Most competencies may also be met by test scores or college courses. See Detailed Competency Requirements for more information.

- English - 4 years (composition/literature based)
• Math - 4 years - Algebra 1, Geometry, Algebra II and one course requiring Algebra II as a prerequisite.
• Laboratory Science - 3 years total (1 year each from any of the following areas are accepted: Biology, Chemistry, Earth Science, Integrated Sciences, and Physics)
• Social Science - 2 years (including one year American History)
• Foreign Language - 2 years (same language)
• Fine Arts - 1 year

**Higher Requirements for Some ASU Schools/Colleges**

Some colleges/schools have higher requirements for admission to their majors. To learn more about requirements, find the major of your interest at Degree Search. You should select a second major on your application if your first choice has higher requirements.

**Application Steps**

1. Complete the Undergraduate Admission Application. ASU prefers that you apply online.
2. Submit the nonrefundable application fee
   - Arizona Residents - $25
   - Non-residents - Fall 2008, Winter 2008, Spring 2009 and Summer 2009 the application fee is $50. Starting Fall 2009 the application fee is $55.
3. Have your ACT or SAT scores (TOEFL score for international students) sent directly to ASU. ACT or SAT scores are required for merit scholarship consideration and for ASU course placement.
4. Applicants must request transcripts from each educational institution attended. Official transcripts must be mailed or sent electronically directly to Undergraduate Admissions by the records office of the issuing institution(s). ASU does not accept transcripts sent or carried by hand by applicants themselves or transmitted by fax. High school transcripts must show GPA and date of graduation. ASU requires an English translation of all foreign-language transcripts.

ASU will review your application file once you have submitted all materials. To see if you have any missing items, and to view your admission status, sign in at My ASU using your ASURITE ID, which is sent to you after you apply for admission.

**Mailing Address (All materials, all campuses)**

Undergraduate Admissions
Arizona State University
PO Box 870112
Tempe, AZ 85287-0112

Undergraduate Admissions Contact Information and Office Locations

**Office Locations**
Downtown Phoenix campus
Phone: 602-496-4372
Location: University Center Building, Suite 166
Mailing Address:
Enrollment Services
411 N. Central Ave., Suite 166
Phoenix, Arizona 85004
Monday-Friday 8:00 a.m. – 5:00 p.m.

Tempe campus
Phone: 480-965-7788
Fax: 480-965-3610
Location: Student Services Building, Room 110
Mailing Address:
Undergraduate Admissions
PO Box 870112
Tempe, Arizona 85287
Monday-Wednesday: 8:00 a.m. – 5:00 p.m.
Thursday: 9:00 a.m. - 5:00 p.m.
Friday: 8:00 a.m. – 5:00 p.m.

Polytechnic campus
Phone: 480-727-1359
Fax: 480-727-1360
Location: Building #380
Mailing Address:
7107 E. Tiburon
Quad 1
Mesa, Arizona 85212
Monday-Friday 8:00 a.m. – 5:00 p.m.

West campus
Phone: 602-543-8203
Fax: 602-543-8312
Location: University Center, Room 120
Mailing Address:
Admission and Enrollment Services
PO Box 37100
My Checklist
Complete each of these steps for enrollment to ASU.

1. Visit ASU
2. Apply
3. Application fee, transcripts and scores
   - If you did not submit your application fee with your admission application, mail a check or money order to ASU. You may also call Undergraduate Admissions (480-965-7788, option 5) and pay with a credit card (Visa/Mastercard).
   - Ask each high school and college you have attended to send your official transcripts directly to ASU. Hand-delivered transcripts are not official.
   - If your ACT or SAT score does not appear on your high school transcript, ask ACT www.act.org or the College Board (SAT) www.collegeboard.com to send your scores directly to ASU.
   - If you have taken AP, IB, and/or CLEP exams, request that your scores be sent directly to ASU.
   - If you are an international applicant have your TOEFL score sent to ASU directly from testing agency.
   - If you are concurrently enrolled in high school and college courses, or if you are dually enrolled in college courses taught on your high school campus, you must request official transcripts from both your high school and the college offering the dual credit to be sent to ASU. ASU will not award college credit that appears only on high school transcripts.
   - Upon graduation from high school or completion of your current college semester, request that a final transcript be sent from your school to ASU.

Mail application fee, and have transcripts and test scores sent to:

Undergraduate Admissions
Arizona State University
PO Box 870112
Tempe, AZ 85287-0112

4. Activate Accounts
After you have applied for admission, you will be issued an ASURITE ID, which will give you access to online student services, including the ability to check your admission status.

5. Financial Aid and Scholarships
ASU encourages all students to complete the Free Application for Federal Student
Aid (FAFSA). The FAFSA becomes available in January. ASU’s priority date for submission is March 1.

Search and apply for scholarships that may fit your profile, talents and academic interests.

Note that Arizona law requires verification of citizenship or other lawful presence in the United States for all students who are receiving in-state tuition and/or financial aid funded by state money.

6. Housing and Dining
ASU expects all freshmen to live on campus, and ASU encourages freshmen to live on the campus of their major so that they can enjoy the full benefit of their academic experience.

7. Immunization
Your MMR verification must be submitted to ASU before you can register for classes.

8. Orientation and Registration
ASU expects all freshmen to attend orientation. During this program freshmen will be able to meet with their academic advisor, learn about university expectations and register for classes.

9. ASU Sun Card
The Sun Card is the official photo ID card of ASU. All in-person transactions require a photo ID.

Obtain your Sun Card during orientation. Learn more about Sun Card.

10. Parking Decals and Commuter Options
Students may purchase parking decals online. (Students living in the residence halls will receive information with their hall assignments.) ASU also offers a variety of commuter options including free public bus passes and free shuttles between the ASU campuses.

11. Tuition and Fees
Tuition is based on your residency for tuition purposes status. Note that Arizona law requires verification of citizenship or other lawful presence in the United States for all students who are receiving in-state tuition and/or financial aid funded by state money.

Payment Information. Sign in to pay your tuition and fees.

Check tuition payment deadlines. You will not lose your classes if you do not pay by ASU’s published deadline; however, you will automatically be enrolled in the Tuition Installment Plan and charged a nonrefundable $75.00 enrollment fee.
12. Final Transcripts
Upon graduation from high school or completion of your current college semester, request that a final official transcript be sent from your school directly to ASU.

Undergraduate Admissions
Arizona State University
PO Box 870112
Tempe, AZ 85287-0112

13. Welcome Program
Source URL: http://students.asu.edu/my-checklist

Transfer Admission Requirements
Transfer students must meet the following requirements for admission to ASU.

Graduation Requirement
Transfer applicants must meet at least one of the following:

- Be a high school graduate.
- Complete an Arizona General Education Curriculum (AGEC) at an accredited Arizona community college.
- Complete an associate degree or higher.

GPA Requirement (A=4.00)
Transferring with 24 credit hours or more:

- Arizona residents: 2.00.
- Nonresidents: 2.50 (2.00-2.49 considered).

Transferring with fewer than 24 credit hours

- Meet freshman competency requirements.

School/College Requirements
Some programs have additional requirements. Please check with your desired program of study for specific details. See degree search for major-specific admission information.

Preferential Deadlines
Applications received after preferential deadlines will be considered on a space-available basis.

Fall semester: June 1

Winter session: Sept. 15

Spring semester: Dec. 1
Summer session: March 1

Application Procedure

1. Complete the admission application.
2. Submit the nonrefundable application fee:
   - Arizona residents: $25.
   - Nonresidents: $55.
3. Request to have your official transcript(s) mailed directly from your school(s) to transfer admissions at the address listed below. It must be a certified copy.
   - If you have completed an associate degree or higher, please request official transcripts from all institutions you have attended (post–high school course work).
   - If you have not completed an associate degree or higher, please request your official high school transcript showing proof of graduation, in addition to transcripts from all institutions you have previously attended or currently are attending (post–high school course work).
   - Upon graduation or completion of your final semester at your current institution, request that a complete transcript be sent directly to ASU to determine final admission status. Receipt of your final transcript impacts financial aid disbursement and eligibility to register for future classes.
4. Apply Now

Mailing Address
All admission materials, for all campuses, should be sent to:

Transfer Admissions
Arizona State University
P.O. Box 870112
Tempe, AZ 85287-0112

Source URL: http://transfer.asu.edu/transferadmission

International Admission
ASU is proud of its tradition of welcoming students from around the world. ASU's international students are enrolled in every college or school across all four of the university's campuses in metropolitan Phoenix. A vibrant international student population translates to a stronger multicultural experience at ASU.

   Application Requirements
   Application Deadlines
   Application Procedures
   After You Have Been Admitted to AS
Application Requirements
An international student is a student who is not a citizen of, or a permanent resident of, or a refugee in the United States of America (F & J Visas).

Aptitude Requirement

- Freshmen must have a 3.0 grade point average (GPA) (a B or better where A=4.0) from a secondary school.
- Transfer students must have a minimum 2.5 GPA (a C+ or better where A=4.0) from a college or university.
- International students do not need to take the ACT or SAT tests for admission, however, they may be required for entrances into some ASU schools/colleges.

English Language Proficiency Requirement
Applicants whose native language is not English (identified by the U.S. Department of Stat Bureau of Public Affairs) must provide evidence of English language proficiency. The English proficiency requirement may be fulfilled by meeting one of the following:

- Minimum score of 500 (paper-based), 173 (computer-based), or 61 (internet-based) on the Test of English as a Foreign Language (TOEFL)
- Minimum overall band of 6.0 with no band below 5.5 on the International English Language Testing System (IELTS)

Exceptions to the English (TOEFL/IELTS) Requirement:

- Applicants who have completed their junior and senior years in a U.S. high school with SAT Verbal score of 550 or ACT English score of 23.
- Applicants who have completed a minimum of 48 transferable semester credits including 6 credits of freshman English composition at a U.S. college or university with a cumulative GPA of 2.5 or higher.
- Applicants holding a bachelor’s degree from a regionally accredited U.S. college or university.
- Applicants who have completed four years of high school in a U.S. high school. These applicants are subject to high school competency requirements.
- The TOEFL is not required for admission for applicants who have successfully completed the Advanced 2 level of the American English and Culture Program (AECP) at Arizona State University.

Competency Requirement
International students who attended 4 years of high school in the United States are required to meet the competency requirements.

- English - 4 years (composition/literature based)
• Math - 4 years - Algebra 1, Geometry, Algebra II and one course requiring Algebra II as a prerequisite.
• Laboratory Science - 3 years total (1 year each from any of the following areas are accepted: Biology, Chemistry, Earth Science, Integrated Sciences, and Physics)
• Social Science - 2 years (including one year American History)
• Foreign Language - 2 years (same language)
• Fine Arts - 1 year

Higher Requirements for Some ASU Schools/Colleges
Some colleges/schools have higher standards for admission. International applicants must meet general international admission requirements as well as the appropriate freshman or transfer college/school requirements of their major. See degree search for details for the major of interest.

Financial Guarantee
All international applicants on F1 or J1 visas must provide a Financial Guarantee to show evidence of sufficient funds available for their studies before the application can be processed. In addition, the US Bureau of Citizenship and Immigration Services (BCIS) requires ASU to obtain additional information prior to processing your visa application. You must go to www.asu.edu/interactive and login, and then select Immigration (INS) Records Entry for F1 and J1 VISAS. Failure to complete the required immigration procedure may cause you to lose student visa status. Contact the International Student Office at ASU for immigration information at (480) 965-7451 or ISO@asu.edu.

Preferential Application Deadlines
You must submit the Application for Undergraduate Admission, along with the application fee, by the deadline specified for each semester. In order to expedite the evaluation of your application, also submit official transcripts, test scores and supporting credentials immediately.

Fall Semester 2009
ASU’s preferential international application deadline for fall semester is May 1, 2009. Space is limited in some programs and admission to these programs is more competitive.

International students who have been admitted for the fall semester may begin attending classes as early as summer session.

Spring Semester 2010
Preferential application deadline is October 1, 2009.

Application Procedures
1. Complete the Undergraduate Admission Application. ASU prefers students to apply online. If a paper application is completed, it must be mailed to the mailing address below.
2. Submit the nonrefundable application fee. Fall 2008, Winter 2008, Spring 2009 and Summer 2009 the application fee is $50 (U.S. dollars.) Starting Fall 2009 the application fee is $55 (U.S. dollars.) You may pay with a credit card with the online application or submit a non-refundable application fee in the form of a check or money order drawn on a U.S. Banking Affiliate and made payable to Arizona State University. Do not send cash or international postal money orders. Application fees cannot be waived or transferred to a future application.

3. Request that an official transcript be sent directly from your school(s) to Undergraduate Admissions. Upon graduation or completion of the semester, request that a final transcript be sent directly to ASU to determine final admission status.


   Have your ACT, SAT, TOEFL or IELTS score sent directly to ASU.

   TOEFL: The official TOEFL (Test of English as a Foreign Language) score report can be sent directly to ASU from the Educational Testing Service. ASU’s TOEFL institutional code is 4007. For information about this test and registration procedures, contact ETS at PO Box 6151 Princeton, NJ 08541-6151, USA or visit www.toefl.org.

   IELTS: For information about this test and registration procedures, contact the IELTS Office, University of Cambridge Local Examination Syndicate, 1 Hills Road, Cambridge/CB1 2EU, UK or visit www.ielts.org.

5. Submit your financial guarantee. In compliance with Bureau of Citizenship and Immigration Services regulations, all international applicants on the F-1 (student) or J-1 (exchange) visa must provide evidence of sufficient funds available for their studies. The Financial Guarantee, dated within the past six months, must be co-signed by an authorized bank or representative of a recognized sponsoring agency in the U.S.A. An Affidavit of Support cannot be used in lieu of a bank statement. ASU has a Financial Guarantee Form (.pdf file). ASU requires a bank statement or a bank letterhead that has been cosigned by a banking official. Review estimated expenses.

   *To complete a paper application:

   Make an online request for an application to be sent to you via mail or fax. Write to the address below to request an application.

   Download the application and send the completed application and all supporting documents (application fee, transcripts, test scores and the financial guarantee) to the address listed below. Complete and sign the application (incomplete, unsigned applications cannot be processed).

   Mailing Address
   Undergraduate Admissions
After You Have Been Admitted to ASU Visa, Immigration Procedures

- Admission to ASU cannot be determined until your file is complete and all of your credentials are evaluated.
- Your SEVIS I-20 (Certificate of Eligibility for Non-Immigrant Student Status), essential for securing an F-1 student visa, will be forwarded to you if you are admitted to ASU. Keep your SEVIS I-20 in a secure place; ASU will not issue a second SEVIS I-20.
- Take your SEVIS I-20 and letter of admission to the nearest U.S. Embassy to apply for a student visa.
- Arrive at ASU no later than one week before classes begin according to the information on the SEVIS I-20. ASU cannot authorize you to arrive later or change the information on your SEVIS I-20. Report immediately to the International Student Office on the Tempe campus Tempe Cente, Suite 150 with your immigration documents for SEVIS registration.
- When arriving in the United States, show your SEVIS I-20 and your letter of admission to the U.S. customs/immigration officials at the airport.
- If you are an international student currently in the United States, you must inform your school’s international student advisor of your plan to transfer your SEVIS information to ASU. This must be done in order to receive a new ASU I-20. Meet with an advisor at your current school and complete a SEVIS Transfer Form to determine an appropriate date to transfer to ASU. ASU’s school code is PH0214F00127000. When you are admitted to ASU, your SEVIS I-20 will be issued after the release date indicated by your school. When you arrive at ASU, pick up your new SEVIS I-20 from Undergraduate Admissions, then report to the International Student Office. See SEVIS Transfer Request form. (PDF)
- Students holding F-2 visas cannot attend ASU on a full-time basis.
- Measles immunization: You must complete the measles immunization verification form you receive with your letter of admission before you can register for classes. Proof of two Measles (Rubeola), Mumps and Rubella (MMR) vaccinations, at least one of which you received after 1979, is required.
- You must enroll full-time each semester.

Source URL: http://students.asu.edu/international-admission
Nondegree Student Admission

Some individuals may be interested in studying in a nondegree status, either through pre-college summer programs or for their own personal learning experience. If this matches your interest, please read more about the nondegree status and follow the steps to completing a nondegree application for admission.

Definition of Nondegree Student Status

A nondegree student is one who has not attended ASU as a degree-seeking student, who has not earned a bachelor’s degree, who is not attending full time, and who is not, at this time, applying to a degree program.

Once admitted to a degree program, a student is not permitted to register in a nondegree status.

Nondegree students may enroll in eight credit hours each fall or spring semester, seven semester hours for each 5-week summer session, nine semester hours for the 8-week summer session, and three semester hours for winter intersession.

Nondegree students may apply up to 15 hours taken in nondegree status to a degree program if you choose to pursue an undergraduate degree in the future.

Nondegree students are not eligible for financial aid.

Nondegree students may not be eligible for academic advising.

Application Requirements

Application Deadlines

Application Procedures

Requirements

To be admitted to ASU as a nondegree student, an applicant must be a high school graduate.

Students currently enrolled in high school and persons under the age of 18 may be admitted as nondegree students by submitting an official ACT composite score of 22 or SAT Reasoning score of 1040. ASU does not require the writing option for these tests.

Apply now at https://webapp1.asu.edu/ugapp/mainmenulogic

Preferential Application Deadlines

You must submit the Application for Undergraduate Admission, along with the application fee, by the deadline specified for each semester. In order to expedite the evaluation of your application, also submit official transcripts, test scores and supporting credentials immediately.

Fall Semester 2009

ASU’s preferential nondegree application deadline for fall semester is June 1. Nondegree applications received after June 1 will be considered on a space-available
basis. Space is limited in some programs and admission to these programs is more competitive.

**Application Procedures**

1. Complete the Undergraduate Admission Application. ASU prefers that you apply online.
2. Submit the nonrefundable application fee
   - Arizona Residents - $25
   - Non-residents - $55
3. If needed, have your ACT or SAT scores sent directly to ASU.

ASU will review your application for admission once all materials are on file. To see if your file is complete, sign in to My ASU using your ASURITE ID provided to you after you submitted your application.

**Mailing Address (All materials, all campuses)**
Undergraduate Admissions
Arizona State University
PO Box 870112
Tempe, AZ 85287-0112

**Undergraduate Readmission Requirements**
If you have previously attended ASU but have not been enrolled at ASU for one semester or more you must apply for readmission. An applicant for readmission must have an ASU GPA of 2.0 or higher, depending on the ASU school or college. Students who do not meet this GPA requirement may appeal. In these cases, the completed application for readmission may be subject to a due date that is earlier than the application deadline.

If you have attended another school since you attended ASU, see a brief FAQ about transferring college credit to ASU.

**Preferential Application Deadlines**

**Fall Semester 2009**
ASU’s preferential readmission application deadline for Fall Semester is June 1, 2009. Readmission applications received after June 1 will be considered on a space-available basis. Space is limited in some programs and admission to these programs is more competitive.

**Summer Semester 2009**
Preferential deadline is May 1, 2009

What needs to be submitted by the deadline?
You must submit the Application for Undergraduate Admission, along with the application fee, by the deadline specified for each semester. In order to expedite the
evaluation of your application, also submit official transcripts, test scores and supporting credentials immediately.

I previously attended ASU. Am I a readmission student or a transfer student?

If you have previously attended ASU as a degree-seeking student, you will be considered a readmission student.

I was previously admitted to ASU but did not attend. Am I a readmission student or a transfer student?

If you have previously been admitted to ASU but did not attend, you will be considered a freshman student or a transfer student.

**Application Procedures**

1. Complete the Undergraduate Admission Application. ASU prefers that you apply online.
2. Submit the nonrefundable application fee:
   - Arizona Residents - $25
   - Non-residents - $55

   If applying to an Online degree program a nonrefundable application fee of $55 will be charged.

3. Request that an official transcript be sent directly from your school(s) to Undergraduate Admissions. Upon completion of the semester, request that a final transcript be sent directly to ASU to determine final admission status. A student who does not meet readmission requirements for his/her selected major must submit complete transcripts before an admissions decision is made. Students need only submit transcripts from institutions other than ASU. NOTE: Receipt of your final transcript impacts financial aid disbursement and eligibility to register for future classes.

4. All applicants on F1 or J1 visas must provide a Financial Guarantee to show evidence of sufficient funds available for their studies before the application can be processed. In addition, US Citizenship and Immigration Services (USCIS) requires ASU to obtain additional information prior to processing your visa application. You must go to My ASU and login, and then update address information showing Local and SEVIS addresses (list current US address as Local Address; add home country address as SEVIS Address). Please note that if you are readmitted, you must still meet all deadlines associated with the issuance of an I-20 to attend ASU. These deadlines are dependent upon your current location. Contact the International Student Office at ASU for immigration information at 480.965.7451 or ISO@asu.edu.

Mailing Address (Transcripts, all campuses)
Undergraduate Admissions
Arizona State University
Admission Before Receipt of Final Transcript
Applicants enrolled in other colleges and universities may be considered for readmission on the basis of meeting all readmission requirements, except for a final transcript of work in progress. This final transcript must be sent to Undergraduate Admissions directly from the issuing institution immediately after the work in progress has been completed. Transcripts carried by hand are not accepted.

Admission is official only after the final transcript has been received showing that the applicant has met the university readmission requirements. In the event the applicant does not qualify or has falsified application documents, readmission and registration are canceled, and any registration fees paid are returned according to university refund policies.

Veterans Exception
By Arizona statute, no failing grades received by a veteran at an Arizona university or community college before military service may be considered when determining admissibility. This exception applies only to veterans who

1. are honorably discharged;
2. have served in the armed forces of the United States for a minimum of two years; and
3. have previously enrolled at a university or community college in Arizona.

Military service records must be submitted, including form DD 214.

Academic Renewal
Academic renewal is a university policy administered to recalculate the cumulative ASU GPA of an undergraduate student who:

1. Is pursuing his/her first undergraduate degree and has not previously received an academic renewal; and
2. Has a cumulative ASU GPA below 2.0 (individual colleges may elect to consider applications for students whose GPA is a 2.0 or higher); and
3. Is readmitted to a degree program after an absence of at least five continuous calendar years (including summer sessions).
Courses (including transfer credits) completed before the five-year absence with a grade “C” (2.00) or higher was earned are treated in the same manner as if all the credits were transfer credits, up to a maximum of 60 credit hours.

The cumulative GPA is based only on credits earned subsequent to the student’s reentry. Graduation requirements for resident credit hours and GPA must be fulfilled after the academic renewal. Graduation requirements for academic recognition (resident credit hours and GPA) must also be fulfilled after the academic renewal.

Courses completed before and after the academic renewal remain on the transcript and may be considered when students apply for undergraduate professional or graduate programs.

A request for academic renewal follows this procedure:

1. Students interested in academic renewal must fill out the Application for Academic Renewal and submit the form to the Dean's Office in the college of your major.
2. The Application for Academic Renewal may be submitted immediately upon readmission but must be submitted no later than the start of the third semester after readmission.
3. The Dean's Office specifies in advance a minimum of 12 semester hours required for completion.
4. When the approved credits are completed with a cumulative GPA of 2.50 or higher, and no grade lower than "C" (2.00) in each course, the Dean's Office will forward the Application for Academic Renewal to the University Registrar’s Office for processing.

Only readmission students working toward their first undergraduate degree are eligible to apply for academic renewal, which may be effected only once during a student’s academic career.

**Academic renewal is transferable among colleges.**

All students with a cumulative ASU GPA below 2.00 and have been absent from ASU 5 consecutive calendar years or more are eligible to petition for academic renewal. Individual colleges may elect to entertain petitions for academic renewal from students with ASU GPAs above 2.00. College standards committees have final authorization on academic renewal petitions.

Undergraduate Readmissions Contact Information and Office Locations

All ASU campuses
Phone: 480.965.7550
Fax: 480.965.2295
Location: Student Services Building, Room 140
Leave of Absence
Undergraduate Student Leave of Absence (http://students.asu.edu/leave-absence)

If a student needs to take a small break from their studies at the University they may be eligible for a Leave of Absence. The Undergraduate Student Leave of Absence (LOA) policy assists and encourages students to return and graduate after one or two consecutive fall and spring semesters of absence from ASU. Students who have only one or two consecutive semesters of absence and who have been granted a leave of absence need not apply for readmission or pay readmission fees and may participate in their regularly scheduled registration/enrollment period upon return to the University.

Application Resources
Application for Admission (https://webapp1.asu.edu/ugapp/mainmenulogic)

Source URL: http://students.asu.edu/readmission

Enrollment Verification
Arizona State University is frequently required to certify a student’s enrollment as to full-time, part-time, etc. The following general guidelines are used primarily to verify enrollment for the purpose of loan deferments and eligibility. The Registrar is responsible for such verifications.

Enrollment Verification Guidelines

Regular Semester

<table>
<thead>
<tr>
<th></th>
<th>Full-Time</th>
<th>Three Quarter-Time</th>
<th>Half-Time</th>
<th>Less Than Half-Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate</td>
<td>12 or more hours</td>
<td>9-11 hours</td>
<td>6-9 hours</td>
<td>5 or fewer hours</td>
</tr>
<tr>
<td>Graduate</td>
<td>9 or more hours</td>
<td>7-8 hours</td>
<td>5-6 hours</td>
<td>4 or fewer hours</td>
</tr>
<tr>
<td>Research/Teaching</td>
<td>6 or more hours</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assistant</td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>
Five Week Summer Session

<table>
<thead>
<tr>
<th></th>
<th>Full-Time</th>
<th>Half-Time</th>
<th>Less Than Half-Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate</td>
<td>4 or more hours</td>
<td>2 hours</td>
<td>1 hour</td>
</tr>
<tr>
<td>Graduate</td>
<td>3 or more hours</td>
<td>2 hours</td>
<td>1 hour</td>
</tr>
<tr>
<td>Research/Teaching Assistant</td>
<td>2 or more hours</td>
<td>1 hour</td>
<td></td>
</tr>
</tbody>
</table>

Eight Week Summer Session

<table>
<thead>
<tr>
<th></th>
<th>Full-Time</th>
<th>Half-Time</th>
<th>Less Than Half-Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate</td>
<td>6 or more hours</td>
<td>3-5 hours</td>
<td>2 or fewer hours</td>
</tr>
<tr>
<td>Graduate</td>
<td>5 or more hours</td>
<td>3-5 hours</td>
<td>2 or fewer hours</td>
</tr>
</tbody>
</table>

Note that classes taken for audit are included in total enrolled hours.

Independent learning courses are not considered for enrollment verification purposes.

Requesting an Enrollment verification

Enrollment Verification can certify your registration, GPA information, dates of attendance and/or degrees conferred at ASU. This information is primarily used for bank loan deferments and insurance renewals including good student discounts.

Students may verify their enrollment online using the National Student Clearinghouse or students may also request Enrollment Verification letters in person (bring your photo ID) at any registrar location:

Students may order Enrollment Verifications by mail or fax by submitting a signed letter including the following:

- Student’s Signature
- Student’s Name
- ASU ID Number
- Date of Birth
- Student’s Return Address and Phone Number
- Specific Mailing Address/Fax Number
- The following information is verified on ALL enrollment verifications:
Status (for example: full time, half time, less than half time)
Current Semester Attending or All Semesters Attended
Semester Name/begin & End Date
Semester Hours
Academic Career (for example: Graduate or Undergraduate)
  - Degree, College and Major Pursuing
  - ASU ID#
  - By request only, the following information may also be verified:
    - Degrees Conferred
    - Academic Level
    - Good Standing
    - Semester/Cumulative GPA
    - Student Address
    - Date-Of Birth

Note: Requests by mail or fax MUST include the student's verifiable signature. Allow one week for processing. Send your request to:

Enrollment Verification
University Registrar's Office
Arizona State University
PO Box 870312
Tempe, AZ 85287-0312
Fax: 480.965.7722

If you have questions or need additional information, please contact the University Registrar's Office, Records Information Department at 480.965.3124.

Source URL: http://students.asu.edu/enrollment-verification

**Attendance**

The instructor has full authority to decide whether class attendance is required.

Source URL: http://catalog.asu.edu/attendance
Arizona General Education Curriculum (AGEC)
The AGEC is composed of 35 semester hours of lower-division general education course work in which a student may prepare for transfer.

The AGEC has three forms: AGEC-A, AGEC-B, and AGEC-S. Refer to www.az.transfer.org/cas/atass/student/agec.html [1] for a detailed description of each AGEC.

Community colleges are responsible for certifying the date of completion of the AGEC on the official institutional transcripts.

Completion of the appropriate AGEC will fulfill university lower-division general education requirements of the baccalaureate degree with which the AGEC articulates but may not apply to degrees articulated with the Transfer Guide Pathway TG-XR. Students completing the AGEC will still be required to fulfill lower-division program requirements and prerequisites within their college and major/minor area of study. To complete a degree program most efficiently, students should select courses that concurrently satisfy AGEC and major requirements.

Completion of any AGEC guarantees admission to the university provided that a GPA of 2.00 (for Arizona residents) or 2.50 (for nonresidents) has been achieved. AGEC completion, however, does not guarantee admission to any specific university program. Many majors (e.g., architecture, engineering, business, fine/creative arts, or health professions) have significant prerequisites and/or program requirements that must be completed before a student may be admitted to upper-division course work. Community college students who are undecided about which of the universities they plan to attend or what program of study they intend to pursue are advised to explore educational options while they complete the AGEC. In all cases, students have the responsibility for selecting general education course work that is relevant to the requirements of their intended major and degree.

Students who complete both the AGEC and an approved associate's degree will be assigned junior-class standing by the state universities. Junior-class standing is based on the number of semester credits a student has earned and does not necessarily indicate the remaining number of semester credits needed to complete degree requirements. Course prerequisites, major requirements, and upper-division requirements continue to be specified by each university. Appropriate sequencing of courses and timely completion of course prerequisites are essential to ensure efficient progress toward a baccalaureate degree. Students who have identified the university they plan to attend and/or a major area of study are advised to fulfill requirements and prerequisites identified by these programs through transfer guides and/or curriculum check sheets provided by the state universities. The AGEC does not replace articulation agreements developed to enhance the transfer process between specific institutions, e.g., Associate Transfer Partnership Degrees (ATP). Nor does the AGEC eliminate the possibility that students who have identified the university they plan to attend and/or a major area of study will follow transfer guides provided by the state universities.
Course Load and Concurrent Enrollment

Course
A minimum full-time course load for an undergraduate student is 12 semester hours. The maximum course load for which a student may register is 18 semester hours (with the exception of a 19-hour maximum for students enrolled in the College of Design or Ira A. Fulton School of Engineering). A student wishing to register for more than the maximum must petition the standards committee of the college in which the student is enrolled and must obtain an approved overload before registration.

Summer Session Semester Hour Load
The summer session semester hour load limit is seven semester hours for each five-week session and nine semester hours for the eight-week session. The student may not exceed a total of 14 semester hours for any combination of sessions.

Reserving of Course Credit by Undergraduates
ASU undergraduate students who have achieved senior status (cannot be post-baccalaureate) with a cumulative GPA of 3.00 or higher may reserve up to nine semester hours of graduate level course work. Only reserved courses with a grade of “B” (3.00) or higher may be included on a graduate plan of study. Reserved courses cannot be used to meet any baccalaureate graduation requirements. Before registering for these courses, the student must submit a Graduate College petition form that is signed by the student’s undergraduate advisor, the head of the academic unit offering the class and the Graduate College dean. Permission to reserve a course does not guarantee admission to a graduate degree program or that the course may be used toward graduate degree requirements.

Concurrent Enrollment
Provided that the other institution’s regulations concerning enrollment, graduation requirements, and transfer of credits are not violated, a student may enroll in classes at other institutions or in independent learning courses while enrolled at ASU. However, the student is urged to seek advising before concurrent enrollment to assure orderly progress toward a degree. If total credits exceed the maximum course load, prior permission must be granted by the college standards committee.
**Enrollment Verification Guidelines**
The registrar is responsible for verifying enrollment according to general guidelines, see Enrollment Verification [1].

Source URL: http://catalog.asu.edu/course_load

Links:[1] http://students.asu.edu/enrollment-verification

**Credit by Examination**
No more than 60 hours of credit are awarded for any or all programs, including ASU comprehensive and proficiency examinations. Credit will not be awarded for any course in which the student has been given credit from any educational institution. Credit will not be granted for a course taken at an educational institution after credit by examination has been awarded.

Exception: Students who take the advanced placement exams, however, may choose either 1) to have the credit earned by advanced placement kept in their cumulative University hours or 2) to complete the ASU course and have its credit and grade instead, regardless of which order the test or course are taken. (See the Advanced Placement section below for additional details on the exam and its equivalent scores.) Credit may not be received for a lower-level or prerequisite course when credit has already been received in a higher-level course within the same field. In these categories, only credit earned by comprehensive examination will count toward the resident credit requirement for graduation.

**Advanced Placement**
Students who have taken an advanced placement (AP) course of the College Entrance Examination Board (CEEB) in their secondary school and who have taken an AP Examination of the CEEB may receive university credit. No credit is given for any examination with a score of 2 or 1. There is no limit to the number of AP credits that can be used to meet the General Studies requirement, including the requirements in natural sciences (SQ and SG) and literacy and critical inquiry (L).

When the scores are received by the university directly from the CEEB, credit is awarded as shown in the Advanced Placement Credit table below.

**Advanced Placement Credit**

<table>
<thead>
<tr>
<th>Examination*</th>
<th>Score</th>
<th>Semester Hours</th>
<th>Equivalency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art—History</td>
<td>5 or 4</td>
<td>6</td>
<td>ARS 101, 102</td>
</tr>
<tr>
<td>Subject</td>
<td>Credits</td>
<td>Units</td>
<td>Course Codes</td>
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<td>STP 226</td>
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*All test scores are posted initially as Tempe campus course equivalents and will be honored at any ASU campus the student may attend.*

**College-Level Examination Program (CLEP)**

Students who have taken a College-Level Examination of the College Entrance Examination Board may receive university credit. The table of CLEP credit applies to all students enrolled in the university for the first time in August 1975 and any student enrolling thereafter. CLEP examination credit is not given where it duplicates credit previously earned by the student at the university or accepted by the university for work done elsewhere. All examinations are given monthly by University Testing Services.
The General Studies requirement in natural science (SQ and SG) and literacy and critical inquiry (L) are not satisfied by CLEP. There is no limit to the number of CLEP credits that can be used to fulfill the other parts of the General Studies requirement. A student who has received ASU credit for a course due to Special Programs credit may not duplicate the credit by enrolling in the same class for credit at ASU or transferring it to another institution.

Subject Examinations
To obtain credit or placement for all subject exams except English, French, German, and Spanish, a student must receive a score of 50 (Computer Based Training [CBT] scale) or higher. To obtain credit for English Composition with Essay, a student must receive a standard score of 610 (1978 scale), 500 (1986 scale), or 60 (CBT scale). For test scores for French, German, and Spanish, see the CLEP credit table, below.

All equivalency is subject to future review and possible catalog change. For more information, call University Testing Services at 480/965-7146, or visit EDB 301.

**CLEP Credit**

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<th>Hours</th>
<th>Equivalency</th>
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<td>American Literature</td>
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<td>Analyzing and Interpreting Literature</td>
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<td>Biology</td>
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<td>8</td>
<td>FRE 101, 102 (Students must score 55–61.)</td>
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<td>12</td>
<td>FRE 101, 102, 201 (Students must score 62–65.)</td>
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<td></td>
<td>16</td>
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<td><strong>Freshman College Composition</strong></td>
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<td>8</td>
<td>GER 101, 102 (Students must score 46–50.)</td>
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<td><strong>History of the United States II—1865 to the Present</strong></td>
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<td><strong>Human Growth and Development</strong></td>
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<td><strong>Humanities</strong></td>
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<td><strong>Information Systems and Computer Applications</strong></td>
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<td><strong>Introductory Business Law</strong></td>
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<td><strong>Introductory Psychology</strong></td>
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<td>Precalculus (replaces College Algebra/Trigonometry)</td>
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<td>Principles of Macroeconomics</td>
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<td>Principles of Management</td>
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<td>Principles of Microeconomics</td>
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<td>Western Civilization II—1648 to the Present</td>
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* All test scores are posted initially as Tempe campus course equivalents and will be honored at any ASU campus the student may attend.

**DSST**

Students who have taken a DSST (DANTES [Defense Activity for Nontraditional Education Support] Subject Standardized Test) may receive university credit. Credit is awarded for score results at or above the American Council on Education’s recommended score if the subject examination is applicable to a program of study at ASU or may be assigned elective credit. To receive credit, a transcript showing the DSST results must be received by ASU directly from the Educational Testing Service.

**International Baccalaureate (IB) Diploma/Certificate**
Students who present an International Baccalaureate Diploma/Certificate may qualify for university credit, depending on the level of the examination and the grade received. Arizona State University grants credit for higher-level courses only. A grade of 5 qualifies the student to receive credit for up to two introductory courses while a grade of 4 qualifies a student to receive credit for one introductory course. No credit is awarded for English as a Second Language (English B). Credit is awarded according to the International Baccalaureate Diploma/Certificate Credit table below.

International Baccalaureate Diploma/Certificate Credit

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<td></td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

* No credit is awarded if the language is the student’s native language.
Comprehensive Examinations
A comprehensive examination is intended to permit a student to establish academic credit in a field in which the student has gained experience or competence equivalent to an established university course. Applications are given only for courses listed in the current catalog and only for courses in which a comprehensive examination can serve as a satisfactory measure of accomplishment.

A number of restrictions apply. To be eligible to apply to take a comprehensive examination to establish undergraduate course equivalence, a student must:

- have earned not more than 60 semester hours of credit through comprehensive, CLEP, international baccalaureate, and advanced placement examinations
- have earned no credit for a duplicate course; and
- have earned no credit for a course for which this course is a prerequisite.

The decision on the suitability of course material for a comprehensive examination, the development of a comprehensive examination, and the administration of an examination are strictly departmental functions. An application is for one course only. The student should complete an application form with the number, title, and number of semester hours for the course. When completed, the application must be approved by the student’s advisor and the chair of the department responsible for offering the course.

The student must then pay the stated fee for such examinations at Cashiering Services. The receipt must be taken to the departmental office.

The examination is prepared by the instructor who normally conducts the course, and it is comprehensive in nature and scope. The instructor and other experts designated by the chair grade the examination, using letter grades “A+,” “A,” “A−,” “B+,” “B,” “B−,” “C+,” “C,” “D,” or “E.” If the grade is “C” or higher, a mark of “Y” is entered on the student’s permanent record; otherwise, no entry is made. Credit by examination is indicated as such on the record. The student is notified by mail of the result of the examination. In cases of failure (“D” or “E”), the student is not given an opportunity to repeat the examination.

A student pursuing a second baccalaureate degree may not receive credit by comprehensive examination, but with prior approval of the college, the student may use the examination to waive a course requirement if a grade of “C” or higher is earned.

Proficiency Examinations
Proficiency examinations and auditions are given

- to waive a course requirement;
- to validate certain transfer credits in professional programs; and
- to determine a student’s ability in a field where competence is an important consideration.
Detailed information may be obtained from the dean’s office of the college in which
the student is registered.

Source URL: http://catalog.asu.edu/credit_exam

Placement and Testing Requirements
All new, transfer, or readmitted undergraduate students who plan to enroll for
seven or more semester hours must meet one of the following testing requirements.
Students who fail to meet at least one of these requirements are not allowed to
register for any course the following semester:

1. Take the ACT English or SAT verbal examination, and have scores submitted
to ASU.
2. Receive a score of 4 or 5 for the advanced placement examination in English
offered by the College Entrance Examination Board, and have scores
submitted to ASU.
3. Take the CLEP general examination in English Composition with Essay,
earning a score that qualifies for equivalency with ENG 101, and have scores
submitted to ASU.
4. Have previously taken ENG 101, 102, 105, 107, or 108 at ASU; or have
previously earned a grade of “Y”; or be currently enrolled in WAC 101 or 107
at ASU. If the course was taken before 1980, contact the Recording Section, in
SSV 142, before registering for classes.
5. Transfer a course equivalent to ENG 101, 102, 105, 107 or 108 with a grade
of “C” (2.00) or higher. An official transcript showing the grade must be
received at ASU. If a student transfers an equivalent composition course from
a public Arizona community college or university, the equivalency is
automatically posted and the student need not take further action. A student
transferring a composition course from any other college or university may
be required to submit documentation to determine equivalency of the
course(s). After consultation with an advisor, if evaluation is necessary the
student should provide a copy of both the transfer transcript and the catalog
description of the course to the Writing Programs Office in LL
314/480.965.3853 on the Tempe campus or the Writing Programs Office in
FABN 201A/602.543.6091 on the West campus.
6. International students from non-English-speaking countries must take ENG
107 (or WAC 107 followed by ENG 107 the second semester) in the first
semester at ASU, unless they have taken and transferred an equivalent
composition course from a college or university in the U.S. Such a course
must be evaluated for equivalency by the Composition Office.

Source URL: http://catalog.asu.edu/test_req
Retention and Academic Standards

Class Standing
A student’s class standing is determined by the number of hours earned, as shown in the table below.

<table>
<thead>
<tr>
<th>Student</th>
<th>Hours Earned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>24 or fewer semester hours earned</td>
</tr>
<tr>
<td>Sophomore</td>
<td>25 to 55 semester hours earned</td>
</tr>
<tr>
<td>Junior</td>
<td>56 to 86 semester hours earned</td>
</tr>
<tr>
<td>Senior</td>
<td>87 or more semester hours earned</td>
</tr>
<tr>
<td>Graduate</td>
<td>Bachelor’s degree from accredited institution</td>
</tr>
</tbody>
</table>

Academic Good Standing
For the purpose of retention, academic good standing for degree-seeking students is defined in the table below.

<table>
<thead>
<tr>
<th>Total Earned Hours</th>
<th>Minimum Cumulative GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 or fewer</td>
<td>1.60</td>
</tr>
<tr>
<td>25 to 55</td>
<td>1.75</td>
</tr>
<tr>
<td>56 or more</td>
<td>2.00</td>
</tr>
</tbody>
</table>

A student who does not maintain the minimum GPA standard is placed on academic probation or is disqualified. A student on academic probation is in conditional good standing and is permitted to enroll. A student who has been disqualified is not in academic good standing and is not permitted to enroll for fall or spring semesters.

To transfer from one college to another within the university or to be eligible for readmission, a student must have an ASU GPA of 2.00 or higher. The GPA determining good standing is computed on courses taken only at ASU.

For purposes of retention or transfer, an individual college may set higher GPA standards; otherwise, the university standards prevail. See the college sections of this catalog or contact the college deans’ offices for statements regarding college retention standards.

Dean’s List
Undergraduate students who earn 12 or more graded semester hours (“A+,” “A,” “A-”
"B+," "B," "B-," "C+," "C," "D," or "E") during a semester in residence at ASU with a GPA of 3.50 or higher are eligible for the Dean’s List. A notation regarding Dean’s List achievement appears on the unofficial transcript.

**Satisfactory Academic Progress**

The university is required to publish and enforce standards of satisfactory academic progress for certain students (e.g., student athletes, students receiving financial aid, and students receiving veterans benefits).

Certification of satisfactory progress for student athletes is verified by the academic advisor and the dean’s designee for certifying satisfactory progress. Certification of satisfactory progress for students receiving financial aid or veterans benefits is verified by Student Financial Assistance or the Veterans Services section, respectively. Students should contact their advisors or the appropriate office for additional information on satisfactory progress requirements.

**Probation**

A student’s college assumes responsibility for enforcing academic standards and may place on probation any student who has failed to maintain good standing as previously defined. For purposes of probation and retention, an individual college may set higher GPA standards. A student on academic probation is required to observe any rules or limitations the college may impose as a condition for retention.

**Ineligible**

A student who is placed on ineligible status at the end of a semester is considered ineligible to continue in the college/school at the end of the following semester even if the student meets ASU good standing requirements but not the conditions imposed for retention by the college/school. At the close of the semester, a student deemed ineligible will receive a letter from the college/school outlining options available for continuing at ASU in another college.

Ineligibility is exercised at the discretion of the college. An ineligible student is notified by the dean of the college and is not allowed to register in a fall or spring semester at the university, unless arrangements are made to transfer to another college. A student who has already registered for a future semester will be withdrawn from classes. An ineligible student who does not change to a different major may not attend ASU. A student who is ineligible may apply for reinstatement to the college standards committee. An ineligible student may not attend ASU as a nondegree student.

**Disqualification**

A student who is placed on probation at the end of a semester is subject to disqualification by the college/school at the end of the following semester if the conditions imposed for retention are not met.

Disqualification is exercised at the discretion of the college/school. A disqualified student is notified by the dean of the college and is not allowed to register in a fall or
spring semester at the university. If the student has already registered for a future fall or spring semester, the registration is canceled. A student who has been disqualified may apply for reinstatement to the college standards committee. A student who is disqualified may not attend as a nondegree student.

Reinstatement
A disqualified or ineligible student who has skipped a fall or spring semester must follow the procedures for readmission. See Readmission to the University [1].

A disqualified or ineligible student who has not skipped a semester may submit an Application for Reinstatement to the college of his or her major. If the student wishes to transfer to a different college, he or she may submit an Application for Reinstatement to the college into which he or she wishes to transfer. An ineligible student who does not skip a fall or spring semester must follow the ineligible procedures. See ineligible status.

Academic Integrity
The highest standards of academic integrity are expected of all students. The failure of any student to meet these standards may result in suspension or expulsion from the university or other sanctions as specified in the University Student Academic Integrity Policy. Violations of academic integrity include, but are not limited to, cheating, fabrication, tampering, plagiarism, or facilitating such activities. The University Student Academic Integrity Policy is available from the Office of the Executive Vice President and Provost of the University and from the deans of the individual colleges.

Suspension or Expulsion for Academic Dishonesty
All decisions relating to expulsion or suspension that are concerned with academic dishonesty are the sole prerogative of the dean of the school or college into which the student has been admitted. These decisions of suspension or expulsion can be appealed in accordance with established university procedures. Application for reinstatement may be made to any of the academic units within the university after the specified period of suspension. Merely having remained in a suspended status for a period of time does not, in itself, constitute a basis for reinstatement.

Source URL: http://catalog.asu.edu/retention_standing


Academic Standards
A student who does not maintain the minimum GPA standard is placed on academic probation or is disqualified. A student on academic probation is in conditional good standing and is permitted to enroll. A student who has been disqualified is not in academic good standing and is not permitted to enroll for fall or spring semesters.
To transfer from one college to another within the university or to be eligible for readmission, a student must have an ASU GPA of 2.00 or higher. The GPA determining good standing is computed on courses taken only at ASU.

For purposes of retention or transfer, an individual college may set higher GPA standards; otherwise, the university standards prevail. See the college sections of the catalog or contact the college deans' offices for statements regarding college retention standards.

**Probation**
You will be placed on academic probation if you do not maintain the minimum GPA standard set by the university or by your college. The following chart shows what the university requires as a minimum for academic good standing for retention purposes, but each college may set its own standards.

<table>
<thead>
<tr>
<th>Total Earned Hours</th>
<th>Minimum Cumulative GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 or fewer</td>
<td>1.600</td>
</tr>
<tr>
<td>25-55</td>
<td>1.750</td>
</tr>
<tr>
<td>56 or more</td>
<td>2.000</td>
</tr>
</tbody>
</table>

You may be subject to disqualification if the conditions stated at the bottom of your grade report are not met by the end of the following fall or spring semester. It may be possible to achieve academic good standing if you earn above average grades at ASU or if you repeat lower division courses at ASU in which you have received grades below "C". Refer to the Academic Standards for your college in the General Catalog for further information, and contact an academic advisor in the college of your major.

**Ineligible**
You will become ineligible if following at least one semester of academic probation, you do not meet the minimum GPA standard set by your college. While you are ineligible to remain enrolled in that college, you still meet ASU good standing requirements and may change your major to one of several other colleges that will accept you. If you became ineligible, your college sent you a letter at the close of the semester that outlined the various options available to you. If you no longer have that letter, please contact the University Registrar's Recording/Readmission Section for further Information.

Please note that while your status is ineligible, you may not enroll in fall or spring classes at ASU. If you have registered for an upcoming semester, you will be withdrawn from those classes. If you do not change your major to another college, you may not attend. You must apply for readmission to the university following a
period of non-attendance.

*Disqualification*
If you are placed on probation at the end of a semester, you are subject to academic disqualification by your college at the end of the following semester if the conditions imposed for retention are not met. If you are disqualified, you will be notified by the dean of the college. Please take note of the following information.

- While you are disqualified, you are not eligible to enroll in a fall or spring semester at ASU. If you have registered for the upcoming fall or spring semester, you will be withdrawn by the University Registrar’s Office, and if you have already paid tuition for that semester you will receive a full refund. If you do not attend in the spring semester, you must be readmitted before you can attend in the upcoming summer or fall, and if you do not attend in the fall you must be readmitted before you can attend in the upcoming spring or winter.
- You may not attend ASU as a non-degree seeking student.
- If you elect to attend another university, any credits earned there will not affect your ASU cumulative GPA. A course repeated elsewhere will not enable you to have a "D" or "E" deleted from your ASU cumulative GPA.
- Consult with an academic advisor in the college of your major on your eligibility to attend ASU summer school or winter session during disqualification to raise your ASU GPA.
- To continue or return to ASU you must apply for reinstatement, and if you skip a fall or spring semester at ASU you must also apply for readmission. Deadlines and an application fee apply.

For further information see the Undergraduate Readmissions (http://students.asu.edu/readmission) web page or contact the appropriate readmissions office.

Tempe/Polytechnic/Downtown campus: Recording/Readmissions Services (480) 965-7550
West campus: Admission (602) 543-8203

*University Policy for Student Appeal Procedures on Grades*

*Informal*
The steps outlined on this page, beginning with step A, must be followed by any student seeking to appeal a grade. Student grade appeals must be processed in the regular semester immediately following the issuance of the grade in dispute (by commencement for fall or spring), regardless of whether the student is enrolled at the university. It is university policy that students filing grievances and those who
are witnesses are protected from retaliation. Students who believe they are victims of retaliation should immediately contact the dean of the college in which the course is offered.

A. The aggrieved student must first undergo the informal procedure of conferring with the instructor, stating the evidence, if any, and reasons for questioning that the grade received was not given in good faith. The instructor is obliged to review the matter, explain the grading procedure used, and show how the grade in question was determined. If the instructor is a graduate assistant and this interview does not resolve the difficulty, the student may then go to the faculty member in charge of the course (regular faculty member or director of the course sequence) with the problem.

B. If the grading dispute is not resolved in step A, the student may appeal to the department chair or other appropriate chair of the area within the department (if any). The department chair may confer with the instructor to handle the problem. Step B applies only in departmentalized colleges.

C. If these discussions are not adequate to settle the matter to the complainant’s satisfaction, the student may then confer with the dean of the college concerned (or the dean-designate), who will review the case. If unresolved, the dean or designate may refer the case to the college academic grievance hearing committee to review the case formally. In most instances, however, the grievance procedure does not go beyond this level.

**Formal**
The following procedure takes place after steps A, B, and C (or A and C) have been completed.

D. Each college has on file in the office of the dean (and in each department of the college) the procedures and composition of the undergraduate or graduate academic grievance hearing committee for student grievances. Each college committee shall operate under grievance procedures as stated, which satisfy due process requirements. The committee shall always meet with the student and the instructor in an attempt to resolve the differences. At the conclusion of the hearing, the committee shall send its recommendations to the dean.

E. Final action in each case will be taken by the dean after full consideration of the committee’s recommendation. Grade changes, if any are recommended, may be made by the dean. The dean shall inform the student, instructor, department chair (if any), registrar, and grievance committee of any action taken.

Source URL: [http://catalog.asu.edu/appeal](http://catalog.asu.edu/appeal)
University Undergraduate General Studies Requirements

A baccalaureate education should not only prepare students for a particular profession or advanced study, but for constructive and satisfying personal, social and civic lives as well. In addition to depth of knowledge in a particular academic or professional discipline, students should also be broadly educated and develop the general intellectual skills they need to continue learning throughout their lives. Thus, the General Studies requirement complements the undergraduate major by helping students gain mastery of critical learning skills, investigate the traditional branches of knowledge, and develop the broad perspective that frees one to appreciate diversity and change across time, culture, and national boundaries.

Critical learning skills include proficiency in the use of language, mathematics and quantitative methods as tools for acquiring, renewing, creating and communicating knowledge. A broad education includes an understanding of the methods and concerns of traditional branches of knowledge—the arts and humanities, the social sciences, and the natural sciences. Developing perspective requires historical, global and cross-cultural examination of knowledge of all kinds.

General Studies requirements are composed of courses in five core areas and three awareness areas. The courses are approved by the General Studies council and are noted in the course schedule [1] for each academic term. General Studies courses are regularly reviewed and are occasionally added to and deleted from the list. Students should always consult the Schedule of Classes [1] each semester to see which courses currently meet the General Studies requirement.

A student receives the General Studies credit that a course carries during the semester in which the course is taken.

Five Core Areas

L: Literacy and Critical Inquiry (Six Semester Hours)

Literacy is competence in written and oral discourse. Critical inquiry is the gathering, interpretation, and evaluation of evidence. The literacy and critical inquiry requirement helps students sustain and extend their ability to reason critically and communicate clearly through language.

Students must complete six semester hours from courses designated as L, at least three semester hours of which must be chosen from approved upper-division courses, preferably in their major. Students must have completed ENG 101, 105, or 107 to take an L course.

MA and CS: Mathematical Studies (Combined Six Semester Hours)

This core area has two categories: (1) Mathematics (MA) is the acquisition of essential skill in basic mathematics and requires the student to complete a course in college mathematics or precalculus or to demonstrate a higher level of skill by
completing a course for which college algebra is a prerequisite; and (2) computer/statistics/quantitative applications (CS) applies mathematical reasoning and requires students to complete a course in either the use of statistics/quantitative analysis or the use of the computer to assist in serious analytical math work.

This requirement has two parts: (1) at least three semester hours must be selected from courses designated MA, and at least three semester hours must be selected from courses designated CS; and (2) all students are expected to fulfill the MA requirement by the time they accumulate 30 hours of credit in residence at ASU. Any student who has more than 30 hours of resident ASU credit and has not fulfilled the mathematics (MA) requirement must enroll in an MA course or an appropriate prerequisite and continue to do so every semester until the mathematics requirement is met. College officers may grant waivers to the immediate and continual enrollment requirement only when there are scheduling conflicts detrimental to the student’s academic progress.

**HU: Humanities, Fine Arts, and Design and SB: Social and Behavioral Sciences (Combined 15 Semester Hours)**

The study of the humanities and the disciplines of art and design deepen awareness of the complexities of the human condition and its diverse histories and cultures. Courses in the humanities are devoted to the productions of human thought and imagination, particularly in philosophical, historical, religious, and artistic traditions. Courses with an emphasis in fine arts and design are devoted to the study of aesthetic experiences and the processes of artistic creation. They may also feature a design emphasis in which material culture is studied as a product of human thought and imagination.

The social and behavioral sciences provide scientific methods of inquiry and empirical knowledge about human behavior, within society and individually. The forms of study may be cultural, economic, geographic, historical, linguistic, political, psychological or social. The courses in this area address the challenge of understanding the diverse natures of individuals and cultural groups who live together in a world of diminishing economic, linguistic, military, political and social distance.

A total of 15 semester hours must be completed in the following two core areas: (1) humanities, fine arts, and design (HU) and (2) social and behavioral sciences (SB). Two conditions must be satisfied: (1) six semester hours must be taken in one of these two core areas and nine hours in the other core area; and (2) three of the 15 semester hours must be at the upper-division level.

**SQ and SG: Natural Sciences (Combined Eight Semester Hours)**

The natural sciences help students appreciate the scope and limitations of science and its contributions to society. Natural science areas of study include anthropology, astronomy, biology, biochemistry, chemistry, experimental psychology, geology, microbiology, physical geography, physics and plant biology. Knowledge of methods
of the scientific inquiry and mastery of basic scientific principles and concepts are stressed, specifically those that relate to matter and energy in living and nonliving systems. First-hand exposure to scientific phenomena in the laboratory is important in developing and understanding the concepts, principles and vocabulary of science.

General Studies courses that satisfy the natural science requirement are given one of two classifications: quantitative (SQ) and general (SG).

**Natural Science—Quantitative (SQ)**

These laboratory courses include a substantial introduction to the fundamental behavior of matter and energy in physical and biological systems.

**Natural Science—General (SG)**

These laboratory courses cover aspects of scientific inquiry that lend themselves to more qualitative or descriptive discussions of science.

Eight semester hours of courses designated SQ or SG must be selected. Of these, at least four semester hours must be taken from the SQ category.

**Three Awareness Areas**

Students must complete courses that satisfy three awareness areas. Courses that are listed for a core area and one or more awareness areas may satisfy each of these requirements concurrently, up to a maximum of two of the awareness area(s) listed for that course. The three awareness areas promote appreciation of cultural diversity within the contemporary United States, the development of an international perspective, and an understanding of current human events through study of the past.

**Cultural Diversity in the United States (C)**

The objective of the cultural diversity (C) requirement is to promote awareness and appreciation of cultural diversity within the contemporary United States. The objective is accomplished through the study of the cultural, social, or scientific contributions of women and minority groups, examination of their experiences in the United States, or exploration of successful or unsuccessful interactions between and among cultural groups. Awareness of cultural diversity and its multiple sources can illuminate the collective past, present and future and also help students to achieve greater mutual understanding and respect.

**Global Awareness (G)**

The objective of the global awareness (G) requirement is to help students recognize the need for an understanding of the values, elements, and social processes of cultures other than that of the United States. The global awareness area includes courses that recognize the nature of other contemporary cultures and the relationship of the American cultural system to generic human goals and welfare.
**Historical Awareness (H)**
The objective of the historical awareness (H) requirement is to help students develop knowledge of the past that can be useful in shaping the present and future. History is present in languages, art, music, literature, philosophy, religion, and the natural sciences, as well as in the social science traditionally called history.

**Meeting the General Studies Requirement**
All students enrolled in a baccalaureate degree program must successfully complete a minimum of 35 semester hours of approved General Studies courses. Many General Studies courses are approved as satisfying more than one requirement. The following conditions govern the application of courses toward the General Studies requirement:

1. A single course may be used to satisfy one core area and a maximum of two awareness area requirements;
2. A single course may be used to satisfy a maximum of two awareness area requirements;
3. A single course cannot be used to satisfy two core area requirements, even if it is approved for more than one core area.

There is no limit to the number of advanced placement (AP) or College-Level Examination Program (CLEP) credits that can be used to meet the General Studies requirement; see Credit by Examination [2]. However, the natural sciences (SQ and SG) and literacy and critical inquiry (L) portions of the General Studies requirement are not satisfied by CLEP.

**Transfer Credit**
The Arizona General Education Curriculum (AGEC), offered by Arizona community colleges, is composed of 35 semester hours of lower-division general education course work. Students who complete the AGEC have fulfilled the ASU First-Year Composition requirement and all lower-division portions of the General Studies requirement. Students must still take six upper-division semester hours (three for L and three for SB or HU) to complete the ASU General Studies requirement. If students transfer from Arizona community colleges without completing the AGEC or from other accredited postsecondary institutions, they receive credit for General Studies based on course-by-course equivalency. See Arizona General Education Curriculum (AGEC) [3].

**College or School and Major Requirements**
In addition to General Studies requirements, students must also complete college or school and major requirements. Students are encouraged to work with their academic advisors to develop a program of study that efficiently meets all graduation requirements. A well-planned program should enable a student to concurrently satisfy requirements at the university, college, or school levels and within their major.

Source URL: http://catalog.asu.edu/ug_gsr
University Undergraduate Graduation Requirements
All students enrolled in a baccalaureate degree program must fulfill the following university requirements to graduate.

Credit Requirements
A minimum of 120 semester hours is required for graduation with a baccalaureate degree. A minimum of 45 semester hours in upper-division courses is required for graduation. Some programs may require more than 120 semester hours and 45 upper-division semester hours for graduation; check the program's major map for graduation requirements.

No more than 60 semester hours in independent learning courses and/or earned by comprehensive examination (including advanced placement, College-Level Examination Program, DANTES Subject Standardized Test, and International Baccalaureate Diploma/Certificate exams) are accepted for credit toward the baccalaureate degree.

Grade Point Requirement
A minimum cumulative grade point average of 2.00 for all courses taken at ASU is required to graduate with a baccalaureate degree. Some programs may require more than a 2.00; refer to the specific program’s major map for graduation requirements.

General Studies Requirement
All students enrolled in a baccalaureate degree program must satisfy a university requirement of a minimum of 35 semester hours of approved course work. See General Studies. [1]

Students transferring from Arizona community colleges with a certified completion of the appropriate Arizona General Education Curriculum (AGEC) will have satisfied all lower-division General Studies requirements of the baccalaureate degree with which the AGEC articulates. For more details regarding the different versions of AGEC, refer to az.transfer.org/cas/atass/student/agec.html [2].

Mathematics Requirement
All undergraduate degree-seeking students are expected to fulfill the university's mathematics requirement by the time they have accumulated 30 hours of credit in residence at ASU. Any student who has more than 30 hours of credit and has not fulfilled the mathematics requirement must enroll in a mathematics course or an
appropriate prerequisite course and continue to do so every semester until the mathematics requirement is met. A waiver may be granted for continuous enrollment if there are scheduling conflicts detrimental to the student’s academic progress.

First-Year Composition Requirement
Completion of both ENG 101 and 102 or ENG 105 with a grade of “C” (2.00) or higher is required for graduation from ASU in any baccalaureate program. International students from non-English-speaking countries may meet the First-Year Composition requirement by completing ENG 107 and 108 with a grade of “C” (2.00) or higher.

New or Transfer Students
Composition courses transferred from non-Arizona public or out-of-state institutions may require evaluation and approval by the Writing Programs Office. After consultation with an advisor, if evaluation is necessary, the student should provide a copy of the transfer transcript and catalog description of the course(s) to the Writing Programs Office in LL 314, 480/965-3853 on the Tempe campus or the Writing Programs Office in FABN 201A, 602/543.6091 on the West campus. Students should complete the process upon transfer of coursework to ASU so that the student is able to enroll in additional courses if required to do so.

Resident Credit Requirement
Resident credit refers to a course that is offered in a regular semester, winter session, intersession, or summer session. Credit earned through comprehensive examinations is also included when calculating ASU resident hours. Credit earned through independent learning, advanced placement, the College-Level Examination Program, or an International Baccalaureate Diploma/Certificate are excluded when calculating ASU resident hours.

Every candidate for the baccalaureate degree is required to earn a minimum of 30 semester hours in resident-credit courses at ASU.

Guidelines for Determination of Catalog Year
The catalog is published annually. Department, school, division, college, and university requirements may change and are upgraded often. In determining graduation requirements, an undergraduate student may use only one edition of the catalog but may elect to follow any later catalog edition. Students may not use an edition of the catalog that was in effect before their high school graduation or completion of GED. Students maintaining continuous enrollment at any Arizona community college or public university may graduate according to the requirements of the catalog in effect at the time of initial enrollment following high school graduation or completion of a GED or according to the requirements of any single catalog in effect during subsequent terms of continuous enrollment. Students may maintain continuous enrollment whether attending a single Arizona community college or public university or transferring among public institutions in Arizona while pursuing their degrees. Students transferring among Arizona public higher
education institutions must meet the admission, residency, and all curricular and academic requirements of the degree-granting institution.

1. A semester in which a student earns course credit is counted toward continuous enrollment. Noncredit courses, audited courses, failed courses, or courses from which the student withdraws do not count toward the determination of continuous enrollment for catalog purposes. See examples A and B in the Continuous Enrollment table below.

2. Students who do not meet the minimum enrollment standard stipulated in number 1 during three consecutive semesters (fall/spring/fall or spring/fall/spring) and the intervening summer term at any Arizona community college or public university are no longer considered continuously enrolled. (Note that students are not obligated to enroll and earn course credit during summer terms, but summer enrollment may be used to maintain continuous enrollment status.) These students must meet requirements of the Arizona community college or public university catalog in effect at the time they are readmitted or of any single catalog in effect during subsequent terms of continuous enrollment after readmission. See examples C and D in the Continuous Enrollment table below.

3. Students admitted or readmitted to an Arizona community college or public university during a summer term must follow the requirements of the catalog in effect the following fall semester or of any single catalog in effect during subsequent terms of continuous enrollment. See example E in the Continuous Enrollment table below.

4. In areas of study in which the subject matter changes rapidly, material in courses taken long before graduation may become obsolete or irrelevant.

5. Course work that is more than eight years old is applicable to completion of degree requirements at the discretion of the student's major department. Departments may accept such course work, reject it, or request that the student revalidate its substance. The eight-year limit on course work applies except when program accreditation agencies limit the life of course work to fewer than eight years. Departments may also require students to satisfy current major requirements rather than major requirements in earlier catalogs when completing earlier requirements is no longer possible or educationally sound.

6. Enrollment by Arizona community college students in nontransferable courses still constitutes enrollment for purposes of determining whether the student has been continuously enrolled. For example, if a student takes two semesters of cooperative education classes that are not transferable to the university but constitute continuous enrollment at the community college, the university should consider it continuous enrollment.

7. Exceptions made by an institution apply only to the institution that made the exception. For example, if the community college departments accepted credit that was more than eight years old, the university department to which the student transfers might not; it has the right and the obligation to reevaluate any credit more than eight years old.
Inquiries about these guidelines may be directed to the student’s academic advisor.

**Declaration of Graduation**

Students must file a Declaration of Graduation (DOG) using the Degree Audit Reporting System (DARS). DARS is an automated process that matches courses a student has completed with the requirements of a particular academic degree program, resulting in a report that shows the student which requirements are satisfied and which remain to be fulfilled, thus providing a guide for efficient selection of courses toward graduation. For example, a student majoring in Biology would request a degree audit report that would show how his or her completed ASU and transfer course work would apply to the Biology degree program.

Each student must submit a DOG form no later than the semester in which he or she earns the 87th semester hour. The DOG process confirms the degree requirements under which the student is enrolled, as indicated on the degree audit report for that academic program and catalog year. The student should review his or her degree audit with an academic advisor to assure an accurate interpretation. Some departments may require the DOG earlier than the 87th hour. Students failing to submit the DOG are prevented from further registration.

**Application for Graduation Requirements**

The following steps are required to complete the graduation process:

1. Register for the final semester.
2. Pay the graduation fee at Cashiering Services.
3. Submit the fee receipt and application for graduation to any Registrar site. The Degree Audit Report or Program of Study will be reviewed and eligibility to graduate verified.
4. Complete all course work listed on the Degree Audit Report or Program of Study by the graduation date.

For more information about the steps and deadline dates visit http://students.asu.edu/graduation [3]

**Petition for Variance from Degree**

Any student wishing to have a college or university degree requirement variance must petition the standards committee of the college in which the student is enrolled. All petitions must originate with the student’s advisor.

The University Undergraduate Standards Committee advises the Office of the Executive Vice President and Provost regarding undergraduate student petitions that concern university-wide academic requirements. These requirements include but are not limited to requirements on the amount of transfer credit, graduation requirements, limits on credit by examination, and requirements for a second baccalaureate degree. To petition for a variance from such university requirements, the normal department, division, school, and college forms and procedures are used.
Petitions that have been denied at the college level are forwarded to the University Undergraduate Standards Committee.

**Other Requirements**
The separate units of ASU—such as colleges, schools, and departments—have specific requirements for graduation that must be satisfied for a baccalaureate degree. Students are encouraged to consult with an academic advisor in planning a program to ensure that it meets the various requirements. A well-planned program may enable a student to concurrently satisfy a portion of the General Studies requirement together with a portion of a college or major requirement.

**Overview of Graduation Requirements**
At ASU, students take classes that fulfill four types of requirements. As illustrated in the Graduation Requirements diagram below, some courses can fulfill two or more types of requirements, but other courses fulfill only one requirement. The total semester hours needed to graduate are represented by the largest circle. The university minimum is 120 semester hours. Some majors, however, require more than 120 semester hours.

Although the three shaded circles are equal in size and the white circle is larger than all three, the total number of semester hours for each type of requirement may vary.

![Graduation Requirements Diagram](image)

**University Requirements**
The yellow circle represents university requirements. The General Studies
requirement and the First-Year Composition requirement are among these requirements.

**College Requirements**
The gray circle represents college requirements. Some colleges and schools have additional requirements, such as the College of Liberal Arts and Sciences.

**Major**
The red circle represents the requirements of the major. The semester hours required for a major may be as low as 30 hours or as high as 63 hours.

**Electives/Minor/Certificate**
The white circle represents electives and the requirements of a minor or certificate. A minor typically adds an additional 18 to 25 semester hours of course work. Although every student must eventually declare a major, minor and certificates are not required. Some courses, while providing semester hours toward graduation, fall outside the shaded circles and are not required in a program for graduation. These courses are electives. Some majors leave no room for electives within the minimum 120 semester hours required to graduate.

**Graduation with Academic Recognition**
An undergraduate student must have completed at least 56 semester hours of resident credit at ASU to qualify for graduation with academic recognition for a baccalaureate degree. Note: West campus students following a catalog year prior to fall 2007 are required to have completed at least 50 semester hours of resident credit at ASU.

The cumulative GPA determines the designation, as shown in the Academic Recognition table below.

**Academic Recognition**

<table>
<thead>
<tr>
<th>Cumulative GPA</th>
<th>Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.40–3.59</td>
<td>cum laude</td>
</tr>
<tr>
<td>3.60–3.79</td>
<td>magna cum laude</td>
</tr>
<tr>
<td>3.80–4.00</td>
<td>summa cum laude</td>
</tr>
</tbody>
</table>

The cumulative GPA for these designations is based on only ASU resident course work. For example, ASU independent learning course grades are not calculated in the honors GPA. All designations of graduation with academic recognition are indicated on the diploma and the ASU transcript. Graduation with academic recognition applies only to undergraduate degrees.

A student who has a baccalaureate degree from ASU and is pursuing a second baccalaureate degree at ASU (with a minimum of 30 hours of resident credit) is granted academic recognition on the second degree based on the semester hours earned subsequent to the posting of the first degree. If fewer than 56 semester
hours are completed at ASU subsequent to completion of the first ASU degree, the level of academic recognition can be no higher than that obtained on the first degree. If 56 or more semester hours are completed at ASU after completion of the first ASU degree, the level of academic recognition is based on the GPA earned for the second ASU degree. Inquiries about graduation with academic recognition may be directed to the Graduation Section, 480/965-3256.

**Additional Degrees**

**Second Baccalaureate Degree**

The student seeking a second baccalaureate degree must meet admission criteria for that degree. After conferral of the first degree, a minimum of 30 semester hours in resident credit courses at ASU must be successfully completed to earn the second baccalaureate degree. The student must meet all degree and university requirements of the second degree.

**Concurrent Degrees**

More than one baccalaureate degree may be pursued concurrently if prior approval is given by the standards committee(s) of the college(s) offering the degrees. Students may receive concurrent degrees if they meet the minimum requirements for both degrees.

**eAdvisor and Critical Requirements**

eAdvisor is Arizona State University’s electronic advising and enrollment management system designed for first-time freshmen and transfer students from Arizona public universities and Arizona community colleges. eAdvisor assists students in

- learning more about graduation requirements for their major;
- discerning what critical courses and grades are required to stay on track to successfully complete their degree;
- planning for and scheduling appropriate courses in the correct sequence to maximize success;
- monitoring progress toward their degree; and
- finding out how courses may fit into other majors if they decide to change majors.

Through eAdvisor, students follow a major map that outlines the critical requirements and optimal eight semester plan. If students to not meet the critical requirements, an advising hold may be placed on the students' records and an advising session is required before future registration activities. When students do not meet the critical requirements for two consecutive semesters, they are considered off-track, and may be advised to change majors.

Source URL: http://catalog.asu.edu/ug_grad_req

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*Effective 5/18/2009. Consult online version of Graduate Policies for the most current information: graduate.asu.edu/academic_policies.html
Introduction
The Graduate College admits students into programs leading to both professional and research-oriented advanced degrees beyond the bachelor’s degree. The master’s and doctoral degrees are awarded to students completing programs that culminate in research and creative endeavors. The Ph.D. degree is the highest university award, conferred on candidates who have proven their ability as scholars and original researchers. For a list of ASU graduate degrees, see graduate degree listings at: www.asu.edu/aad/catalogs/graduate/grad-degs.html.

Academic Integrity
The highest standards of academic integrity are expected of all graduate students, both in the academic coursework and in their related research activities. The failure of any graduate student to meet these standards may result in serious consequences including suspension or expulsion from the university and/or other sanctions as specified in the academic integrity policies of individual colleges as well as the university.

Violations of academic integrity include, but are not limited to: cheating, fabrication, tampering, plagiarism, or aiding and/or facilitating such activities. At the graduate level, it is expected that students are familiar with these issues and each student must take personal responsibility in their work. In addition, graduate students are expected to follow university guidelines related to the Student Code of Conduct. University policies related to academic integrity and code of conduct are available in the Office of Student Life, or at www.asu.edu/studentaffairs/studentlife/judicial.

Graduate Student Responsibilities
Graduate students are responsible for familiarizing themselves with all graduate policies and procedures. Each student should also communicate directly with her/his degree program department to be clear on its expectations for degree completion.

Admissions

Applications
Submission of an Application and Deadlines
For admission information and procedures, see graduate.asu.edu/admissions. Students are encouraged to apply via the website to expedite processing time. The application deadlines are set by the degree programs so applicants are urged to contact the programs directly. For fall enrollment, international applicants must submit application materials by the previous December. For spring enrollment (when allowed by the academic unit) international applicants must submit application materials by the previous August. Not all programs accept applications for both fall and spring semesters. Applicants are advised to contact the specific degree program departments for this information.

*Effective 5/18/2009. Consult online version of Graduate Policies for the most current information: graduate.asu.edu/academic_policies.html
Application Fee
Each application to an ASU graduate program must be accompanied by a nonrefundable application fee. For current fees please see the Graduate Admission website.

Application Requirements
All applicants must submit official transcripts to the Graduate College from all post-secondary institutions previously attended (see graduate.asu.edu/admissions). Degree programs, departments, or colleges, may have admission requirements in addition to those of the Graduate College. Many graduate programs require scores from a national admissions test such as the Graduate Record Examination (GRE), Graduate Management Admission Test (GMAT), or the Miller Analogies Test. Some programs require a portfolio, letters of recommendation, and/or a statement of goals.

Applicants should contact the degree program for specific additional requirements. Degree programs will make a recommendation to the Graduate College dean regarding their willingness to admit an applicant.

Because ASU receives applications from many highly qualified students, some applicants may be denied admission for reasons not related to their academic performance (e.g., program capacity, mentor availability, program match).

Additional International Requirements
International Applicants: Additional Requirements
Applicants who will hold an F-1 or J-1 visa must:

1. Meet the regulations of the U.S. Immigration and Customs Enforcement (ICE) agency.
2. Obtain insurance coverage against illness and accident before being permitted to register. Insurance must be maintained throughout the student’s enrollment at the university.
3. Must submit additional materials as stated on the Graduate College’s website at graduate.asu.edu/admissions.
4. Verify that they have the financial resources to cover their expenses during graduate study at ASU. The Financial Guarantee form is available through the Graduate College website at graduate.asu.edu/forms.

The I-20 or the DS-2019 (documents needed to obtain a student visa) is issued only after the completed and properly verified Financial Guarantee form and supporting documents have arrived. International students may enroll at ASU only if they have been admitted to a degree program, a certificate program, or the post-baccalaureate teacher education program. 

Immediately upon arrival on campus, students must report to an advisor in the International Student Office (ISO), www.asu.edu/studentaffairs/ed/iso.

*Effective 5/18/2009. Consult online version of Graduate Policies for the most current information: graduate.asu.edu/academic_policies.html
English Language Requirement

Applicants from a country whose native language is not English must provide evidence of English proficiency as indicated by acceptable scores on the Test of English as a Foreign Language (TOEFL), or the International English Language Testing System (IELTS), as follows:

1. The minimum TOEFL requirement for entry into any graduate program is 550 (paper-based) or 83 internet based TOEFL (iBT).
2. The minimum IELTS requirement for entry into any graduate program is an overall band score of 6.5 with no individual band score below 6.0.
3. Individual degree programs may have higher TOEFL or IELTS requirements for their various programs. Consult the individual department websites for more information.

The following exceptions apply to the English proficiency requirement:

1. Applicants who have completed at least 90 semester credit hours (or equivalent) with a cumulative grade point average of 3.00 or higher (on a 4.00 scale) at a regionally accredited institution in the United States are exempt from the English proficiency requirement.
2. Applicants who have earned a bachelor’s degree or higher from a regionally accredited university in the United States are exempt from the English proficiency requirement. This study must have been done within the United States.
3. Applicants who have completed a minimum of 12 semester hours of graduate level study at a regionally accredited college or university in the United States with a GPA of 3.00 or higher are exempt from the English proficiency requirement.
4. Applicants who have completed the ASU American English and Culture Program Advanced 2 Level (with grades of “B” or higher) are exempt from the English proficiency requirement.

All international applicants who are from a country whose native language is not English and who wish to apply for teaching assistantships must pass an examination that certifies their skill in speaking English—either the Test of Spoken English (TSE), which may be taken in the student’s home country, or the Speaking Proficiency English Assessment Kit (SPEAK) test, which is administered at ASU. Some degree programs also require TSE or SPEAK scores of applicants whose native language is not English. For specific information about TSE requirements, contact the head of the program.

Admission

Graduate College Admission Requirements

An individual who holds a bachelor’s degree (or equivalent) or a graduate degree from a regionally-accredited college or university of recognized standing is eligible to apply for admission to the Graduate College. Remedies for undergraduate deficiencies may be assigned by academic units if the undergraduate degree is based on credits not accepted by ASU, such as life experience, or noncredit workshops and seminars.

*Effective 5/18/2009. Consult online version of Graduate Policies for the most current information: graduate.asu.edu/academic_policies.html
Generally, an applicant must have a GPA of 3.00 (scale: 4.00 = A), or the equivalent, in the last two years of work leading to the bachelor’s degree. A student who enters a graduate degree program is expected to have undergraduate educational experiences, including general education studies, that are similar to those required for the baccalaureate degree at ASU. The Graduate College evaluates the equivalency of the student’s bachelor’s degree to determine if the degree is acceptable for a graduate program at ASU.

**Admission Decisions**

Only the Graduate College dean can make formal offers of admission. The Graduate College notifies all applicants in writing of the admission decision. Applicants are admitted into the university for the semester and year indicated on their admission letter and must initiate their program by registering for courses in that semester.

All academic credentials and supporting materials received by the university in connection with an application for admission become the property of ASU.

**Deferral of Admission Decisions**

A student may, with the recommendation of the degree program, defer his/her initial semester and year of admission to the next semester in which the program is admitting students. No further deferrals are allowed.

**Admission Status**

There are several admission status levels which can be applied to a student’s application:

- **Regular Admission Status:**
  Regular admission status is assigned to an applicant who fulfills all requirements for admission and is academically acceptable to both the degree program and the Graduate College.

- **Regular Admission with Deficiencies Status:**
  Regular admission with deficiencies status is assigned to an applicant whose grades and test scores are at an acceptable level but who does not have the undergraduate background expected by the degree program and the university. Deficiency courses may not be applied toward the minimum hours required for the degree program.

- **Provisional Admission Status:**
  Provisional admission status is assigned to a student who does not meet minimum academic standards but has additional evidence to suggest the potential for success. This status provides the degree program with an opportunity to better evaluate the student’s academic potential. Students who do not meet the provisions of their admission will be withdrawn from their program. When students have completed their provisional requirements, they should check with their advisors to make sure that change of status has been recommended. A provisional student may also be assigned deficiency courses. Students with Provisional Admission are not eligible to submit their Plan of Study.

*Effective 5/18/2009. Consult online version of Graduate Policies for the most current information: graduate.asu.edu/academic_policies.html*
Post-baccalaureate Non-degree Admission Status:
Students not immediately intending to earn a degree may enroll as post-baccalaureate non-degree students. The application process does not require submission of test scores or transcripts unless the student is applying to a graduate certificate program as well. For post-baccalaureate non-degree admission information and procedures, access the website at graduate.asu.edu/admissions/nondegree. See the Pre-Admission Credits paragraph in the Graduate Degree Requirements section of these policies for maximum credit hours that can be applied to a degree program. Please note that courses in some academic units are open only to degree-seeking students.

Registration and Enrollment

Graduate students register during terms indicated in the Registration and Tuition Payment Guide issued by the University Registrar’s Office. Details regarding registration and course drop/add procedures are also provided in the Registration and Tuition Payment Guide. Day and evening graduate classes, offered on or off-campus during the academic year (fall and spring semesters) and the summer sessions, are considered part of the regular program. Students may register at MyASU.

Enrollment Verification Guidelines

The Registrar’s Office will verify students’ enrollment each semester according to the general guidelines below.

### Enrollment Verification Guidelines for Graduate Students

<table>
<thead>
<tr>
<th></th>
<th>Full Time*</th>
<th>Half Time</th>
<th>Less Than Half Time</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Regular semester</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate</td>
<td>9 or more hours</td>
<td>5–8 hours</td>
<td>4 or fewer hours</td>
</tr>
<tr>
<td>Graduate assistant**</td>
<td>6 or more hours</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Five-week summer session</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate</td>
<td>3 or more hours</td>
<td>2 hours</td>
<td>1 hour</td>
</tr>
<tr>
<td>Graduate assistant**</td>
<td>2 or more hours</td>
<td>1 hour</td>
<td>—</td>
</tr>
<tr>
<td><strong>Eight-week summer session</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate</td>
<td>5 or more hours</td>
<td>3–4 hours</td>
<td>2 or fewer hours</td>
</tr>
</tbody>
</table>

* An audited course does not count for full-time enrollment.
** For enrollment verification purposes, “graduate assistant” is a generic term that includes teaching assistants, research assistants, teaching associates and research associates.

*Effective 5/18/2009. Consult online version of Graduate Policies for the most current information: graduate.asu.edu/academic_policies.html*
International students are required to maintain full-time enrollment status to maintain their U.S. visa.

Maximum Course Load
The Graduate College does not have a maximum credit hour enrollment policy. It is expected that academic advisors will set course loads for their students that facilitate academic success.

Maximum Employment Hours for International Students
Employment for international students on F-1 or J-1 visas must be limited to 20 hours per week while school is in session (summer sessions are voluntary and are not limited.) This is a federal regulation and the individual degree program is responsible for enforcement.

Continuous Enrollment and Leave of Absence Policies
Once admitted to a graduate degree program, master’s and doctoral students must be registered for a minimum of one credit hour (not audit) during all phases of their graduate education. This includes periods when they are engaged in research, working on or defending theses or dissertations, taking comprehensive exams, taking Graduate Foreign Language exams or in any other way using university facilities or faculty time including the term in which they graduate. This credit must appear on the Plan of Study or must be an appropriate graduate-level course (e.g. 595, 695, or 795, Continuing Registration). Courses with grades of “W” and “X” are not considered valid registration for continuous enrollment purposes.

Students planning to discontinue enrollment for a semester or more must request approval for a leave of absence. Student may petition the Graduate College for a leave of absence for a maximum of two semesters during their entire program. A petition for a leave of absence, endorsed by the members of the student’s supervisory committee and the head of the academic unit, must be approved by the Graduate College dean. This request must be filed and approved before the anticipated absence.

An approved leave of absence will enable students to re-enter their program without re-applying to the university. Students who do not enroll for a fall or spring semester without an approved leave of absence by the Graduate College are considered withdrawn from the university under the assumption that they have decided to discontinue their program. Student removed for this reason may reapply for admission to resume their degree program; the application will be considered along with all other new applications to the degree program.

A student on leave is not required to pay fees, but in turn is not permitted to place any demands on university faculty or use any university resources.

Enrollment Policy for the Teaching and Research Assistantships/Associateships

*Effective 5/18/2009. Consult online version of Graduate Policies for the most current information: graduate.asu.edu/academic_policies.html
All teaching and research assistants and associates (i.e., TAs and RAs) must enroll for a minimum of six semester hours of appropriate credit during each semester of their appointment. The six hours cannot include audit enrollment.

TAs and RAs are treated as residents for tuition purposes. To be eligible for tuition remission, TAs and RAs must be employed a minimum of 10 hours per week (25 percent Full Time Equivalency {FTE}). TAs/RAs working 10-19 hours per week (25-49 percent FTE) receive a 50 percent remission of tuition for the semester or summer session of their employment. TAs/RAs working 20 hours per week (50 percent FTE) do not pay tuition during the semester or summer session of their employment. In addition, the university pays the individual health insurance premium for those TAs and RAs working 20 hours per week (50 percent FTE).

See the TA/RA Handbook for application procedures for assistantships and associateships.

Graduate Degree Requirements

Plan of Study

Determination of Academic Requirements

A student graduates under the degree requirements and policies in effect at the semester and year of admission to a graduate degree program.

The Plan of Study (POS)

The Plan of Study specifies the requirements that students must complete for their degree and is submitted and revised electronically via the interactive POS system (iPOS). In order to facilitate degree completion and shorten time to degree, graduate students with regular status must submit their POS by the time they have enrolled for 50 percent of the minimum credit hours required towards their degree program.

The POS must be approved by a student’s committee, the head of the academic unit, and the Graduate College dean. The POS becomes a contract between the University and the student that guides the student in completing degree requirements.

Courses numbered 500 or higher are graduate level courses. Core courses required by a graduate degree program must be 500-level or above. A maximum of six credit hours of 400 level coursework may be used on an approved POS (400 level courses taken for a grade of Pass/Fail cannot be included on a POS). Courses with grades of “D” (1.00) and “E” (0.00) cannot be included on a POS.

Students may not include on their Plan of Study any credit hours that have been applied towards a previously awarded degree.
Grading Exceptions

Special Graduate Grade Considerations
Graduate coursework (i.e. 500, 600, and 700 level) reported as incomplete (“I”) must be completed within one calendar year of the end of the scheduled course. If the course has not been completed and a regular grade assigned, it will become a permanent incomplete. The student will need to re-register for the course to receive credit.

Thesis and dissertation credit may only be assigned a grade of “Y” or “Z.”

A grade of “W” is given whenever a student officially withdraws from a course after the drop/add period.

Audit Enrollment
Graduate students may register to audit one or more courses with the approval of the supervisory committee chair and the consent of the instructor involved. An audited course does not count towards the minimum number of credits required for international students with visa restrictions, students employed as TA/RAs, or students receiving financial assistance.

Pre-Admission/Transfer Credit

Pre-Admission Credits
Credit hours completed before the semester and year of admission to an ASU graduate degree program are considered pre-admission credits. With approval of the degree program and the Graduate College, a maximum of nine credit hours of pre-admission credits may be included on the POS for a master’s degree and a maximum of 12 credit hours for a doctoral degree.

Transfer Credit
Transfer credits are those accepted from another institution for inclusion on an ASU Plan of Study. Official transcripts of any potential transfer credit for a POS must be sent directly to the Graduate Admissions Office from the Office of the Registrar at the institution where the credit was earned.

Transfer hours may not exceed 20 percent of the total credit hours for a master's degree, and 12 credit hours for doctoral degrees. Only graduate level courses with grades of "A" (4.00) or "B" (3.00) may be transferred. Transfer credits may not be applied toward the minimum degree requirements for an ASU degree if they have been counted toward the minimum requirements for a previously-awarded degree.

Certain types of graduate credits cannot be transferred to ASU, including credits awarded (as follows):

1. By post-secondary institutions that lack candidate status or accreditation by a regional accrediting association.

*Effective 5/18/2009. Consult online version of Graduate Policies for the most current information: graduate.asu.edu/academic_policies.html
2. For life experience.
3. For courses taken at non-collegiate institutions (e.g., government agencies, corporations, and industrial firms).
4. For courses, workshops, and seminars offered by other postsecondary institutions as part of continuing education programs.
5. For extension courses.
6. Prior to the posting of a bachelor’s degree.

Academic credits earned at other institutions that base their credit calculation on a different scale from ASU’s are subject to conversion before inclusion on a Plan of Study. In all cases, the inclusion of transfer courses on a Plan of Study is subject to approval by the degree program and the Graduate College dean.

**Sandra Day O’Connor College of Law Credit**
The Graduate College accepts a numerical grade of 70 or above for courses taken in the ASU Sandra Day O’Connor College of Law as part of an approved Plan of Study. These grades are not used in the two GPAs calculated for graduation unless needed, as determined by the Graduate College.

**Repeating ASU Courses**
Graduate students (degree or non-degree) may retake any course at ASU, but all grades remain on the student transcript as well as in all GPA calculations.

**Reserving Course Credits by Undergraduates for Graduate Degree Use**
ASU undergraduate students who have achieved senior status with a 3.0 cumulative GPA or higher may reserve up to nine credit hours of graduate level coursework. Only reserved courses with a grade of “B” (3.00) or higher may be included on a Plan of Study. Reserved courses cannot be used to meet any baccalaureate graduation requirements. Before the student’s bachelor’s degree is conferred the student must submit a Request for Graduate Credit form which is signed by the student’s undergraduate advisor and the head of the academic unit, to the Graduate College for approval. Students are not eligible to reserve credit after the bachelor’s degree has been awarded.

**Graduate Foreign Language Examination**
A graduate degree program may require at least a reading level proficiency of a foreign language relevant to the student’s area of study. Students who are required to demonstrate proficiency in a foreign language must pass the Graduate Foreign Language Examination specific to their particular graduate program. Students must be enrolled for a minimum of one credit hour during the term in which they take the examination.

Students must successfully complete the foreign language examination before taking any required comprehensive examinations or scheduling the final oral defense of the thesis or
dissertation. A student may petition the Graduate College for a re-examination but must pass the examination in no more than three attempts.

Maintaining Academic Progress toward Degree Completion

Grade Point Averages (GPA) and Restricted Grades
There are two GPA requirements that govern academic progress in and graduation from a graduate degree program. The POS GPA is based on all courses that appear on the student’s final POS. The Graduate GPA is based on all courses numbered 500 or higher that appear on the transcript, with the exception of:

1. Courses counted toward an undergraduate degree at ASU (unless shared with a master’s degree in an approved bachelor’s/master’s degree program).
2. Courses noted as deficiencies in the original letter of admission.

Transfer credits and courses taken in the Sandra Day O’Connor College of Law are not counted in calculations of the POS or Graduate GPA. Courses with grades of “D” (1.00) and “E” (0.00) cannot appear on the POS but will be used to compute the Graduate GPA.

To be eligible for graduation, students must achieve a POS GPA and a Graduate GPA of 3.00 or higher.

Satisfactory Progress towards the Degree and Time Limits on Degree Completion
All graduate students are expected to make systematic progress towards completion of their degree. This progress includes meeting the conditions listed below and achieving the benchmarks and requirements set by the individual degree programs. Each degree program should have in place policies for satisfactory academic progress. If students fail to meet the requirements of their degree program and/or the benchmarks outlined below, the degree program may recommend withdrawal of the student to the Graduate College dean. The Graduate College dean makes the final determination.

1. Maintain a minimum of 3.0 GPA both on POS and Graduate GPA. If either GPA falls below 3.0, the student must develop, with their advisor, an academic performance improvement plan that includes the conditions and timeframes for making satisfactory academic progress in her/his degree program. The student is considered to be on academic probation until the conditions specified in the academic performance improvement plan are met and both GPA’s are raised above 3.0.
2. Meet all requirements of the graduate degree program.
3. Meet the maximum time limit for graduation from the student’s graduate degree program (six years for master’s, ten years for doctoral).

*Effective 5/18/2009. Consult online version of Graduate Policies for the most current information:
graduate.asu.edu/academic_policies.html

Academic Catalog Archive 2009-10
4. Doctoral students must meet the five year time limit for graduation after passing the comprehensive examinations.
6. Successful completion of the oral defense required in the culminating experience.

Students should verify any additional satisfactory progress policies as required by their degree program.

Thesis and Dissertation Considerations
The master’s thesis and doctoral dissertation (or equivalent) must be based on original and independent research/creative activity conducted by the student, under the guidance of the graduate supervisory committee. The thesis is an introduction to scholarly writing and is intended to create an understanding of theory and methods applicable to one’s field. The dissertation should demonstrate the candidate’s mastery of research and scholarly methodologies, theory, and tools of the discipline. Both the thesis and dissertation should demonstrate the candidate’s ability to address a major intellectual problem and to propose meaningful questions and hypotheses, as well as utilize the methods with which to study the proposed research question(s) and related hypotheses, and draw conclusions.

Graduate Supervisory Committees
Students are guided by faculty mentors who advise them through their degree program. Students should identify their advisors early in their graduate career and look to them for guidance in their graduate work. Once the student has selected a thesis/dissertation committee, the head of the academic unit recommends the supervisory committee to the Graduate College dean who reviews and appoints the Committee. Graduate supervisory committees must consist of a minimum of three individuals, including the chair or co-chairs.

Faculty Emeriti who meet Graduate College criteria may serve as members or co-chairs on graduate supervisory committees. They may serve as chairs with the recommendation of the academic unit and approval of the Graduate College dean on a case by case basis. Qualified individuals outside the university, upon the recommendation of the head of the academic unit and approval of the Graduate College, may serve as members of thesis and dissertation committees. All such requests must be submitted to the Graduate College dean for approval.

See the Master’s Degree Requirements and the Doctoral Degree Requirements sections below for the composition of supervisory committees.

Thesis or Dissertation Research Involving Human and Animal Subjects

*Effective 5/18/2009. Consult online version of Graduate Policies for the most current information: graduate.asu.edu/academic_policies.html*
Theses or dissertations that make use of research involving human or animal subjects must include a statement indicating that the research has been approved by the appropriate university body.

Research involving human subjects conducted under the auspices of Arizona State University is reviewed by the University Human Subjects Institutional Review Board (IRB) in compliance with federal regulations. Documents containing any data collection from human subjects require that applications be submitted to the University Human Subjects IRB for approval before data collection or recruitment of subjects is initiated at researchadmin.asu.edu/compliance/irb.

Research involving the use of animals conducted under the auspices of Arizona State University is reviewed by the Institutional Animal Care and Use Committee (IACUC) in compliance with federal regulations. Documents containing any data collection from animal research require that applications be submitted to the Institutional Animal Care and Use Committee for approval at researchadmin.asu.edu/compliance/iacuc.

It is very important that students check with their thesis/dissertation advisor well in advance of data collection to ensure university regulations are adhered to in the collection of research data.

**Completing the Degree**

The final culminating experiences for graduate degrees vary by program. In many master’s degree programs a thesis is required, in other programs the culminating experience is an applied or professional project. In all Ph.D. programs, as well as in most professional doctoral programs, dissertations are required. Theses and dissertations are officially documented and archived. Dissertations are deposited with University Microfilms International (UMI) which makes their content available to the public. Information on the dissertation later appears in Dissertation Abstracts International. For this reason, all theses and dissertations must undergo Graduate College format review. The Graduate College dean reviews the content to affirm the quality and originality of the scholarly work.

**Thesis and Dissertation Format Review**

Prior to the defense, students must prepare their thesis or dissertation for submission to the university. This requires that the document meet format guidelines, as outlined in the Formal Manual, for readability, consistency, and binding. Copies of the Format Manual are available in the Graduate College and at graduate.asu.edu/formatmanual on the web.

To help ensure these guidelines are met, students are required to submit a complete copy of the thesis or dissertation to the Graduate College for format review at least 10 working days before the proposed date of the oral defense. It is very important that students familiarize themselves with format requirements before beginning the thesis/dissertation process. They should check with their degree program to make sure they have no specific additional requirements on formatting.

*Effective 5/18/2009. Consult online version of Graduate Policies for the most current information: graduate.asu.edu/academic_policies.html*
Doctoral students are responsible for the University Microfilms International (UMI) microfilming fee, which covers the expense of having the document sent to UMI, where it is microfilmed and cataloged.

**Thesis and Dissertation Defenses**

Thesis and dissertation defenses are open to all members of the university community and the general public. The oral defense engages the supervisory committee and the candidate in a critical and analytical discussion of the research and findings of the study, as well as a review of the contribution of the research topic to advancing knowledge in that discipline. The presentation of a thesis or dissertation defense in an open forum fosters a broader awareness of the state of graduate research at ASU, promotes a wider scholarly dialogue among disciplines, and recognizes publicly the scholarly contributions of master’s or doctoral candidates.

Defenses must be scheduled with the Graduate College at least 10 working days in advance of the defense date. It is expected that oral defenses will be held on an ASU campus during regular business hours in order to facilitate student, faculty, and public accessibility. When there are sound educational reasons for holding a defense under different circumstances, contact the Graduate College for approval before scheduling the defense.

It is desirable that all members of a student’s supervisory committee be physically present with the student at the final oral defense of a thesis or dissertation. However, there are situations (e.g. faculty travel, faculty emergencies and/or faculty leave) that may necessitate holding a defense with one or more committee member(s) absent. Contact the Student Academic Services (SAS) office in the Graduate College for additional information. The forms to schedule the defense are found at graduate.asu.edu/forms/index.html and must be submitted when the thesis/dissertation is presented for format review to the Graduate College.

**Graduation**

Students must apply for graduation in accordance with the University Registrar policies. See Application for Graduation. Students must meet all University and Graduate College degree requirements prior to the conferral of their degree.

The graduation deadlines and procedures are set by the Graduate College and are available online at graduate.asu.edu/graddeadlines.html. Deadline dates vary slightly depending on the calendar year, so students should check them carefully in advance of the semester they plan to defend their thesis/dissertation. It is very important that students become familiar with these deadlines so that graduation can occur during the expected term.

**Master’s Degree Requirements**

**Master’s Students’ Plan of Study**

*Effective 5/18/2009. Consult online version of Graduate Policies for the most current information: graduate.asu.edu/academic_policies.html*
**Master's Students' Plan of Study**

As noted previously, master’s students must file their *Plan of Study* (POS) by the time they enroll in 50 percent of the credit hours required towards their degree program. A student is not eligible to apply for the comprehensive or final examination until a POS has been approved.

**Minimum Credit Hour Requirements**

A minimum of 30 semester hours of graduate work is required for the master’s degree at ASU. Six (and only six) of the minimum required credit hours on a POS must be 599 Thesis credits if a thesis is required. Please note that *Plans of Study* submitted for master’s degrees that do not have a thesis requirement may not include 599 Thesis credits.

**Maximum Time Limit**

All work toward a master’s degree must be completed within six consecutive years. The six years begins with the semester and year of admission to the program. Graduate courses taken prior to admission that are included on the *Plan of Study* must have been completed within three years of the semester and year of admission to the program.

**Completing the Master's Degree**

**The Master's Supervisory Committee**

A master’s student’s supervisory committee must be appointed before the student may apply for the comprehensive examination or applied project or before the student can register for 599 Thesis credits (if applicable). The committee is appointed by the Graduate College dean upon the recommendation of the head of the academic unit. It is composed of a minimum of three members, including a chair or co-chairs.

For master’s committees, tenured/tenure-track faculty may serve as members of a graduate supervisory committee, chair or co-chair. The chair of the committee is typically from the student’s degree program and should be carefully selected by the student to guide their work. Members of the Graduate Faculty may serve as members or co-chairs of a master’s committee. Graduate Faculty endorsed to chair doctoral committees may also chair master’s committees. ASU academic professionals or non-tenure accruing faculty with appropriate academic credentials may serve as a member or co-chair on master’s committees.

**Thesis and Thesis Defense**

To satisfy the research requirement for most master’s degrees, a student is expected to present a thesis which is defended in an oral examination. Degree programs may have additional requirements in addition to the thesis (e.g. comprehensive examinations). Students should check with their degree program to verify requirements. An oral defense of the thesis is required and must be completed to the satisfaction of the supervisory committee. Students must be enrolled for at least one semester hour of credit that appears on the *Plan of Study* or one hour of appropriate graduate-level credit (such as 595 Continuing Registration) during the semester (including summer session) in which the student defends the thesis.

*Effective 5/18/2009. Consult online version of Graduate Policies for the most current information: graduate.asu.edu/academic_policies.html*
Revisions to the thesis are normal and must be completed in a timely manner. If the student is unable to complete revisions to the thesis and meet the ASU Bookstore deadline for the semester in which the defense is held, the student must complete the revisions, remain registered, and present the finished document to the ASU Bookstore within one year of the defense. Failure to do so will require the re-submission of the document for format review and may result in re-defense of the thesis to ensure currency of the work.

Other Master’s Culminating Experiences
A comprehensive examination, capstone course or an applied project is required as a culminating experience in master’s programs that do not have a thesis requirement. Students must have an approved Plan of Study prior to scheduling their comprehensive examination and/or registering for their applied project or capstone course. An oral defense of an applied project is required and must be completed to the satisfaction of the supervisory committee.

Comprehensive Examinations Procedures
The student must schedule the comprehensive examination with their academic unit. The results of this examination must be reported to the Graduate College within the semester it is completed. Failing the comprehensive examination is considered final unless the supervisory committee and the head of the academic unit recommend a re-examination. A petition for re-examination, endorsed by the members of the student’s supervisory committee and the head of the academic unit, must be approved by the Graduate College dean before a student can take the re-examination. Only one re-examination is permitted and must be administered no sooner than three months and no later than one year from the date of the original examination. If the student’s petition for re-examination is not approved or the student fails the re-examination, the Graduate College will withdraw a student from his/her degree program.

Foreign language requirements, if applicable, must be fulfilled before taking the comprehensive examinations. Students are required to register for at least one semester hour of credit that appears on the POS or one hour of appropriate graduate-level credit (such as 595 Continuing Registration) during the semester or summer session in which they take their comprehensive examinations.

Doctoral Degree Requirements

Doctoral Plan of Study

The Doctoral Plan of Study
As noted previously, doctoral students must file their Plan of Study (POS) by the time they enroll in 50 percent of the credit hours required towards their degree program. The doctoral Plan of Study must be approved by the student’s supervisory committee, head of the academic unit, and the Graduate College dean.
Minimum Credit Hour Requirements
A minimum of 84 credit hours of graduate work is required for the doctoral degree at ASU; 12 (and only 12) of these hours must be 799 Dissertation course credits if the student is completing a dissertation. Students may apply up to 30 credit hours from a previously awarded master’s degree toward their doctoral Plan of Study with approval of the degree program and the Graduate College dean.

Maximum Time Limit
Doctoral students must complete all program requirements within a ten-year period. The ten-year period starts with the semester and year of admission to the doctoral program. Graduate courses taken prior to admission that are included on the Plan of Study must have been completed within three years of the semester and year of admission to the program (previously awarded master’s degrees used on the Plan of Study are exempt).

In addition, the student must defend the dissertation within five years after passing the comprehensive examinations. Therefore, the maximum time limit is the shortest of the following:

1. Time period since initial enrollment (10 year time limit).
2. Time after passing the comprehensive exams (5 year time limit).

Any exceptions must be approved by the supervisory committee and the Graduate College dean and ordinarily involves repeating the comprehensive examinations. The Graduate College may withdraw students who are unable to complete all degree requirements and graduate within the allowed maximum time limits.

Completing the Doctoral Degree

Dissertation Supervisory Committee
Upon the recommendation of the head of the academic unit, the Graduate College dean appoints the student’s dissertation committee. The committee must be composed of at least three members, including either a chair or co-chairs. Doctoral programs may have additional requirements for committee composition. This committee serves as the intellectual guide for the student and must approve the research/scholarly focus and substance of the dissertation. The members of the dissertation committee have the necessary knowledge and skills to advise the student during the formulation of the research topic and during the completion of the research and the dissertation.

Dissertation chairs and co-chairs must be approved by the Graduate College dean and each degree program maintains the list of faculty approved by the Graduate College to do so. Generally, most resident faculty at ASU may serve on dissertation committees with the proviso that they have appropriate expertise in the discipline.

All Ph.D. programs have a Graduate Faculty. The Graduate College maintains a web page (graduate.asu.edu/gradfaculty) of faculty approved to serve as Ph.D. committee members. The Graduate Faculty in a Ph.D. program may also include highly qualified individuals from outside
the university who have been approved to serve on committees. Each Ph.D. program maintains
the list of faculty approved by the Graduate College to chair or co-chair Ph.D. dissertations.
Ph.D. students are urged to communicate with their Ph.D. program to be clear on eligibility of
faculty to chair committees.

The final committee membership must be appointed by the Graduate College dean before the
student may apply for the comprehensive examinations, defend the dissertation prospectus, and
register for 799 Dissertation course credits (if applicable).

Comprehensive Examinations
When students have essentially completed the course work in an approved Plan of Study, they
should request permission to take the comprehensive examinations. These written and oral
examinations are designed to test the student’s mastery of the field of specialization. Doctoral
comprehensive examinations are administered by a committee consisting of a minimum of three
members.

Foreign language requirements, if applicable, must be fulfilled before taking the comprehensive
examinations. Students are required to register for at least one semester hour of credit that
appears on the POS or one hour of appropriate graduate-level credit (such as 795 Continuing
Registration) during the semester or summer session in which they take their comprehensive
examinations.

Failure in the comprehensive examinations is considered final unless the supervisory committee
and the head of the academic unit recommend, and the Graduate College dean approves a re-
examination. Only one re-examination is permitted. A petition for re-examination, endorsed by
the members of the student’s supervisory committee and the head of the academic unit, must be
approved by the Graduate College dean before a student can take the second examination. Re-
examination may be administered no sooner than three months and no later than one year from
the date of the original examination. The Graduate College may withdraw a student from his/her
degree program if the student’s petition for re-examination is not approved, or if the student fails
to successfully pass the retake of the comprehensive exam.

Doctoral Prospectus Defense
All doctoral degree programs that require students to complete a dissertation must require
students to complete a dissertation proposal/prospectus and submit the results to the Graduate
College. Failure of the doctoral dissertation prospectus defense is considered final unless the
supervisory committee and the head of the academic unit recommend, and the Graduate College
dean approves a second proposal defense. If a petition is approved, the student must submit the
new prospectus by the end of six months (the six months start from the date that the first doctoral
dissertation proposal defense was held). If the academic unit does not grant the student
permission to retake the proposal defense, or if the student fails to pass the retake of the proposal
defense, the Graduate College may withdraw the student from the degree program.

Candidacy

*Effective 5/18/2009. Consult online version of Graduate Policies for the most current information:
graduate.asu.edu/academic_policies.html
Doctoral students (with specific degree program exceptions approved by the Graduate College dean) achieve candidacy status in a letter from the University Registrar dean upon:

1. Passing the foreign language examination, if applicable.
2. Passing the comprehensive examinations.
3. Successfully defending the dissertation prospectus, if applicable.

Doctoral students who have been advanced to candidacy are required to maintain continuous enrollment until all degree requirements have been completed and graduated. See Continuous Enrollment.

Doctoral Dissertations and the Doctoral Defense
The written doctoral dissertation is based on an original and substantial scholarly work that constitutes a significant contribution to knowledge in the student’s discipline. The dissertation research must be conducted during the time of the student’s doctoral studies at ASU, under guidance of ASU Graduate Faculty, and in accordance with Graduate College policies and procedures. The composition of the dissertation is defined by the degree program with the approval of the Graduate College dean.

The dissertation research experience culminates in a final oral exam, commonly known as the “dissertation defense.” A final public dissertation defense is required. Each student must be enrolled for at least one semester hour of credit that appears on the Plan of Study or one hour of appropriate graduate-level credit (such as 795 Continuing Registration) during the semester (including summer session) in which the student defends the dissertation.

Revisions to the dissertation are normal and must be completed in a timely manner. If the student is unable to complete revisions to the dissertation and meet the ASU Bookstore deadline for the semester in which the defense is held, the student must complete the revisions, remain registered, and present the finished document to the ASU Bookstore within one year of the defense. Failure to do so will require the re-submission of the document for format review and may result in re-defense of the dissertation to ensure currency of the work.

Other Graduate Educational Opportunities

Graduate Certificates
The graduate certificate is a programmatic series of linked courses. Graduate certificates facilitate professional growth for people who already hold the baccalaureate degree. For more information on current graduate certificates see the Graduate Degree and Certificate Search page.

Admission

*Effective 5/18/2009. Consult online version of Graduate Policies for the most current information: graduate.asu.edu/academic_policies.html*
All applications for graduate certificate programs must be submitted through www.asu.edu/gradapp.

Certificate Requirements
A minimum of 15 semester hours of graduate work are required to complete a graduate certificate. No more than one-fifth (20 percent) of the minimum required credit hours for a graduate certificate may be transferred from another university. All transfer work must meet Graduate College transfer policies. All course work used to complete an ASU graduate certificate must be completed within a six-year time limit. Courses at a 400-level may be allowed with prior approval from the appropriate certificate program, however, a minimum of two-thirds of the courses taken to complete the certificate must be at the 500-level or above. No more than 40% of coursework towards the requirements of a graduate certificate can be completed prior to admission to the certificate program.

Awarding of the Graduate Certificate
A student will be eligible for the official posting of the graduate certificate to their transcripts when all applicable coursework has been successfully completed and Graduate College scholarship requirements have been met. Students must complete, sign and submit to their specific graduate certificate program the Application for Awarding of a Graduate Certificate form to be verified first by the certificate program and then by the Graduate College, thus ensuring that all requirements have been met before the graduate certificate will be officially posted.

Concurrent Master’s Degree
A student may pursue concurrent master’s degrees with prior written approval from the head of the academic unit for each degree program and the Graduate College. A maximum of 20 percent of the minimum total semester hours for the completion of both degrees may be common hours shared between the Plans of Study. The total number of hours common to both degree programs may vary from this maximum value only when the Graduate College has formally approved coordinated degree programs.

Course work common to both programs must constitute a well-planned and meaningful part of each of the programs and may only include course work completed after admission to both degree programs. In all cases, these guidelines must be followed:

1. The student must be enrolled in both programs each fall and spring semester to maintain continuous enrollment or must petition for a leave of absence. Any approved leave of absence applies to both degree programs.
2. Graduate credit transferred from another institution may be applied toward only one degree program.
3. Culminating experiences (e.g. capstone courses, theses, applied projects) and comprehensive examinations cannot be shared between concurrent degree programs.

*Effective 5/18/2009. Consult online version of Graduate Policies for the most current information: graduate.asu.edu/academic_policies.html
4. The six year maximum time limit for completing degree requirements and graduation apply to each concurrent degree individually.

Concurrent enrollment in a doctoral program and master’s degree program may not have common hours. Doctoral programs and master’s degrees in the same major may not be concurrently pursued.

**Concurrent Doctoral Degree**

A student may pursue concurrent doctoral degrees with prior written approval from the head of the academic unit for each degree program and the Graduate College. In all cases, these guidelines must be followed:

1. The student must be enrolled in both programs each fall and spring semester to maintain continuous enrollment or must petition for a leave of absence. Any approved leave of absence applies to both degree programs.
2. The 30 hours allowed from a previously awarded master’s degree may only be applied to one of the doctoral programs and graduate credit transferred from another institution may be applied toward only one degree program.
3. The comprehensive examination, the dissertation prospectus, and the dissertation cannot be shared between concurrent degree programs.
4. The student must meet the 10 year maximum time limit and five year limit after comprehensive exams for each degree.

**Master’s in Passing (MIP)**

In those cases where there is an approved Master’s in Passing (MIP) program in place for a doctoral degree, those doctoral students who complete the requirements of the approved MIP may be awarded the related master’s degree. Students should check with their doctoral program to see if there is an approved Master’s in Passing for their degree.

Students who include 30 hours from a previously awarded master’s degree on their doctoral Plan of Study are not eligible for a Master’s in Passing. All coursework included in an MIP Plan of Study must have been completed after the semester and year of admission to the doctoral program.

**Withdrawals from Graduate Degree Programs or the University**

**Voluntary Withdrawal from the University**
If a student wishes to withdraw from all graduate degree programs and the university, they must complete the Voluntary Withdrawal form found at graduate.asu.edu/forms. Students must still complete the appropriate forms with the University Registrar to withdraw from their courses. International students should contact the International Student Office (ISO) before submitting a Voluntary Withdrawal form as it most likely will affect their visa status.

**Voluntary Withdrawal from a Graduate Degree Program**

If a student wishes to transition from one graduate degree program to another graduate degree program, the student should complete the Voluntary Withdrawal form found at graduate.asu.edu/forms. The students should not take this action until they have been admitted to the other graduate degree program.

**Procedures for Other Types of Withdrawals**

There are appropriate circumstances when students may need to withdraw from the university (i.e. medical withdrawal, compassionate leave). The policies for such withdrawals are the same for both undergraduate and graduate students. Types of withdrawals and procedures can be found at: www.asu.edu/aad/manuals/usi/usi201-09.html. For course withdrawals contact the University Registrar’s Office.

A grade of “W” is given whenever a student officially withdraws from a course after the drop/add period.

**Involuntary Withdrawal of a Student from a Graduate Program by the Graduate College**

Any student who does not abide by the Graduate College policies may be withdrawn from their graduate program after review by the Graduate College dean.

In addition, a department may recommend withdrawal of a student from a graduate program for lack of compliance with published departmental policies or lack of satisfactory academic progress. All such recommendations need to be submitted to the Graduate College, documenting the issue, communication with the student, and the failure of the student to remedy the issue. Only the Graduate College dean may withdraw a student from a graduate program due to lack of compliance with satisfactory academic progress policies.

**Graduate Student Appeals**

**The Graduate Council Appeals Board: Policies and Procedures**

The Graduate Council Appeals Board (GCAB) acts as the appeals body for graduate students seeking redress on academic decisions regarding their graduate programs. Before initiating an appeal, the graduate student must fully utilize all other appeal and review processes available in the student’s program, department, or college. The student should also discuss the situation with
the Graduate College dean’s office to explore resolution of the matter at the unit or college level before filing an appeal.

The GCAB reviews written appeals of graduate students concerning:

1. Retention in graduate programs (with the limitations described below).
2. Procedural matters in graduate student programs (e.g., procedures related to *Plans of Study*, theses, dissertations, and preliminary, qualifying or comprehensive exams).
3. Other academic issues that are not covered by other university policies or processes.
4. The GCAB will not entertain any appeals until the graduate student has fully utilized all other appropriate appeal procedures through their academic unit and college.
5. The GCAB does not review appeals pertaining to the following areas because these appeals are heard by other university bodies (see parenthesis below):
   - Course grades (subject to review by the academic unit and college).
   - Results of capstone experiences, comprehensive and qualifying examinations and defenses (subject to review by the academic unit and college).
   - Allegations of academic dishonesty (subject to review under the ASU Student Academic Integrity Policy).
   - Allegations of scientific misconduct (subject to review under ASU policy RSP 210 [“Misconduct in Research”] in the Research and Sponsored Projects Policy and Procedures Manual).
   - Allegations of discrimination (subject to review by the ASU Office of Diversity).

The Guidelines for Graduate Appeals describing further the GCAB appeal procedures, process, and jurisdiction are available from the Graduate College and on the website at [graduate.asu.edu/files/gradappeals/GradAppeals](http://graduate.asu.edu/files/gradappeals/GradAppeals).

Arizona State University does not discriminate on the basis of race, color, national origin, sex, sexual orientation, gender identity, disability, religion, age or veteran status in the University’s services, educational programs, and activities, including, but not limited to, admission to and employment by the University. The Office of Diversity has been designated to handle inquiries regarding the University’s non-discrimination policies: Director, Office of Diversity, University Services Building, 1551 S. Rural Rd., Tempe, Arizona 85287, Intercampus Mail Code 5612. Phone: (480) 965-5057; TTY (480) 965-0471. For information generally about ASU’s non-discrimination policies and procedures for filing complaints, please see [www.eoaa.asu.edu/aa_policies.asp](http://www.eoaa.asu.edu/aa_policies.asp). Some deadlines for filing complaints are as short as thirty days.
College Policies

W. P. Carey School of Business Policies

Undergraduate Policies

Academic Standards

Critical Requirements
All business students must meet the critical requirements for their intended majors. Students who do not comply with the critical requirements are off-track and have holds placed on their records. These students must meet with an advisor to have this hold removed. If the student still has not met all critical requirements in the following semester, then further registration in the intended major is not permitted. For more information, access the Web site at http://wpcarey.asu.edu/up [1].

Probation
All business students, freshman through senior, must maintain a minimum GPA of "C" (2.00) for all courses completed at ASU. If this standard is not maintained, the student is placed on probation. Students on probation must see an advisor before further registration. Students on probation must obtain a semester GPA of 2.50 with no grade lower than a "C" (2.00). If a student on probation meets this requirement, but the cumulative GPA remains below "C" (2.00), the student is given an additional semester on continued probation. At the end of continued probation, the student must return to good standing (a minimum GPA of 2.00) to avoid disqualification.

Pass/Fail
Business majors may not include among the credits required for graduation any courses taken at this university on a pass/fail basis. Pass/fail credits taken at another institution may be petitioned for use, but only if the student can demonstrate proof that the pass grade was equivalent to a “C” (2.00) or higher.

Disqualification
Students who do not meet probation requirements are academically disqualified. Disqualified students should meet with an academic advisor. These students may attend ASU during summer and winter sessions.

Reinstatement and Readmission
Students seeking reinstatement (after disqualification) or readmission (after an absence from the university) should contact the undergraduate programs office, in BA 109, regarding procedures and guidance for returning to good standing.

Academic Dishonesty
The faculty of the W. P. Carey School of Business follow the guidelines in the Student
Academic Integrity Policy on academic dishonesty. A copy of the policy may be obtained in the undergraduate programs office, BA 109.

Student Appeal Procedure on Grades
The faculty of the W. P. Carey School of Business have adopted a policy on the student appeal procedure on grades. A copy of the policy may be obtained in the undergraduate programs office, BA 109.

**Graduate Policies**

All graduate students in the W. P. Carey School of Business are required to maintain a cumulative GPA of "B" (3.00). See individual graduate degree programs for specific requirements on satisfactory academic progress, probation and disqualification.

Advising
Advising of graduate students is normally handled by graduate faculty members. Once admitted, a student can request a temporary faculty advisor in a potential area of concentration in order to prepare a program of study. Students are encouraged to begin discussions with faculty members early in their studies so that course work can be geared toward supporting their academic progress. All students, whether in a thesis or nonthesis option, must file a program of study.

Source URL: http://catalog.asu.edu/policies/business


**Herberger Institute for Design and the Arts Policies**

Due to recent organizational changes approved by ABOR, the following policies are under review.

Katherine K. Herberger College of the Arts policies:

**Undergraduate Policies**

**Advising**
Undergraduate academic advising is handled as a centralized activity within the college. To offer personalized attention, each academic unit establishes its own graduate advising procedures. Students are encouraged to make appointments through the Herberger Student Academic Services Office. For more information, call 480-965-4495.

**Academic Standards and Retention**
Good Standing
Students in the Katherine K. Herberger College of the Arts are considered in good standing for the purpose of retention if they maintain a cumulative GPA of 2.00 or higher in all courses taken at ASU. However, to gain admission into certain undergraduate degree programs in the college, students must maintain a minimum GPA within their major and/or a minimum cumulative GPA. These minimum GPAs vary according to the given program.

Probation
Any student who does not maintain good standing is placed on academic probation. A student on academic probation is required to observe any limitations or rules the college may impose as a condition for retention.

Students are encouraged to seek advising from their major academic advisor, in an effort to improve academic standing. All Herberger College of the Arts students who are placed on academic probation and continuing probation are required to attend mandatory advising appointments. Students will also be required to complete an academic success contract with their advisor to discuss campus academic resources, plan out semester goals and discuss strategies to attain academic success. These meetings will continue until the student earns a cumulative GPA of 2.00 or higher.

Disqualification
A student who is on probation becomes disqualified if the student, 1) has not returned to good standing, or 2) has not met the required semester GPA.

Disqualification is exercised at the discretion of the college and becomes effective on the first day of the fall or spring semester following college action. A disqualified student is notified by the Office of the Registrar and/or the dean of the college and is not allowed to register for a fall or spring semester at the university until reinstated.

Reinstatement
Students seeking reinstatement after disqualification should contact the Katherine K. Herberger College of the Arts Student Services Office regarding procedures and guidance for returning to good standing. When reinstatement includes readmission, application must be made to the readmissions section of the Office of the Registrar.

All academic disciplinary action is a function of the Katherine K. Herberger College of the Arts Student Services Office, GHALL 116, under the direction of the assistant dean for student success for the college. Students having academic problems should call this office for advising at 480-965-4495.

Graduate Policies

Advising
Advising is handled as a decentralized activity within the college. To offer personalized attention, each academic unit establishes its own graduate advising procedures. Students are encouraged to make appointments through the central office of their major discipline.
University of Design policies:

Undergraduate Policies

Critical Requirements and Milestones
For more information about critical requirements, including the milestone, see http://design.asu.edu/students [1].

Critical Requirements
A new or transfer student who has been admitted to the university and has selected a college major is admitted to the program of his or her choice. Each student must meet all critical requirements including the milestone at the end of the second semester. For international students whose native language is not English, TOEFL scores are required.

Milestone
Passing the milestone at the end of the second semester is competitive. Consult the requirements of each major for details. Students who are interested in more than one program must meet the milestone requirements for both and must submit separate applications and portfolios, as required by the program. Transfers requested past the second semester are considered only if vacancies occur, and such transfers are limited to students with equivalent course work who are competitive with continuing students. Students who do not meet the critical requirements but pass the milestone are not dismissed from the university and may transfer to other programs.

Transfer Credits
While the university accepts credits transferred from other accredited institutions, transfer credits are not applied to specific degree programs until reviewed and accepted by the appropriate academic units. Transfer course work must be equivalent in both content and level of offering. In addition, a review of samples of work (portfolio format) from previous studio classes is required to receive credit for studios. Students who change majors to transfer into the college or one of its program areas must have a minimum cumulative GPA of 2.50.

Change of Major
Current ASU students who wish to change majors to one of the college’s degrees must have a cumulative ASU GPA of 2.50 or higher.

Academic Advising
While the college provides academic advising, it is ultimately the responsibility of each student to fulfill academic and program requirements. Advising and record
keeping for students majoring in architecture, landscape architecture, graphic design, housing and community development, industrial design, interior design, urban planning, and the B.A. in design studies are the responsibility of a college academic advisor, located in CDS 115. General career advising is available from all faculty members. Administration of program requirements is the responsibility of the head of the academic unit and the dean.

Appeals Procedures
Academic appeals and requests for variances are typically made to the student's advisor and then, if necessary, to the head of the appropriate academic unit, the College Standards and Appeals Committee, and finally, the dean. A student who feels unjustly treated in academic or other matters relating to his or her career as a student may contact a college academic advisor or may take the grievance to the college ombudsperson.

Academic Standards
A student in any of the college's programs is placed on probation when he or she fails to maintain a cumulative GPA of 2.00. Students on probation must observe rules or limitations the college imposes on their probation as a condition of retention. If, after one semester on probation, the overall GPA is not at least 2.00 and the conditions of probation have not been met, the student is disqualified for a minimum of two full academic semesters; however, students whose cumulative GPA is below 2.00, but are still in academic good standing according to university standards, are ineligible to major in a College of Design program, but may be eligible for majors in other colleges at ASU. A disqualified student may attend summer sessions at ASU to raise their cumulative GPA. If a 2.00 or higher cumulative GPA is achieved upon completion of summer course work, the student may petition the college for early reinstatement. Appeals may be made to the college Standards and Appeals Committee; see an academic advisor for the necessary appeals forms. There are also other options available for immediate reinstatement for qualified students; see an academic advisor to discuss these options. For more information, see Retention and Academic Standards.

Students must earn a grade of “C” (2.00) or higher in studio courses in order to progress to the next studio in sequence. If a student is already registered for the next studio, and has earned a grade of “D” or “E” in the prerequisite studio, the student will be administratively dropped from the subsequent studio.

Retention Standards
Students who have passed the milestone are placed on probation when any of the following occurs:

- Failure, incomplete or withdrawal from any required course.
- A semester GPA below 3.00.
- A grade of “D” (1.00) or “E” (0.00) in a design studio, a design laboratory or a design lecture.
Violation of the university's Code of Student Conduct or any admission agreement.

Students on probation must observe rules or limitations that the college or academic unit places on their probation as a condition of continuation. Students may be removed from a program (but not necessarily the university) when any of the following occurs:

- The requirements imposed are not met or the probationary semester GPA is below 3.00 after one semester on probation.
- Failures or withdrawals in required courses are not resolved at the next offering of the course.
- They fail or withdraw from required sequential courses.
- Incompletes in required sequential courses are not completed before the first day of class of the next semester.

A student removed from a program is not guaranteed reinstatement in the program even if probation requirements or requirements placed on readmission are fulfilled. Appeals may be made first to the appropriate academic unit and, if necessary, to the college Governance and Grievance Committee. For more information, see Retention and Academic Standards.

Incompletes
Students are responsible for contacting the instructor regarding the process of requesting and fulfilling an incomplete. Tardiness in contacting the instructor may result in a failing grade. Students must obtain official “Request for Grade of Incomplete” forms at http://design.asu.edu/students/forms.shtml [2]. The completed form must include a justification, a listing of requirements that have not been fulfilled and a proposed schedule of completion. The instructor reviews the request, proposes modifications if necessary, and submits a copy of the request to the appropriate office. An incomplete in any course that is a prerequisite for sequential courses automatically denies enrollment in subsequent courses or could result in the student being administratively dropped from a subsequent course if they are already enrolled in it. For more information, see Incomplete.

Withdrawals
University withdrawal regulations apply to all courses. In addition, because the college’s curricula are modular and sequential and because space in the programs is limited, a student is expected to progress through the curriculum with his or her class. Withdrawal from a required critical-requirements course automatically places a student on probation. Withdrawal from a required course after the milestone in a required sequence automatically removes the student from the program beginning the subsequent semester. For more information, see Grading System.

Pass/Fail or Credit/No Credit
The only courses accepted toward graduation with a grade of pass/fail or credit/no credit are internships and field studies.

**Graduate Policies**

### Advising

**Architecture**
Students should consult the school’s Web site at http://design.asu.edu/sala/index.shtml [3] for general information about the programs and admission procedures. In addition, a graduate coordinator is available for professional advising. For more information, call 480-965-3536 or send an e-mail to sala.grad@asu.edu [4]. For information about the undergraduate program and for undergraduate advising, send an e-mail to design.advising@asu.edu [4].

**Design**
Preadmission information, advising, and continued support are provided by the coordinator of the program. General information can be found on the program’s Web site at http://design.asu.edu/sdi/index.shtml [5]. For additional information, send an e-mail to design.grad@asu.edu [6].

**Planning**
Students should consult the school’s Web site at http://design.asu.edu/planning/index.shtml [7] for general information about the program and admission procedures. The school’s student coordinator provides admission information, general program information and general advising. The school’s director and MUEP program coordinator provide professional advising and continued support. For more information, call 480-965-7167, or access the school’s Web site at http://design.asu.edu/planning/index.shtml [7].

Source URL: http://catalog.asu.edu/policies/design_and_arts

Links:


[4] mailto:design.advising@asu.edu


[6] mailto:design.grad@asu.edu

Mary Lou Fulton Institute and Graduate School of Education Policies

Due to recent organizational changes approved by ABOR, the following policies are under review.

Undergraduate Policies

Advising
All new students are required to meet with an academic advisor before registering for their first semester. To further assist and support freshmen in their first year, these students are also required to meet with an advisor before registering for their second semester. Each fall, freshmen are notified of "Welcome Week." This is an opportunity to consult with advisors regarding academic difficulties, avenues for student involvement in campus activities, and preparation of spring schedules. To schedule an appointment with an advisor, call 480-965-5555.

Graduate Policies

General career advising in a program can be obtained by contacting the director of the division or the coordinator of the program in which a degree is offered. After admission to a degree program, specific advice related to degree activities is provided by supervisory committees. Graduate students pursuing teacher certification should first contact the Office of Student Services in EDB L1-13. For more information, call 480-965-4854.

Continuous Enrollment and Reentry
Once admitted to a Ph.D. or Ed.D. degree program, the student is expected to be enrolled continuously, excluding summer sessions, until all requirements for the degree have been fulfilled. Continuous enrollment promotes steady progress toward the completion of the degree and an ongoing relationship between the student and faculty offering the program. If additional credit is not required toward the Ph.D. degree, the student may enroll for 595, 695, or 795 Continuing Registration. Continuing registration does not carry credit; no grade is given. If a program of study must be interrupted for one semester, the student may apply for leave status. However, this leave status can not exceed one semester. A student on leave is not required to pay fees, but is not permitted to place any demands on university faculty or use any university facilities. A student who interrupts a program without obtaining leave status may be removed automatically by the Graduate College, under the assumption that the student has decided to discontinue the program. A student removed by the Graduate College for this reason may reapply for admission;
the application is considered along with all other new applications to the degree program.

An application for leave status, endorsed by the members of the student’s supervisory committee and the head of the academic unit, must be approved by the dean of the Graduate College. This request must be filed and approved no later than the last day of registration in the semester of anticipated absence.

**Interdisciplinary PhD Lack of Progress Policy**

Students admitted to the interdisciplinary Ph.D. program must be continuously enrolled to remain active in the program. This means that students must be enrolled for at least one hour every fall and spring semester from the first semester of enrollment until graduation. A student can be placed on academic probation for the following reasons:

1. Failing to meet the scholarship requirements of the Graduate College, a GPA of 3.00 (on a 4.00 scale) or higher, or is placed on probationary status.
2. Unsatisfactory progress as noted on annual review form by mentor or failure to meet for annual review.

A student can be recommended for dismissal from the doctoral program if the following rules are not adhered to:

1. Students have four years from the date of admission to admission to candidacy.
2. Students have five years after advancing to candidacy to complete and pass their dissertation. Students who are not enrolled in dissertation hours and who are not making sufficient progress toward defending their dissertation can be withdrawn from the program due to lack of progress.
3. Two semesters of probationary performance constitutes grounds for dismissal from the degree program.

Dismissal for any of the reasons cited above is automatic. The student receives notice from the Curriculum and Instruction Graduate Programs office that he or she has been removed from the program. A student may appeal any action concerning dismissal by petitioning the interdisciplinary executive committee.

Source URL: http://catalog.asu.edu/policies/education

**Ira A. Fulton School of Engineering Policies**

The Ira A. Fulton School of Engineering educates undergraduate and graduate engineering students, giving them the knowledge, skills and attitudes they need for success in technically-oriented careers. The school provides students with a range of educational opportunities by which they may achieve excellence in the major branches of engineering, computer science and construction management.
The Ira A. Fulton School of Engineering takes pride in its diversity, its economic and cultural heritage, and in the quality of its graduates. It strives to be an integral part of the community it serves and a lifelong presence in the lives of those within its compass. The school’s educational and research programs are built around the following principles: entrepreneurship; use-inspired research and scholarship; a focus on the individual; intellectual fusion of unique and distinct disciplines; social embeddedness in the local, national and international community; and global engagement.

For more information, see http://fulton.asu.edu/fulton/ [1].

**Fulton School of Engineering Aspirations**
Graduates from any of the school’s programs will be technically sound. In addition to technical competency, the Ira A. Fulton School of Engineering aspires to develop leaders who are aware of biological issues, well-read, well-spoken and knowledgeable about current business practices. To this end, the school offers enhanced curricula, special courses and extracurricular activities to enrich the student’s stay and to offer every student opportunities to achieve the school’s aspirations.

All the programs within the school are professional programs, and hence professionalism is an important component of all the curricula. The school strives to help students understand and value the various aspects of professionalism, including ethical behavior, a desire for life long learning, the ability to communicate with others, and an awareness of how the profession fits into and impacts society. As a first step in ethics, all students are expected to follow student code of conduct and rules of academic integrity defined by the university, as outlined at http://www.asu.edu/studentaffairs/studentlife/srr/index.htm [2].

**First-Year Composition Requirement**

**Graduation Requirements**
To qualify for graduation, a student must have a minimum cumulative ASU GPA of 2.00 in addition to having a GPA of at least 2.00 for the courses in their major field.

**University Graduation Requirements**
In addition to department and school requirements, students must meet all university graduation requirements [4]. A well-planned program of study enables students to meet all requirements in a timely fashion. Students are encouraged to consult with an academic advisor in planning a program to ensure that they comply with all necessary requirements.
Undergraduate Policies

Evaluation of Previous Course Work
Transferring from one institution to another or between programs can result in a net loss in credits that count toward the degree. Thus, it is important for students who contemplate transferring into the Ira A. Fulton School of Engineering from another institution, whether a community college or four-year institution, to carefully study the catalog material pertaining to the particular program to get a sense of what courses may transfer.

Credit is granted for transferred courses deemed equivalent to corresponding courses in the selected program of study, subject to grade and ASU resident credit requirements. No grades lower than “C” (2.00) are accepted as transfer credit to meet the graduation requirements of the school. Credits transferred from a community college or two-year institution are applied only as lower-division credits. For a listing of the acceptable courses transferable to the various degree programs, prospective Arizona transfer students should consult their advisors and refer to the ASU transfer tools available at http://articulation.asu.edu/ [5].

It should be noted that some courses taken in other ASU colleges or other universities may be acceptable for general university credit but may not be applicable toward the degree requirements of the school. Determination of those particular courses applicable to a specific degree program is made within the appropriate academic unit with approval of the dean.

Currency of Course Work
Courses taken more than five years before admission to degree programs in this school are not normally accepted for transfer credit, at the option of the department in which the applicant wishes to enroll. Courses completed within the five years preceding admission are judged for their applicability to the student’s curriculum.

General Education Development
Students admitted to the university after successful completion of the General Education Development (GED) examination are directly admitted to the Ira A. Fulton School of Engineering (Bachelor of Science in Engineering or Bachelor of Science) program within their major, provided they meet the minimum ACT or SAT score required for admission as listed in the table for Ira A. Fulton School of Engineering admission requirements for freshmen and transfer students.

Readmission
Undergraduates who have been away from the university for one or more semesters and want to return to ASU in an Ira A. Fulton School of Engineering program, are required to apply for readmission through the university registrar’s office. Students who left ASU as ineligible or disqualified must first request reinstatement (see number four below). All other requests are processed as follows:
1. School of engineering students seeking readmission to the same school program they left are readmitted directly to the Bachelor of Science in Engineering or Bachelor of Science degree program they left with the same academic standing (i.e., good academic standing or on probation) they had when they left ASU.

2. School of engineering students and non-school of engineering students, who are seeking readmission to an Ira A. Fulton School of Engineering program other than the program they left, and who have an ASU GPA of 3.00 or higher, are readmitted directly to the Bachelor of Science in Engineering or Bachelor of Science degree program with the same academic standing (i.e., good academic standing or on probation) they had when they left ASU.

3. School of engineering students and non-school of engineering students seeking readmission to an Ira A. Fulton School of Engineering program other than the program they were in when they left, and who have an ASU GPA less than 3.00 are subject to the admission by change of major process. These requests for readmission are reviewed on an individual basis. If the request for readmission is approved, the student is readmitted directly to the new Bachelor of Science in Engineering or Bachelor of Science degree program with the same academic standing (i.e., good academic standing or on probation) they had when they left ASU.

4. School of engineering students and non-school of engineering students seeking readmission to an Ira A. Fulton School of Engineering program, who left ASU with either ineligible or disqualified status are subject to the school’s reinstatement process, which requires review by the school and program. Approval of reinstatement requires completion of at least 15 hours of appropriate non-school course work with a GPA of 3.00 or higher and a cumulative (ASU + transfer) GPA of at least 2.50. If the reinstatement request is approved and the readmission request involves a change of major, then the change of major review must be completed. All students who gain readmission through reinstatement will return on continued probation in the appropriate Bachelor of Science in Engineering or Bachelor of Science degree program.

Once readmitted, returning students are required to meet with a program advisor before enrolling in courses at ASU.

**Advising**

Successful completion of a program in the Ira A. Fulton School of Engineering requires careful planning. While final responsibility for becoming familiar with and understanding academic degree requirements lies with the student, each department employs professional academic advisors who work with students in setting academic and career goals, understanding school and university policies and procedures, meeting degree requirements and becoming familiar with the university’s and the school’s sources of academic support. Students may also work with a faculty advisor familiar with the chosen field of specialization. Students should consult with an advisor prior to registering each semester.
Students are encouraged to utilize the eAdvisor ([https://webapp.asu.edu/eadvisor/][6]) tool for academic planning. eAdvisor provides critical requirements and major maps ([https://webapp.asu.edu/eadvisor/MajorMaps.html][7]), which are individualized student reports that lay out a specific, clear and accurate path to timely completion of the intended degree.

Many students find it necessary to work while attending ASU. The working student should endeavor to create a careful balance of work and class responsibilities to avoid academic problems. Students should inform faculty and professional advisors of any outside work or activity so that course loads may be adjusted accordingly.

Advisors and staff in the Office of the Associate Dean for Academic and Student Affairs in the school are available to assist individual students with many different types of advising issues. They work with students to answer general questions about policies and procedures; help with registration transactions; administer the probation, disqualification and readmission processes; oversee disciplinary actions; hear grade grievances and assist with other administrative matters. For more information, see http://www.fulton.asu.edu/fulton [8].

**Registration**

Students are required to register for courses using one of the university-provided processes. As part of the registration process, the school enforces the following registration restrictions.

**Mandatory Advising**

All first-year students, student athletes, and students who are found to be having academic difficulty are required to be advised before they can register for classes, including winter and summer sessions. Some programs relax the advising requirement after the first year, so students should consult their department to determine if advising is required.

**Maximum Hours**

Students enrolled in an undergraduate degree program in this school may register for a maximum of 19 credit hours per semester. Any student wanting to register for more than the maximum must submit a college standards petition and have an approval on file prior to registering for the overload.

**Probationary Status**

Students who have been placed on academic probation must be advised by a faculty or professional advisor from within the academic unit of their major and complete the Student Self Assessment for Academic Success form at [http://www.fulton.asu.edu/fulton/students/sas/academicstandards.php][9]. The form is designed to assist students in identifying a path to academic success. Students on probation are limited to 13 credit hours.

**Undergraduate Nondegree Status**

Students who are enrolled in an undergraduate nondegree status in the school must...
obtain advising and approval to register from the Office of the Associate Dean of Academic and Student Affairs before registering each semester.

Course Prerequisites
Students should consult the schedule of classes and the catalog for course prerequisites. Students who register for courses without the designated prerequisites may be withdrawn without the student’s consent at any time before the final examination. Such withdrawal may be initiated by the instructor, the chair of the department offering the course, or the dean of the college. In such cases, students will not receive monetary reimbursement.

Pass/Fail Grades
Students enrolled in the school do not receive degree credit for pass/fail courses taken at this institution. In addition, no course in this school is offered for pass/fail credit. Students requesting credit for pass/fail courses taken at another institution must file a college standards petition to the department of their major. Each request is judged on its particular merits.

Non-Ira A. Fulton School of Engineering Students
Students who are not admissible to programs in this school and who enroll in another school at ASU, may not register for any 300- or 400-level courses in the school unless the course(s) are required in their degree program and the students have the proper course prerequisites.

Academic Standards
The school has developed and enforces a number of academic standards. These standards are designed to support students and ensure the quality of the school’s graduates.

Student Responsibilities
Students need to make many decisions as they complete their degrees. While the school and the university have a number of resources available (e.g., faculty, courses, advisors and tutors) to help in making the decisions, students are expected to take responsibility for their decisions.

Satisfactory Progress
Students are expected to select and successfully complete courses that lead to the timely completion of their degree. Students are said to be making satisfactory progress if they fulfill all of the following:

1. Maintain an acceptable GPA.
2. Enroll and complete critical tracking requirements.
3. Complete courses each semester that are applicable to their degree.

Students who are making satisfactory progress are said to be in good standing.
Probation
Some students do not make satisfactory progress and these students generally need extra attention and resources to help them get back to academic good standing. Such students are placed on probation to help ensure that they get the necessary help. There are many reasons why students fail to make satisfactory progress. Working with an academic advisor to plan a strategy for success is crucial. Students may be required to reduce their course load (13 credit hours maximum), retake courses or even take courses outside of the program, if the advisor judges these measures will help bring the student back to academic good standing. To return to academic good standing in the Ira A. Fulton School of Engineering, students with probation status need to earn a minimum semester GPA of 2.25 and earn a minimum cumulative ASU GPA of 2.00 at the end of the probation semester. If enrolled in only one course a grade of "C+" (2.33) or better and a minimum cumulative ASU GPA of 2.00 is required to obtain academic good standing.

Conditions for Probation
A student is placed on probation when specific academic expectations are not met. Some conditions trigger an automatic placement on probation whereas others trigger an automatic review of the student’s case to determine if probation is warranted. When a probation review is triggered, the final decision is made by the student’s department, which also determines any conditions of probation.

Automatic probation is triggered by any of the following:

- A semester or summer session with a GPA less than or equal to 1.50.
- Two successive semesters with GPAs less than 2.00.
- An ASU cumulative GPA less than 2.00 (for more than 55 credit hours).

Automatic review is triggered by any one of the following:

- An ASU cumulative GPA less than 2.00 (0 to 55 credit hours).
- A cumulative GPA in the major of less than 2.00.
- A failure to complete any courses appropriate for the degree during each semester.

Courses completed during winter session are not used to reevaluate a student’s spring semester probationary status. Courses completed during summer sessions are not used to reevaluate a student’s fall semester probationary status.

Ineligibility
Students who are on academic probation and fail to meet the school’s retention standards become ineligible to continue working toward a degree within the school. Ineligible students who cannot transfer to another program within ASU are designated as disqualified.

Ineligibility occurs if the probationary student does any of the following:

- Does not attain a semester GPA of 2.25 or higher.
• Has a cumulative GPA below 2.00 at the end of the probationary semester.
• Has already been on probation for two consecutive semesters.
• Failed to complete any courses appropriate for the degree during each semester.

Ineligible students are subject to the following limitations:

1. Students who change colleges may not register for courses in engineering unless the courses are required by their new major.
2. Students who register for courses in the school may be withdrawn from these courses any time during the semester they are registered.

Ineligible students are encouraged to consider these options:

1. Student may be eligible to change their major to another college if they have an acceptable cumulative GPA. The acceptable GPA level depends on the number of hours of completed course work. Students should check with an advisor in the Office of Academic and Student Affairs to determine if they are eligible.
2. Student may take nonengineering courses during summer and winter sessions.
3. Student may request a review of their status by contacting the Office of Academic and Student Affairs.

Reinstatement Process
Students who were ineligible or disqualified when they left the Ira A. Fulton School of Engineering and ASU must request reinstatement as part of the readmission process.

Reinstatement:

1. Is only considered after a student has remained out of the school for a minimum of 12 months.
2. Requires a student to supply proof that he or she is now capable of successfully completing courses in the discipline (e.g., completing at least 15 hours of appropriate course work at another postsecondary institution at a GPA of 3.00 or higher).
3. Requires a combined ASU plus transfer GPA of 2.50 or higher.

If the reinstatement request is approved and the readmission request involves a change of major, then the change of major review must be completed. All students who gain readmission through reinstatement return on probation in the program to which the student is being readmitted.

Graduate Policies

Policy for Maintaining Satisfactory Progress
A student who has been admitted to a graduate degree program in the Ira A. Fulton
School of Engineering, with either regular or provisional admission status, must maintain a 3.00 or higher GPA in all of the following:

1. All work taken for graduate credit (courses numbered 500 or higher).
2. Course work in the student’s approved plan of study.
3. All course work taken at ASU (overall GPA) post-baccalaureate.

A. A student will be placed on academic probation if one or more of the student’s GPAs listed above falls below 3.00. Students will be notified by mail when placed on academic probation.

B. A student will earn academic good standing by obtaining a 3.00 or better in the GPAs listed above by the time the next nine hours are completed. Course work such as research and dissertation registration that are for "Z" (in progress) or "Y" (satisfactory) grade cannot be included in these nine hours.

C. A student may be recommended for withdrawal from a graduate program if the student fails to increase all of the GPAs listed above to 3.00 or better by the time he/she completes at least nine credit hours as defined in section B.

A student may appeal actions concerning withdrawal by petitioning the departmental unit in which they are enrolled.

Academic units in the Ira A. Fulton School of Engineering can expand this policy statement to include additional policy governing the satisfactory academic progress of the students in their graduate programs.

Additional Graduate Policies
Full details of policies related to graduate students in the Ira A. Fulton School of Engineering can be found on each department’s Web page. For a list of departments, visit http://fulton.asu.edu/fulton [10]. University policies related to graduate students can be found at http://graduate.asu.edu [11].

Source URL: http://catalog.asu.edu/policies/engineering

Links:
Honors - Barrett, The Honors College Policies

Curriculum

Students planning to graduate from Barrett must also graduate from a disciplinary college. The ASU honors curriculum normally allows students to finish all requirements within the 120 credit hours of credit usually required for graduation. Thirty-six of those credits are honors courses—with a minimum of 18 upper-division credits.

Special Programs

Lorraine W. Frank Office of National Scholarship Advisement
The Lorraine W. Frank Office of National Scholarship Advisement assists students by identifying nationally competitive programs appropriate to each person’s intellectual and career goals, nurturing these prospective applicants and advancing their candidacy. This office, administered by the college, serves the entire ASU community. ASU students regularly earn distinction in the most rigorous and prestigious scholarship competitions. Many pursue enhanced degree programs and research projects under the auspices of Goldwater or Truman Scholarships. Other students undertake postgraduate study in the United States and abroad as Rhodes, Marshall, Fulbright, Udall, National Science Foundation or Mellon Scholars. Many others have been recognized by a range of postgraduate awards, fellowships and assistantships. This office does not administer any need- or merit-based student financial assistance. For more information, call 480-965-5894.

Undergraduate Research Opportunities
Undergraduate research and creative opportunities are available across many disciplinary programs, centers and institutes at ASU. Barrett maintains lists of current opportunities, available by accessing the college’s Web site at http://honors.asu.edu [1]. In addition, the college actively seeks new opportunities matching student training with emerging research on campus.

Study Abroad
Students in Barrett have exclusive access to study abroad programs that significantly enhance their educational experience. Directed and taught by Barrett faculty, these programs usually occur during the first summer session and last between five and six and a half weeks and allow students to earn honors credit while overseas. The five current programs offer students the privilege of studying in several of the most significant and dynamic cities in China, Europe and Latin...
America. The London, Dublin and Edinburgh program has been offered since 1995, the Paris and Loire Valley program since 1998, the Latin American program since 2002, the China program in 2007 and the Athens, Crete and Rome program started in 2008. The International Programs Office offers semester- and year-long programs abroad for students who desire a fuller experience. Often, students who have participated in one of Barrett’s summer programs realize the major benefits of studying abroad and choose to continue through extended programs.

Beginning in Fall 2009 a limited number of Barrett students will participate in an honors exchange program in Singapore through a partnership with the University Scholars Programme at the National University of Singapore.

Internships, Mentorships and Opportunities
Students in Barrett may participate in special internship opportunities—in government, industry and the private sector—throughout metropolitan Phoenix. The college maintains a database of special opportunities, including community service and international and cultural events. For more information, call 480-727-6993.

Events and Programming
Students enrolled in Barrett are given special access when important contributors to contemporary thought in society visit ASU. Each year the college hosts the university’s premier scholar-in-residence program, the Centennial Lecture. Past guests include novelist Carlos Fuentes, paleontologist Steven Jay Gould, psychiatrist Robert Coles, microbiologist Lynn Margulis, essayist Susan Sontag, paleoanthropologist Meave Leakey, American Indian author N. Scott Momaday, Pulitzer Prize winning authors David Halberstam and Anna Quindlen, prolific and wide-ranging African American author and National Book Award recipient Charles Johnson, playwright Edward Albee, a prominent innovator in modern American drama and Kathleen Sullivan, a renowned constitutional law scholar. In 2008 the Centennial Lecturer was Leonard Downie, Jr., former executive director of the Washington Post.

The college is also home to the John J. Rhodes Chair, designed to bring persons to the college who have significantly contributed to civic life and distinguished themselves as public service leaders. Students have unique opportunities to engage intellectually with these outstanding visiting lecturers. In 1998, the college was honored to have Dr. Henry A. Kissinger serve as the inaugural chair. American Indian scholar Donald Lee Fixico was the 2002 Rhodes Lecturer, followed by Jean Strause, notable biographer of J. P. Morgan in 2003, world-renowned astronomer David Levy in 2004 and leading alternate energy expert Hal Harvey in 2005. The Rhodes Lecturer in 2006 was economist and author Silvia Ann Hewlett, followed by long-time CNN anchor and journalist Aaron Brown in 2007, author Eric Schlosser in 2008 and Newsweek senior editor Jonathan Alter in 2009.
Additional Benefits
Barrett, The Honors College at Arizona State University is the site of the nation’s first purposely-designed four-year residential honors college campus. The new Barrett campus stands alone among honors colleges for its size and comprehensiveness of services. The honors campus offers housing to 1,700 students and features its own dining center, classrooms, café, faculty and administrative offices and activity space. Amenities include a fitness center, computer lounge and lab, amphitheater, classrooms, outside activity courts and dining hall with covered terrace, garden and special dining rooms for events. The campus also features a student-driven sustainable living and learning community with low consumption plumbing fixtures, enhanced energy monitoring, a green roof and organic garden. Barrett and all its facilities and services are fully available to every honors student, regardless of where he or she lives.

The Honors Halls of Residence offer students an integrated living-learning environment. Barrett has its own faculty and academic advisors to serve all honors students. Classrooms, recreational and study lounges and a state-of-the-art computing lab make up the principal facilities of the college.

Students enrolled in Barrett receive priority at preregistration and have extended checkout privileges in the campus libraries. Honors courses in disciplinary departments are typically limited to 25 students. Honors courses (with the prefix HON) are usually limited to 19.

Students who meet all requirements of both their disciplinary college and Barrett receive transcript recognition of that accomplishment, as well as special acknowledgment during graduation ceremonies and collegiate honors convocations.

Barrett students have diverse interests and strong records of success. Many are accepted into the nation’s finest graduate and professional programs, including at Chicago, Cornell, Harvard, Michigan, MIT, Northwestern, Stanford, UC-Berkeley, Virginia, Wisconsin and Yale. Many students have published portions of their honors theses and have presented their work at national and regional meetings of scientific and honors societies.

Admission

Students who have demonstrated high levels of academic achievement in high school or college may apply for admission to Barrett. All candidates for admission must file an application to the college separate from their ASU application.

Applicants are evaluated on the basis of their high school GPA (Arizona Board of Regents GPA based on 16 competency courses), high school class rank and performance on the SAT or ACT; as well as talents that contribute to leadership and community service. Continuing ASU or transfer students are evaluated on their college GPA.
Application forms and additional information about the college and its activities are available by calling 480-965-2359 or by accessing the Web site at http://honors.asu.edu [1].

Retention
Honors students must maintain high standards of academic performance and show progress toward completion of graduation requirements in their disciplinary majors and in Barrett. In order to graduate from Barrett, students must complete the following (which includes a total of 36 credit hours of honors course work):

1. HON 171 and 272/273 The Human Event must be completed by the time a student has earned 45 credit hours at ASU. Students are placed on inactive status if this requirement is not met.

2. Thirty additional credit hours of honors course work must be earned with a letter grade of “C” (2.00) or higher. This may include HON prefix classes, honors sections of classes, honors contracts or any automatic honors course such as ENG 105 (in-person sections), CHM 117, CHM 118 or PHY 333, or any graduate-level course.

3. Included in the 30 credit hours of honors course work are 18 hours of upper-division or graduate-level honors credits for an earned letter grade of “C” (2.00) or higher, including six credit hours of honors course work outside the academic major. Students should investigate specialized honors upper-division tracks within their majors.

4. Upper division transfer students (defined as 60 or more university credits completed at the time of Barrett application) must complete a three credit 300-level upper-division HON special topics course in addition to the 18 required hours of upper-division honors course work. A total of 21 hours of upper-division honors course work are required for these transfers because transfers do not have time to complete all 36 honors hours.

5. Students are required to complete an honors thesis/creative project for at least three credit hours though students are encouraged to complete six thesis credit hours. The thesis credit hours may be included in the 18 required hours of upper-division honors course work. The thesis is launched with a prospectus form due one academic year before the defense. The final copy must be filed by the last week of classes during the student’s graduation semester.

6. ASU graduation requirements in an academic major must be met.

7. The student must maintain a cumulative ASU GPA of 3.25 or higher.

Barrett students are expected to meet regularly with honors advisors. Three sessions are mandatory: one during the first semester in Barrett, one during the third semester and another during the sixth semester. To make an appointment with an honors advisor, call 480-965-9155. Office hours are Monday through Friday 8 a.m. to 5 p.m., in MB C100-L1.

Course Requirements
Barrett course requirements may be met in a variety of ways. There are two specific
required courses for first year students. Only courses in which a student receives a grade of “C” (2.00) or higher may be used to meet Barrett requirements.

Those entering the college as lower-division students must take 18 lower-division honors credits, which include HON 171 and 272/273 The Human Event. This cross-disciplinary seminar acquaints them with ideas that form the foundation of a university education and emphasizes critical thinking, discussion and writing. Barrett students complete HON 171 and 272/273 during their first 45 units at ASU.

Those who enter as upper-division students must take 21 upper division honors credits, including a required 300-level honors course. Junior-level seminar courses introduce them to critical thinking, discussion and writing in a topical area chosen by the instructor. It is expected that all students complete this course no later than the first or second semester after transferring.

Departmental honors-only courses carrying footnote number 19 in the Online ASU Schedule of Classes are limited to honors students and others who receive special permission from the instructor to enroll. Enrollment in these courses is limited. Compared to their nonhonors equivalents, these courses are designed to offer a richer, more complex intellectual experience appropriate to the discipline and the level of the course for all students enrolled. Other disciplinary honors courses group honors students in small cohorts to work on research projects of common interest.

Honors contracts are available in many departmental courses allowing honors students to contract with the instructor of designated nonhonors courses to earn honors credit by pursuing enrichment activities, which may include supplemental sessions with the instructor. Honors contracts must be filed during the first four weeks of class and completed during the semester in which the course is offered. Each contract form offers guidelines to aid students and faculty in developing appropriate contracts.

Course numbers listed in the online ASU schedule of classes as 298/492 Honors Directed Study, 493 Honors Thesis, 497 Honors Colloquium and all classes with the HON prefix are reserved for students in Barrett and always count for honors credit. Students may receive credit for more than one of each of these courses in a given department.

Departmental courses with the number 493 are reserved for honors students completing their honors theses and creative projects. A student may enroll for these courses only with the approval of the sponsoring academic department and of the faculty member who serves as the student's thesis director. Course numbers listed in the online ASU schedule of classes as 493 fulfill the student’s upper-division literacy and critical inquiry (L) General Studies requirement.

There are certain courses that carry automatic honors credit. These include ENG 105 (any in-person section) and CHM 117 and 118. MAT 300, PHY 201 and PHY 333,
when taken by students with 45 or fewer credit hours also carry automatic honors credit, as long as the student receives a grade “A” (4.00) or “B” (3.00). Graduate level courses automatically earn honors credit.

**Honors Transcript Recognition**

All courses used to fulfill graduation requirements for Barrett must carry earned letter grades of at least “C” (2.00). A “Y” grade meets college requirements only for HON 492 Honors Directed Study and HON 493 Honors Thesis.

Graduation Requirements

To graduate through Barrett, students must

1. Complete all honors course requirements.
2. Complete all required credit hours of honors course work with a grade of “C” (2.00) or higher (a “Y” grade is allowed for HON 492, HON 493, and for one-semester-hour courses offered through Barrett) unless otherwise provided for by Barrett and the college of the student’s major.
3. Complete ASU graduation requirements in an academic major.
4. Earn a cumulative ASU GPA greater than or equal to 3.25 (4.00 = A).

Source URL: http://catalog.asu.edu/policies/barrett

Links:


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**Walter Cronkite School of Journalism and Mass Communication Policies**

**Undergraduate Policies**

**Advising**

Students should follow the sequence of courses outlined on school curriculum check sheets, their online degree audits, and the advice of the school’s academic advisors. Conscientious, careful planning and early advising are crucial to students who desire to progress through the program in a timely fashion. The critical requirements for freshmen in the Cronkite School are available at http://cronkite.asu.edu [1].

**Graduate Policies**

**Academic Standards and Policies**
Students are required to maintain a 3.00 GPA. Graduate students wishing to take 400-level courses with:

1. JMC 301 as a prerequisite must first successfully complete MCO 501 Newswriting and Reporting.
2. JMC 310 as a prerequisite must first successfully take JMC 415 Writing for Public Relations.
3. JMC 313 as a prerequisite must first successfully complete MCO 598 Introduction to Editing.
4. JMC 330 as a prerequisite must first successfully take MCO 531 Broadcast Journalism.

Contact the department for additional information.

**Advising**

Preadmission information, advising and continued support are provided by the graduate student support specialist, who can be reached at 602-496-1796.

**Maximum Time Limit**

Students have six years to complete the program beginning with the date the first course in the program is taken.

Source URL: http://catalog.asu.edu/policies/journalism

Links:


**Sandra Day O'Connor College of Law Policies**

**Graduate Policies**

**Retention Standards**

College of Law students must maintain a cumulative weighted GPA of 73.00 or higher at the end of the first year and each semester thereafter. Any student who fails to achieve a 70.00 GPA as of the end of the first year is permanently disqualified from the College of Law. A student whose GPA falls in the 70.00 to 72.999 range is disqualified but can apply for readmission to the office of the dean. The office of the dean refers the application to a faculty committee on readmission. In cases where the GPA deficiency is slight and evidence of extenuating circumstances is convincing, readmission may be granted on a probationary status after a review of the reasons contributing to unsatisfactory performance and a finding that there is a substantial
prospect for future acceptable academic performance. Continuation in school thereafter may be conditional on achieving a level of performance higher than the overall 73.00 GPA.

The College of Law Statement of Student Policies contains additional academic and related policies. The Statement of Student Policies can be found on the College of Law Web site at http://law.asu.edu [1].

**Honor Code**

The legal profession, a self-regulating association, depends on the integrity, honor and personal morality of each member. Similarly, the integrity and value of a Sandra Day O’Connor College of Law degree depends on a reputation for fair competition. The college’s honor code is intended as a measure to preserve the integrity of the school’s diploma and to create an arena in which students can compete fairly and confidently. Copies of the honor code are available from the college’s Student Services Office.

**Advising**

Academic assistance for currently enrolled law students is available through the office of the assistant dean for academic affairs.

**Admissions Process**

The Sandra Day O’Connor College of Law offers a full-time, daytime program. New students are admitted to the J.D. program for the fall semester only. To be considered for admission to the J.D. program, an applicant must

1. Demonstrate that he or she will have earned an undergraduate degree from an accredited four-year college or university by the time of enrollment in the J.D. program.
2. Take the LSAT and provide a reportable score from that test.
3. Submit a completed application with application fee.
4. Register with the Law School Data Assembly Service (LSDAS). Note: The LSAT and LSDAS are administered by the Law School Admission Council (LSAC). The undergraduate record and LSAT score are only two of many factors considered for admission.

More details about the application process can be found at http://www.law.asu.edu/admissions [2]. For an application to be considered timely, it must be postmarked or electronically submitted by Feb. 1. For earlier consideration, the early decision deadline is Nov. 1.

Source URL: http://catalog.asu.edu/policies/law

Links:

School of Letters and Sciences Policies

The School of Letters and Sciences offers a liberal arts core curriculum on the Downtown Phoenix campus and a university-wide bachelor's degree in interdisciplinary studies. We provide foundational instruction in humanities, social sciences and natural sciences for all students on the Downtown Phoenix campus, and we are invested in the development of learning-centered course work for students in the College of Nursing and Healthcare Innovation, College of Public Programs and Walter Cronkite School of Journalism and Mass Communication.

The School of Letters and Sciences is designed to respond to the needs of ASU students, faculties of the downtown schools and colleges, the challenges of higher education and our constituent communities. Guiding principles of the school are embedded student success programs, strategic partnerships both inside the university and in the community and interdisciplinary inquiry.

ACADEMIC SUCCESS AND INTEGRITY

Student Responsibilities
Students need to make many decisions as they complete their degrees. While the school and the university have a number of resources available (e.g., faculty, courses, advisors and tutors) to help in making the decisions, students are expected to take responsibility for their decisions.

All students are expected to follow the rules and deadlines specified in this catalog and the current Registration and Tuition Payment Guide. Students are urged to meet with their academic advisors before registration.

In addition to information provided by an advisor, students must read the requirements for university General Studies, college graduation and major degree requirements in their edition of the ASU General Catalog. The ASU academic catalog is the governing source for all degree requirements.

Credit Requirement
All candidates for graduation are required to complete at least 120 credit hours, of which at least 45 hours must consist of upper-division courses (courses numbered 300 or higher). A minimum ASU cumulative GPA of 2.00 is required for graduation.

Academic Integrity
Academic honesty is expected of all students in all examinations, papers, academic transactions and records. Possible sanctions include, but are not limited to, appropriate grade penalties, loss of registration privileges, disqualification and dismissal. The School of Letters and Sciences adheres strictly to the Student Code of
Conduct regarding academic dishonesty. A copy of the Student Code of Conduct may be obtained from your academic advisor, or online at http://www.asu.edu/studentaffairs/studentlife/srr/index.htm [1].

**Degree and Majors**

The School of Letters and Sciences offers the Bachelor of Interdisciplinary Studies (B.I.S.) with majors in interdisciplinary studies and organizational studies. The B.I.S. program is a university-wide degree program that enables students to create interdisciplinary specialties that prepare them for careers in a world that increasingly bridges academic disciplines. Freshmen may not declare a B.I.S. for either major, but sophomores, juniors and seniors who are in good standing can declare either by meeting with an academic advisor.

Interdisciplinary studies is an approach to answering questions, solving problems and addressing contemporary social issues from multiple perspectives. Interdisciplinary students develop the intellectual tools needed to build bridges between academic disciplines and apply their skills, innovations and knowledge in various academic and practical settings. Interdisciplinary studies students select two subject-area concentrations that represent academic interests they wish to integrate into a meaningful program. A four-course core offers students intellectual tools to identify connections between their concentrations and engage in interdisciplinary problem solving.

Organizational studies is intended for students seeking an interdisciplinary degree and a desire to learn about the dynamics of contemporary organizations. Via the organizational studies curriculum, students gain valuable knowledge of management styles, communication strategies, technologies, diversity, ethics and politics. All course work for organizational studies is offered online, giving students freedom and flexibility in completing their requirements. By engaging a breadth of knowledge and experience, and by acquiring the skills to integrate various domains of knowledge, organizational studies students prepare themselves for careers in business, government, nonprofit agencies, healthcare administration or the service industry. Many organizational studies students already have a chosen career field, yet desire a degree that is versatile, flexible, meaningful and affords the opportunity for continued career development and advancement. Organizational studies is offered in partnership with ASU Online and Extended Campus, giving students the flexibility to complete a B.I.S. from just about anywhere.

**Advising**

Successful completion of any degree requires planning, preparation and persistence. While final responsibility for becoming familiar with and understanding academic degree requirements lies with the student, the School of Letters and Sciences employs professional academic advisors who work with students in setting academic and career goals; understanding school and university policies and procedures; meeting degree requirements; and becoming familiar with the
university’s and the school’s sources of academic support. Students should consult with an advisor prior to registering each semester.

Mandatory Advising
The following students in the School of Letters and Sciences must receive advising and must be cleared before registering for classes:

1. Students in their first semester at ASU.
2. Students on probation.
3. Students with a cumulative GPA of less than 2.00.
4. Students who have been readmitted to ASU.
5. Students who have been disqualified (these students are allowed to attend ASU summer and winter sessions only and must be advised prior to registration).

Students are encouraged to check their mandatory advising status each semester before attempting any registration transactions.

Transfer Credit Evaluation
Courses taken at other institutions are deemed transferable according to ASU policy. The applicability of transfer courses is determined in consultation with the student’s academic advisor. In some instances, students will be directed to other departments for the evaluation of certain course work (e.g. first-year composition, math, etc.). Transfer course work must be equivalent in both content and level of offering. Course descriptions and/or syllabi may be required to determine course applicability.

No grades lower than “C” (2.00) are accepted as transfer credit to meet the graduation requirements of this school. Credits transferred from a community college or two-year institution are applied only as lower-division credits. For a listing of the acceptable courses transferable to the various degree programs, prospective Arizona transfer students should consult their advisors and refer to the ASU transfer tools available on the Web at http://articulation.asu.edu/ [2].

Academic Standards and Retention

Academic Good Standing
For purposes of retention, academic good standing for all students in the School of Letters is defined as follows:

<table>
<thead>
<tr>
<th>Total Hours Earned</th>
<th>Minimum Cumulative GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 or fewer</td>
<td>1.60</td>
</tr>
<tr>
<td>25–55</td>
<td>1.75</td>
</tr>
<tr>
<td>56 or more</td>
<td>2.00</td>
</tr>
</tbody>
</table>
Probation
A student who does not maintain the minimum GPA standard after each fall or spring semester is placed on academic probation. A student placed on academic probation must meet with an academic advisor before registration for the subsequent semester. A student placed on academic probation has one semester to raise his or her cumulative or semester GPA to meet the academic good standing criteria; otherwise, the student will be disqualified. A student’s probation status is only reviewed after spring and fall semesters.

Continuing Probation
A student earns continuing probation when their semester GPA exceeds the requirement for good standing, but their cumulative GPA falls short of the required GPA. Students can earn continuing probation for multiple semesters; however, students on continuing probation with a semester GPA below the requirements for good standing will be disqualified.

Disqualification
A disqualified student is notified by the Office of the Registrar and/or the dean of the college and is not allowed to register for a fall or spring semester at the university until reinstated. A student who is on probation becomes disqualified if the student (a) has not returned to good standing, or (b) has not met the required semester GPA. Disqualification becomes effective on the first day of the fall or spring semester following college action. A student who is disqualified may not attend as a nondegree student. If the student has already registered for a future fall or spring semester, the registration is canceled. A student who has been disqualified may apply for reinstatement through the school.

Reinstatement
Reinstatement to the School of Letters and Sciences is only granted for students that either (a) raise their ASU cumulative GPA to good academic standing (see table below) by taking ASU summer or winter classes, or (b) complete 12 or more transferable credits at another college or university with a GPA of 2.5 or higher and no grades lower than “C” (2.00). All students requesting reinstatement must also meet with an advisor in the School of Letters and Sciences to discuss their situations, identify their options and develop a plan for success. Requests for reinstatements must be made at least five business days before the first day of the semester.

Readmission
Undergraduates who have been away from the university for one or more semesters and want to return to ASU in the School of Letters and Sciences are required to apply for readmission through the University Registrar’s Office. Students that have been granted a leave of absence are not required to request readmission provided they have met the terms outlined in their leave of absence request. Students who left ASU on probation or because they were disqualified must first request
reinstatement. Once readmitted, returning students are required to meet with a program advisor before enrolling in courses at ASU.

Concurrent Degrees
Students who wish to obtain concurrent degrees must request approval from the School of Letters and Sciences and the college offering the second degree. Students cannot use their major in one degree as one of their concentrations in a B.I.S. Students who wish to obtain concurrent degrees may not double-count courses from one major to the next, and must have at least 30 different credit hours in each major.

Appeals Procedures
Academic appeals and requests for variances or exceptions should be discussed first with the student's advisor and then, if necessary, submitted in writing to the School of Letters and Sciences standards committee. All requests reviewed by the School of Letters and Sciences standards committee for exceptions to university requirements are also reviewed by the University Standards Committee.

Registration
Students are required to register for courses using one of the university-provided processes. Students must follow the calendar published in the Registration and Tuition Payment Guide each semester for information and deadlines pertaining to enrollment, adding/dropping classes and withdrawals.

Maximum Hours
Students enrolled in an undergraduate degree program in the School of Letters and Sciences may register for a maximum of 18 credit hours for fall or spring semesters, 14 credit hours for summer and three credit hours for winter. Any student wanting to register for more than the maximum must submit a School of Letters and Sciences standards petition and have an approval on file prior to registering for the overload.

Course Prerequisites
Students should consult the schedule of classes and the catalog for course prerequisites. Students may be given overrides to facilitate registration while certain prerequisites are in progress; however, all students must ensure that all prerequisites have been completed prior to beginning their classes. Students who register for courses and don't meet designated prerequisites may be withdrawn without the student's consent at any time before the final examination.

Pass/Fail Grades
Students enrolled in the school do not receive degree credit for pass/fail courses taken at this institution. In addition, no course in this school is offered for pass/fail credit. Students requesting credit for pass/fail courses taken at ASU in another college or at another institution must submit a petition to the School of Letters and Sciences standards committee.
Incompletes
Students are responsible for contacting the instructor regarding the process of requesting and fulfilling an incomplete. Incompletes are only given under extraordinary circumstances where the student has completed a majority of their course work, but circumstances beyond the students control are preventing them from completing their course work in that semester. Tardiness in contacting the instructor may result in a failing grade.

Audit Grade Option
A student may choose to audit a course in which he or she attends regularly scheduled class sessions but earns no credit. The student should obtain the instructor’s approval before registering for the course. Note: this grade option may not be changed after the drop/add period.

Source URL: http://catalog.asu.edu/policies/sls

Links:

College of Liberal Arts and Sciences Policies

Undergraduate Policies

Advising
All students are urged to seek advising in the appropriate college unit before registration. Students must follow the calendar published in the Registration and Tuition Payment Guide each semester for information and deadlines pertaining to enrollment, adding/dropping classes and withdrawals.

In addition to information provided by an advisor, students must read the requirements for university General Studies, college graduation and major degree requirements in their edition of the ASU Academic Catalog. The ASU Academic Catalog is the governing source for all degree requirements.

Regular Advising
All students are strongly urged to seek advising in the appropriate college unit before registration.

eAdvisor
In fall 2007, ASU introduced eAdvisor, which gives students the tools to successfully follow their major map to graduation. eAdvisor assists students in
1. Learning more about graduation requirements for their major.
2. Discerning what critical-requirement courses and grades are required to stay on track to successfully complete their degree.
3. Planning for and scheduling appropriate courses in the correct sequence to maximize success.
4. Monitoring progress toward their degree.
5. Finding out how courses may fit into other majors if they decide to change majors.

Access eAdvisor at https://webapp.asu.edu/eadvisor/ [1].

Advising Locations
College of Liberal Arts and Sciences students should seek routine advising in the department or school of their major.

The Office of Student and Academic Programs, in FULTN 110, is the central resource center for academic information in the college. Requests from students, departmental advisors and faculty for clarification of rules, procedures and advising needs of the college and university should be directed to that office.

Advising Holds
The following categories of liberal arts and sciences students must receive advising and must be cleared before their classes are scheduled:

- Students in their first semester at ASU.
- Students on academic probation.
- Students with a cumulative GPA of less than 2.00.
- Students in their first three semesters (in selected departments).
- Students who have been disqualified (these students are allowed to attend ASU summer and winter sessions only and must be advised in the Office of Student and Academic Programs in FULTN 110).
- Students who have surpassed their 65th earned hour.
- Students who are "off-track" in their major.

Students in the above categories should consult an advisor in the department or school of their major. Students are encouraged to see if they have an advising hold each semester before attempting registration transactions.

Advising for Preprofessional Programs
Special advising is available for students planning to enter the fields listed in the Advising for Preprofessional Programs table. The professional programs shown in the table are not majors in themselves; that is, there are no majors called "premedical," "prelaw," etc. In each program, the student must select an established major in the college or in one of the other colleges.

Advising for Preprofessional Programs

Professional Field

Advisor Location
Health Professions
Students pursuing admission to professional schools in the health professions must choose a major offered by ASU. However, specific courses must be taken to prepare the student to take the MCAT or other entrance examinations and to succeed in post-baccalaureate training. Therefore, students who plan to pursue a health profession should meet regularly with the health professions staff for guidance. While this guidance does not replace the need to meet with an advisor in the department of the student’s major, health professions advising is a necessary supplement. To schedule a meeting with health professions, located in FULTN 110, call 480-965-2365.

Prelaw
The American Bar Association does not recommend any specific major for students who wish to apply to law school upon graduation. ASU does not have a “prelaw” degree program. Therefore, students should select a major that interests them. Recent surveys of law school graduates indicate that students would be well advised to take one or two semesters of accounting as a supplement to their major curriculum. In addition, the American Bar Association recommends a variety of courses in the classics, economics and mathematical reasoning. Courses that engage the student in intense critical analysis and a substantial amount of writing are also recommended. As the student approaches the second semester of his or her junior year, the student should contact the prelaw advisor in the college or department of his or her major to obtain information regarding the procedure to apply to law school. To schedule a meeting with the prelaw advisor located in FULTN 110, call 480-965-6506.

Internships
All students are encouraged to complete at least one internship before graduation; some majors require internships. Many college disciplines have well-established internship programs, so students should begin by seeking information in their academic departments.

College Graduation Requirements
All students in the College of Liberal Arts and Sciences must complete the university General Studies requirement as well as all requirements in the major. In addition, the college has established requirements that are specific to the Bachelor of Arts and Bachelor of Science degrees.

A. Bachelor of Arts Degrees. Students pursuing Bachelor of Arts degrees in the college must demonstrate intermediate proficiency in a second language by completing the courses specified below with a grade of “C” (2.00) or higher in each course. Second-language course requirements may be fulfilled in one of the:

- Completion of second language course work at the intermediate level (202 or equivalent). Those students completing this requirement in Ancient Greek must take both GRK 301 and 302; students completing the requirement in Portuguese or Romanian must complete POR 314 or ROM 314.
- A foreign language course at the 300 level or higher taught in the foreign language and having 202 or its equivalent as a prerequisite.
- Completion of secondary education at a school in which the language of instruction is not English.
- Completion of SHS 202 American Sign Language IV or its equivalent.

B. Bachelor of Science degrees. Students pursuing Bachelor of Science degrees in the college must complete six credit hours (two courses) of “Science and Society” courses. Students should consult with an advisor in the department or school of their major for a list of appropriate courses. The current list of Science and Society courses is also listed on the college’s Web site at http://clas.asu.edu/node/204 [2].

C. All students are required to take a minimum of MAT 119 or higher. A grade of “C” (2.00) or higher must be earned in the chosen mathematics course.

Major Requirements

Each student is required to select a major from among the fields of study offered by the College of Liberal Arts and Sciences. The requirements for completion of the major are described under departmental listings.

A. The major department may require up to 45 credit hours of course work. The minimum is 30 hours. A maximum of 15 additional hours may be required in related courses and prerequisites. No more than 60 credit hours of course work may be required to complete the major, related courses and prerequisites. Some departments require calculus-level mathematics; up to five of these credit hours may be excluded from the 60-hour maximum because they satisfy the mathematics proficiency requirement. A minimum of 12 upper-division hours in the major must be taken in residence.

B. No credit is granted toward fulfilling major or minor requirements in any upper-division course in that subject field unless the grade in that course is at least a “C” (2.00). In the College of Liberal Arts and Sciences, the assignment of a grade of “Y”
(satisfactory) indicates a level of performance that would have resulted in a grade of at least “C” (2.00) had the normal grading scheme been used.

See the individual departments for other minimum grade requirements.

C. Major fields of study are classified into the following three areas:

1. **Humanities:**
   - Asian Languages (Chinese/Japanese)
   - English
   - Film and Media Studies
   - French
   - German
   - History
   - International Letters and Cultures
   - Italian
   - Philosophy
   - Religious Studies
   - Russian
   - Spanish

2. **Natural Sciences and Mathematics:**
   - Biochemistry
   - Biological Sciences
   - Clinical Laboratory Sciences
   - Chemistry
   - Computational Mathematical Sciences
   - Earth and Space Exploration
   - Geological Sciences
   - Kinesiology
   - Mathematics
   - Microbiology
   - Molecular Bioscience/Biotechnology
   - Physics
   - Psychology
   - Speech and Hearing Science

3. **Social Sciences:**
   - African and African American Studies
   - American Indian Studies
   - Anthropology
   - Applied Mathematics for the Life and Social Sciences
   - Communication
   - Economics
   - Family and Human Development
Geography
Global Health
Global Studies
Justice Studies
Political Science
Sociology
Transborder Chicana/o and Latina/o Studies
Women and Gender Studies

**General Electives**

Most Liberal Arts and Sciences majors can meet all of the above requirements with fewer than the 120 credit hours required for graduation. Remaining hours are general electives that may be selected from any of the departments of the College of Liberal Arts and Sciences and from the offerings of the other colleges.

**Credit Requirement**

All candidates for graduation in the Bachelor of Arts and Bachelor of Science degree curricula are required to complete at least 120 credit hours, of which at least 45 hours must consist of upper-division courses. A minimum ASU cumulative GPA of 2.00 is required for graduation.

**Concurrent Degrees**

Students who wish to obtain concurrent degrees must realize that there are certain combinations that would not be approved because there is too great an overlap between the courses required for each major. For example, students may not obtain concurrent degrees in two life sciences. Students who wish to obtain concurrent degrees may not double-count courses from one major to the next, but must have at least 30 different credit hours in each major.

**Course Load**

The normal course load is 15 to 16 credit hours. First-semester freshmen and entering transfer students are not permitted to register for more than 18 credit hours in the initial semester. Other students who wish to register for more than 18 hours must have a GPA of at least 3.40 and must file a petition in the Office of Student and Academic Programs, in FULTN 110, before registration. Any petition for an overload in excess of 21 hours must be presented to the standards committee of the college. No student should assume that his or her petition for overload will be granted.

**Special Credit Options**

Pass/Fail Grade Option

The pass/fail grade option is intended to broaden the education of liberal arts and sciences undergraduates by encouraging them to take advanced courses outside
their specialization. A grade of “P” (pass) contributes to the student’s earned hours but does not affect the GPA. A failing grade is computed into the GPA.

Only College of Liberal Arts and Sciences students with at least 60 credit hours may take courses under the pass/fail option. The option may be used under the following conditions:

- Enrollment for pass/fail needs the approval of the instructor and the college.
- Enrollment under this option must be indicated during registration and may not be changed after the late registration period.
- A maximum of 12 hours taken for pass/fail may be counted toward graduation.

Students may not enroll under the pass/fail option in the following courses:

- Those taken to satisfy the second language or first-year composition requirements.
- Those in the student’s major, minor or certificate program.
- Those counted toward or required to supplement the major.
- Those counted as 499 Individualized Instruction.
- Those taken for honors credits.
- Those counted toward satisfying the College of Liberal Arts and Sciences graduation requirements or the General Studies requirement.

Audit Grade Option
A student may choose to audit a course in which he or she attends regularly scheduled class sessions but earns no credit. The student should obtain the instructor’s approval before registering for the course.

Note: This grade option may not be changed after the drop/add period.

**Academic Standards**

The standards for GPA and the terms of academic probation, disqualification, reinstatement and appeal are identical to those of the university as set forth under Retention and Academic Standards, except that the disqualified student in the College of Liberal Arts and Sciences is suspended for at least two regular semesters at the university. When students are placed on probation, one of three things can happen:

- The student may raise his or her cumulative GPA to academic good standing by taking new classes and be removed from academic probation after the fall or spring semester.
- The student may receive the required semester GPA, but not raise the cumulative GPA to academic good standing, in which case, the student may continue on academic probation, earning the required semester GPA,
for as many semesters as it takes to raise the cumulative GPA to academic good standing.

- The student may fail to achieve the required semester GPA and be disqualified.

Students who leave the university for a semester or more while on academic probation are not automatically readmitted. Such students, and all disqualified students, should contact the Office of Student and Academic Programs in FULTN 110, regarding procedures and guidance for reinstatement and returning to academic good standing. By following recommendations and meeting established standards for summer school work or course work at other institutions, the possibility of successful reinstatement is enhanced. Academic discipline is one of the functions of the Office of Student and Academic Programs. All students having academic difficulties of any kind should contact this office. Also available in this office is information on policies and procedures of the college on academic honesty, student grievances with respect to grades and various petitions regarding college standards and graduation requirements.

Academic honesty is expected of all students in all examinations, papers, academic transactions and records. The possible sanctions include, but are not limited to, appropriate grade penalties, loss of registration privileges, disqualification and dismissal.

Student Responsibilities
Any student enrolling in courses offered by the College of Liberal Arts and Sciences is expected to follow the rules and deadlines specified in this catalog and the current Registration and Tuition Payment Guide. Students are urged to meet with their departmental academic advisors before registration. Students with additional questions or problems are also urged to meet with advisors in the Office of Student and Academic Programs, in FULTN 110, regarding the academic rules of the college and the university.

Source URL: http://catalog.asu.edu/policies/liberal_arts

Links:
[1] https://webapp.asu.edu/eadvisor/

New College of Interdisciplinary Arts and Sciences Policies

Undergraduate Policies

Degree Requirements
All candidates for graduation in the B.A. and B.S. curricula are required to present at least 120 credit hours, of which at least 45 credit hours must consist of upper-division courses. A minimum cumulative GPA of 2.00 is required for graduation.

It is the students’ responsibility to be aware of the requirements for their degree program(s) and to select courses accordingly.

To graduate, a student must satisfy separate requirements of three kinds:

1. College proficiency requirements for language and cultures and mathematics.
2. University first-year composition and General Studies requirements.
3. Major requirements that involve concentrated course work in one program.

**Proficiency Requirements**

Each student is required to demonstrate proficiency in the analysis of language and cultures and mathematics by passing an examination or by completing the courses specified below with a grade of “C” (2.00) or higher in each course.

Students considering graduate work after completion of a bachelor’s degree should consult with faculty advisors regarding language requirements in their intended areas of study.

Language and Cultures
This requirement may be satisfied through one of the following:

1. Completion of secondary education at a school in which the language of instruction is not English.
2. Completion of a language course at the intermediate level (202 or equivalent), including American Sign Language IV.
3. Completion of upper-division course(s) taught in a foreign language, taken in the United States or the relevant country.
4. Completion of six credit hours of upper-division courses that have a global awareness (G) or cultural diversity in the U.S. (C) designation, in addition to the courses used to meet the University General Studies requirements.
5. Completion of two sequential semesters of course work in a current computer language. Contact the college advising office for information on applicable course work.

Mathematics
MAT 142 or any MAT course for which MAT 117 or a higher-level MAT course is a prerequisite.

**Major Requirements**

Each student is required to select a major from among the programs offered by the New College of Interdisciplinary Arts and Sciences.

The major program may require up to 45 credit hours of course work. The minimum is 30 hours. A maximum of 18 additional hours may be required in related courses.
and prerequisites. No more than 63 credit hours of course work may be required to complete the major, related courses and prerequisites. A minimum of 12 upper-division credit hours required for the major must be taken within the New College of Interdisciplinary Arts and Sciences.

No credit is granted toward fulfilling major or minor requirements in any upper-division course in the subject field of the major unless the grade in that course is at least a “C” (2.00). Normally a “Y” (satisfactory) grade needs confirmation that it is equivalent to a “C” (2.00) or higher.

General Electives
Once the three kinds of requirements have been satisfied, the remainder of the minimum of 120 credit hours required for graduation are general electives. Contact college advisors for assistance in selecting elective courses.

Source URL: http://catalog.asu.edu/policies/new_college

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**College of Nursing and Health Innovation Policies**

**Undergraduate Policies**

**Admission**

Preprofessional Admission
Students are admitted into the College of Nursing and Health Innovation as “pre-major nursing” students. Admission to ASU as a pre-major nursing student does not guarantee admission into the professional program. Admission to the professional program requires a separate application to the College of Nursing and Health Innovation and is competitive, with the greatest emphasis placed on GPA based on selected prerequisite courses.

In addition to meeting the university requirements for admission, it is recommended that students complete one year each of high school chemistry and biology. Pre-major nursing students are required to seek academic advising each semester through the College of Nursing and Health Innovation student services office. This advising includes course planning and information about application materials and deadlines.

Transfer Credits
While ASU accepts transfer credit from other accredited institutions, all transfer credit may not apply toward a B.S.N. Students completing course work at a community college or university other than ASU should consult a College of Nursing and Health Innovation academic advisor to plan an appropriate sequence of prerequisite courses and to apply to the professional program. The college has a transfer partnership agreement with the Maricopa Community College District. See
a College of Nursing and Health Innovation academic advisor for details. The college may not accept transfer credit (especially science) completed more than seven years before the date of application to the professional program.

**Professional Program Admission**

Individuals interested in applying to the professional program must receive advising from a College of Nursing and Health Innovation academic advisor and are required to attend an application workshop. Contact the student services office in the College of Nursing and Health Innovation at 602-496-0888 for details.

Students are eligible for consideration for admission to the professional program if they meet the following criteria:

1. Regular admission to the College of Nursing and Health Innovation at the Downtown campus as a pre-major nursing student.
2. Academic good standing at ASU and in the College of Nursing and Health Innovation.
3. Minimum prerequisite GPA of 2.75.
4. Completion of designated prerequisite courses with an earned grade of “C” (2.00) or higher in each course.
5. Completion of all application materials.
6. Submission of all required health and immunization requirements.
7. A Test of English as a Foreign Language (TOEFL) score of 550 or higher for international students.
8. Receipt of entrance examination scores.
9. Submission of other required materials.

Admission is selective and based on available resources. Meeting the minimum prerequisite GPA does not ensure admission. All qualified applicants may not be admitted.

Students admitted to the professional program are required to meet the following additional criteria:

1. Proof of CPR certification (Level C American Heart Association Health Care Provider).
2. Proof of negative drug screen.
3. Completion of all required health and immunization information.
4. Eligible for fingerprint clearance card.
5. Other required materials.

Professional program courses are offered at the Community Services Building in Tempe, the Downtown Phoenix campus, the Mayo Clinic Hospital campus, the Polytechnic campus and the West campus. Students are asked to specify location preference as part of the application process. Students are expected to complete the professional program on the campus assigned upon admission.
The four-semester (64-credit-hour) professional program is available in two options:

1. A 24-month option with classes scheduled during the fall and spring semesters at the Downtown campus.
2. A 16-month year round option with classes scheduled during fall, spring and summer sessions with minimal breaks between semesters available at various sites.

For more information, visit the Web site at http://nursing.asu.edu [1], or contact the College of Nursing and Health Innovation Student Services Office.

Opportunities for individual, direct and group patient care are available in a variety of settings:

- Community clinics.
- Geriatric facilities.
- Health fairs.
- Home health.
- Hospice.
- Hospitals.
- Industries.
- Rehabilitation agencies.
- Schools.

Professional Program Transfer
Students requesting to transfer into the professional program with advanced standing may be required to submit letters of recommendation. Any student enrolled in good standing at any accredited/approved baccalaureate school of nursing within the past two years may apply for admission into the professional program. To be considered for admission to the professional program, transfer students must first be admitted to ASU as pre-major nursing students (see undergraduate admission) and must also meet all professional program admission requirements. To be considered for advanced standing in the professional program courses, petitions for each course must be completed by the student accompanied by course descriptions and syllabus materials and be approved by the college standards committee.

Admission of Registered Nurses (R.N.s)
All R.N. students are admitted into the College of Nursing and Health Innovation as pre-major nursing students. Each R.N. must show evidence of a current unencumbered Arizona R.N. license or one from a compact state recognized by the Arizona State Board of Nursing. R.N. students are responsible for adhering to Arizona State Board of Nursing Rules and Regulations. Alternatives are available to R.N.s to facilitate their progress in the program, including credit by examination, substitution of previously completed nursing courses for specified ASU nursing courses, and transfer of general education course work completed at other
accredited colleges and universities. All R.N. students must consult with an academic advisor in planning their program of study. See professional program admission for admission criteria into the B.S.N. professional program. Registered nurses are admitted into the R.N.-B.S.N. program track twice a year, in January and in August.

Readmission to the Professional Program
Students who have not been in continuous enrollment must file a petition requesting readmission to the professional program and must provide the following documents:

- Proof of current enrollment or readmission to ASU and the College of Nursing and Health Innovation in good standing.
- Transcripts from all colleges or universities attended.
- All other admission requirements as outlined under admission.

Arizona State Board of Nursing Requirement

To be eligible to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN), a student must have a high school diploma or GED certificate as well as proof of graduation from an approved nursing program. Arizona State law prohibits an individual convicted of a felony from applying for nursing licensure or certification until five years after the date of absolute discharge of the sentence. Application for, and passage of, the NCLEX-RN is the sole responsibility of the student.

College Health Requirements

Students admitted/enrolled in the professional program are responsible for fulfilling the requirements of the health policies of the College of Nursing and Health Innovation. The student is responsible for providing proof to the College of Nursing and Health Innovation student services office of having met these requirements before enrollment in the professional program courses.

These health policies include the following requirements:

1. Proof of measles (rubeola), mumps and rubella immunization (two MMRs or appropriate titers).
2. Proof of annual tuberculosis screening.
3. Completed series of hepatitis-B vaccine or proof of hepatitis-B titer.
6. Proof of varicella (chicken pox) immunization.
7. Proof of negative drug screen.

A student may not participate in any clinical experience without meeting these requirements. An annual flu vaccine is also recommended; other health information may be required. While the hepatitis-A vaccination is not required for admission,
information on who might benefit from the vaccination is available from the College of Nursing and Health Innovation student services office.

**Latex Sensitivity**

Healthcare workers are at risk for developing Latex allergies, which may be life threatening. It is the student’s responsibility to report if an allergy or sensitivity to Latex products is suspected; medical care is imperative for diagnosis, guidance and treatment.

**Fingerprint Clearance**

All College of Nursing and Health Innovation students admitted to the professional program must submit a photocopy of their fingerprint clearance card to the student services office by the first day of class.

**Essential Functions**

Students admitted to the professional program are expected to meet the essential functional abilities of the undergraduate nursing student. Essential functions for this program include gathering data through the senses (hearing, seeing, etc.), synthesizing information from a variety of sources, making decisions regarding patient care and performing necessary physical and mental activities to ensure safe care. Some clinical experiences may require students to purchase their own protective devices. For complete details, call an advisor in the student services office at 602-496-0888.

**ASU Health Requirements**

See undergraduate admission and immunization requirements.

**Professional Liability Insurance**

It is highly recommended that students carry their own professional liability insurance when enrolled in clinical nursing courses.

**Health and Accident Insurance**

It is strongly recommended that all students carry their own health and accident insurance. Some clinical agencies require students to have current health insurance. See the baccalaureate programs student handbook. Each student is personally responsible for costs related to any accident or illness during or outside of school activities.

**Automobile Insurance**

Students are required by state law to carry automobile insurance. Students are responsible for transportation to and from clinical sites. Extensive travel may be required for selected clinical experiences.
Academic Advising

Academic advising, provided by the College of Nursing and Health Innovation through the student services office, is an essential aspect of the education experience; see academic advising. While the College of Nursing and Health Innovation provides academic advising, it is ultimately the responsibility of each student to fulfill academic and program requirements. Advisors are available by appointment in the College of Nursing and Health Innovation student services office, call 602-496-0888. Advisor appointments are also available at West campus, the Polytechnic campus and at several community colleges in the area.

Advisors assist students with program planning, registration, preparation of needed petitions, verification of graduation requirements, referrals to university and community resources and career planning.

Student responsibilities include following university guidelines regarding submission of transcripts from all colleges other than ASU, obtaining the necessary signatures or computer verifications required by the university and following university procedures for matriculation.

Mandatory Advising
All pre-major nursing students are required to meet with an academic advisor before registering for each semester of classes. All students on probation are required to meet with an advisor to plan strategies for improving their academic standing.

Declaration of Graduation
Students following the curriculum requirements of the 1996–1998 or later catalog editions must file a declaration of graduation form using the Degree Audit Reporting System during enrollment in the first semester of the professional program.

Student Employment
Each of the four semesters in the prelicensed professional program is composed of 16 credit hours. Seven to eight of these credit hours reflect three days in clinical laboratory practicum experience. The remaining eight to nine credit hours reflect classroom hours with preparation and study requiring additional time and effort. It is suggested that any other extracurricular activities or employment be kept at a minimum.

Academic Standards
Students are admitted into the College of Nursing and Health Innovation as pre-major nursing students and are subject to the general standards of academic good standing at the university (see retention and academic standards). However, students who maintain standards of academic good standing do not necessarily qualify for admission into the professional program. Consideration for admission
into the professional program is contingent on achieving at least a “C” (2.00) in all prerequisite courses and earning a minimum GPA of 2.75 in prerequisite courses. In addition, a grade of “C” (2.00) or higher is required in all course work for the degree except in nursing practice courses where a designation of a “Y” (satisfactory) grade is required.

Once admitted into the professional program, students are allowed only one nursing course failure within the program. The second failure in a nursing course leads to an automatic disqualification from the College of Nursing and Health Innovation. Probation and/or disqualification is in accordance with university policies.

Academic dishonesty is not tolerated in any course and is subject to specific College of Nursing and Health Innovation policies and procedures.

**Graduate Policies**

**Academic Advising**

Students are advised by the student services office before admission to the M.S. program. Upon admission, each student is assigned a faculty advisor within the area of concentration.

Source URL: http://catalog.asu.edu/policies/nursing

Links:


**College of Public Programs Policies**

**Undergraduate Policies**

Interdisciplinary Public Service Requirement

The College of Public Programs has a college level graduation requirement for all undergraduate students majoring within the college. This degree requirement is called the Interdisciplinary Public Service requirement. Each student must complete a total of 13 hours of public programs course work. These 13 hours will consist of one course from each of the four schools within the College of Public Programs and ASU 101. Students may choose a core course from their major and three courses from the approved course list for this requirement in addition to completing ASU 101. ASU 101 must be completed in the first year at ASU; the other courses can be taken while completing the degree. The approved course list is available through your major advisor. All 13 hours must be completed in order for a undergraduate
student to graduate from the College of Public Programs. Questions about this requirement should be directed to your academic advisor for your major.

**Advising**

The mission of the College of Public Programs professional academic advising staff is to assist students in developing meaningful educational plans to meet their academic, career and personal goals in an ongoing process of evaluation and clarification. The advisors strive to perform their duties in a professional, ethical, confidential, accurate and supportive manner, respecting student diversity and needs and always holding the individual in highest regard. The student and advisor should accomplish this process in a spirit of shared responsibility to develop academic excellence, strong decision-making skills and self-reliance. A student who has been admitted to the College of Public Programs is assigned an academic advisor from the academic unit of the student's major area of study. Questions about advising should be directed to the student's academic advisor or to the College of Public Programs Student Services Office, UCENT 600.

**Mandatory Advising**

The following categories of students are required to receive advising and to be cleared by a program advisor before they may register for classes:

1. Students with admissions competency deficiencies.
2. All freshmen.
3. Transfer students in their first semester at ASU.
4. Readmitted students.
5. Students on probation.
6. Students who have been disqualified.
7. Students with special admissions status.
8. All undergraduate students majoring in Social Work.

**Course Load**

A normal course load per semester is 15 to 16 credit hours. The maximum number of hours for which a student can register is 18 credit hours unless an overload petition has been filed and approved by the department/school standards committee and the academic and student affairs committee of the college. Semester course loads may be further limited for students in mandatory advising. Petitions for overload are not ordinarily approved for students who have a cumulative GPA less than 3.00 and who do not state valid reasons for the need to register for the credits. Students who register for credit hours in excess of 18 and do not have an approved overload petition on file may have courses randomly removed through an “administrative drop” action. Specific degree requirements are explained in detail under the respective college, school and department sections.

**Academic Standards and Retention**
Good Standing
Students in the College of Public Programs are considered to be in good standing for the purpose of retention if they maintain a cumulative GPA of 2.00 or higher in all courses taken at ASU. Each major within the College of Public Programs requires a progressively higher GPA than a 2.00 as a student advances towards their degree. These requirements are outlined in the student’s major map.

Probation
Any student who does not maintain good standing is placed on academic probation. A student on academic probation is required to observe any limitations or rules the college may impose as a condition for retention.

Disqualification
A student who is on probation becomes disqualified if:

1. The student has not returned to good standing.
2. The student has not met the required semester GPA.

Disqualification is exercised at the discretion of the college and becomes effective on the first day of the fall or spring semester following college action. A disqualified student is notified by the Office of the Registrar and/or the dean of the college and is not allowed to register for a fall or spring semester at the university until reinstated. A student who is disqualified may not attend as a nondegree student.

Reinstatement
Students seeking reinstatement after disqualification should contact the College of Public Programs student services office regarding procedures and guidance for returning to good standing. When reinstatement includes readmission, application must be made to the readmissions section of the University Registrar. All academic disciplinary action is the function of the College of Public Programs student services office, UCENT 600, under the direction of the dean of the college. Students having academic problems should call this office for advising at 602-496-0600.

Graduate Policies

Advising
Advising is usually handled by graduate faculty or a committee. Once admitted, students are typically assigned a temporary faculty advisor in the potential areas of specialization who assists in planning a course of study. For those degree programs requiring the completion of a thesis, a chair and thesis supervisory committee are selected by the director of graduate studies, in consultation with the student, and appointed by the dean of the Graduate College.

Source URL: http://catalog.asu.edu/policies/public_programs
School of Sustainability Policies

ADVISING

The School of Sustainability's Academic Advising Center assists undergraduate and graduate students in achieving their personal, educational, cultural and career goals while becoming self directed, life-long learners. We encourage continuing students to meet with an advisor at least once each semester. New students will be required to meet with an advisor before being cleared to register for classes. Office hours are Monday-Friday (excluding university holidays), 9 a.m. to 4 p.m. It is highly encourage that students call in advance (480-727-6963) to make an appointment so advisors can set aside the appropriate time to answer all their questions.

Undergraduate Academic Standards

Student Responsibilities
Students need to make many decisions as they complete their degrees. While the School and the University have a number of resources available (e.g., faculty, courses, advisors, and tutors) to help in making the decisions, students are expected to take responsibility for their decisions.

Good Standing
Students in the School of Sustainability are considered in good standing for the purpose of retention if: (1) they maintain a cumulative GPA of 2.00 or higher in all courses taken at ASU, and (2) maintain critical requirements within their major.

Critical Requirements
All sustainability students must meet the critical requirements for their intended majors. Students who do not comply with the critical requirements are off track and have holds placed on their records. These students have to meet with an advisor to have this hold removed. If the student still has not met all critical requirements in the following semester, then further registration in the intended major may not be permitted.

Probation
Any student who does not maintain a cumulative GPA of 2.00 or higher in all courses taken at ASU is placed on academic probation. Probation status for academic reasons begins on the first day of classes of the semester after the semester in which a student has been determined to be on probation. A student on academic probation is required to observe any limitations or rules the school may impose as a condition for retention. Before students on probation can register for classes in the next semester, they must receive advising in their department.

Disqualification
Students who do not meet probation requirements are subject to disqualification. A
disqualified student will not be able to register for classes in the fall or spring semester at the university. If the student has already registered for a future fall or spring semester, the registration is canceled. A student who has been disqualified may apply for reinstatement through the school.

Reinstatement and Readmission
Students seeking reinstatement (after disqualification) or readmission (after absence from the university) should contact the School of Sustainability office regarding procedures and guidance for returning to good standing. When reinstatement includes readmission, application must be made to the readmission section of the Office of the Registrar.

School Graduation Requirements
All students in the School of Sustainability must complete the university General Studies requirement as well as all requirements in the major. In addition, the school has established requirements that are specific to the B.A. and B.S. degrees.

1. ASU 101 Requirement:

   ASU 101 SOS: The ASU Experience (1)

2. Statistics Requirement:

   STP 226 Elements of Statistics, CS (3) or additional statistics course options as approved by the school

3. Foreign Language Requirement:

   Bachelor of Arts Degrees. Students pursuing B.A. degrees in the School of Sustainability must demonstrate intermediate proficiency in a second language by completing the courses specified below with a grade of “C” (2.00) or higher in each course. Second language course requirements may be fulfilled by one of the following:

   - Completion of second language course work at the intermediate level (202 or equivalent; those students completing this requirement in Ancient Greek must take both GRK 301 and 302; students completing the requirement in Portuguese or Romanian must complete POR 314 or ROM 314).
   - A foreign language course at the 300 level or higher taught in the foreign language and having 202 or its equivalent as a prerequisite.
   - Completion of secondary education at a school in which the language of instruction was not English.

   Bachelor of Science Degrees. Students pursuing B.S. degrees in the School of Sustainability must demonstrate intermediate proficiency in a second language by completing the courses specified below with a grade of “C”
(2.00) or higher in each course. Second language course requirements may be fulfilled by one of the following:

- Completion of second language course work at the introductory level (102 or equivalent).
- A foreign language course at the 200 level or higher taught in the foreign language and having 102 or its equivalent as a prerequisite.
- Completion of secondary education at a school in which the language of instruction is not English.

The School of Sustainability also requires a cumulative 2.50 GPA in all major courses in order to graduate with a B.A. or B.S. in sustainability.

**Concurrent Degrees**

Students who wish to obtain concurrent degrees must realize that there are certain combinations that would not be approved because there is too great an overlap between the courses required for each major. For example, students may not pursue both a B.A. or B.S. in sustainability as well as a B.A. in business with a concentration in sustainability.

**Graduate Policies and Academic Standards**

Graduate students should refer to the School of Sustainability Graduate Handbook at http://schoolofsustainability.asu.edu/docs/sos/GraduateHandbook.pdf [1] for information about graduate policies and academic standards.

Please contact the school for more information at http://schoolofsustainability.asu.edu/ [2].

Source URL: http://catalog.asu.edu/policies/sustainability

Links:

**College of Teacher Education and Leadership Policies**

**Undergraduate**

**Academic Policies**

The goal of the ASU Professional Teacher Preparation Program is to produce teachers of the highest quality. We are committed to providing support and resources for those students needing assistance for their academic or professional growth.
Students are evaluated throughout the Professional Teacher Preparation Program. Students in the program will be formally reviewed regarding their academic progress and professional attributes in order to determine retention/continuation status. A student with a record that contains indicators of professional or academic concerns will be placed on probation, suspension, disqualification or permanently removed from the program.

Students enrolled in undergraduate education programs are expected to maintain academic standards. To be in good standing, students must maintain an overall cumulative GPA of 2.50 or higher with at least a grade of “C” (2.00) in each undergraduate education course.

In addition to academic progress, students are evaluated regarding professional attributes in four areas:

1. Communication/knowledge level.
2. Interpersonal relations.
3. Professionalism.
4. Attitudes.

If there are concerns regarding a student’s professional attributes, the student will be placed on probation, suspended, disqualified or permanently removed from the program. Unless the student has been permanently removed from the program, they must participate in the development of a professional improvement plan, which establishes the requirements for continuation in the program. The professional improvement plan lists areas of concern and action steps necessary to improve the targeted behaviors.

Students placed on a plan of improvement, probation or suspension, for any reason, are subject to disqualification by the College of Teacher Education and Leadership at the end of the following semester if the conditions imposed for reinstatement are not met. Students placed on a plan of improvement, probation or suspension, for any reason, are reviewed at the end of the following semester. Students demonstrating behaviors or characteristics that make it questionable whether they can succeed in the teaching profession, may be disqualified or prescribed specific conditions under which continued participation is permitted, that is, probation or suspension even if the student meets minimum academic performance as measured by GPA.

Students who wish to appeal decisions of the College of Teacher Education and Leadership’s Student Issues Committee, may do so in writing to the associate dean for student affairs of the college. Any exceptions to the above retention and disqualification policies and procedures must be approved by the College of Teacher Education and Leadership’s Student Issues Committee and the associate dean for student affairs of the college.
Graduate

Academic Policies

The goal of the ASU Master of Education with Arizona Certification Program (MAC) is to produce teachers of the highest quality. We are committed to providing support and resources for those students needing assistance for their academic or professional growth.

Students are evaluated throughout the MAC program. MAC students will be formally reviewed regarding their academic progress and professional attributes in order to determine retention/continuation status. A student with a record that contains indicators of professional or academic concerns will be placed on probation, suspension, disqualification or permanently removed from the program.

Students enrolled in graduate programs are expected to maintain academic standards. To be in good standing, students must maintain an overall cumulative GPA of 3.00 or higher with at least a grade of “C” (2.00) in each graduate education course.

In addition to academic progress, students are evaluated regarding professional attributes in four areas:

1. Communication/knowledge level.
2. Interpersonal relations.
3. Professionalism.
4. Attitudes.

If there are concerns regarding a student's professional attributes, the student may be placed on probation, suspended, disqualified or permanently removed from the program. Unless the student has been permanently removed from the program, they must participate in the development of a professional improvement plan, which establishes the requirements for continuation in the program. The professional improvement plan lists areas of concern and action steps necessary to improve the targeted behaviors.

Students placed on a plan of improvement, probation or suspension, for any reason, are subject to disqualification by the College of Teacher Education and Leadership at the end of the following semester if the conditions imposed for reinstatement are not met. Students placed on a plan of improvement, probation or suspension, for any reason, are reviewed at the end of the following semester. Students demonstrating behaviors or characteristics that make it questionable whether they can succeed in the teaching profession, may be disqualified or prescribed specific conditions under which continued participation is permitted, that is, probation or suspension even if the student meets minimum academic performance as measured by GPA.
Students who wish to appeal decisions of the College of Teacher Education and Leadership’s Student Issues Committee may do so in writing to the associate dean for student affairs of the college. Any exceptions to the above retention and disqualification policies and procedures must be approved by the College of Teacher Education and Leadership’s Student Issues Committee and the associate dean for student affairs of the college.

Graduation Requirement
Candidates for the Master of Education are required to complete a comprehensive examination unless their program requires an applied project or its equivalent.

Source URL: http://catalog.asu.edu/policies/teacher_ed

College of Technology and Innovation Policies

Undergraduate Policies

ADVISING

New incoming and transfer students should seek advising from an academic advisor in the dean's office. The college requires that students consult with advisors before registering each semester. Advisors should be made aware of any employment obligations or special circumstances that may affect a student’s ability to successfully handle a full course load. Students may register for a maximum of 19 credit hours per semester. Any student wishing to take more than the maximum must petition the college’s standards committee and have an approval on file before registering for a course overload.

ACADEMIC STANDARDS

Retention
A student is expected to make satisfactory progress toward completion of degree requirements to continue enrollment in the College of Technology and Innovation. Any one of the following conditions is considered unsatisfactory progress and results in the student’s being placed on probationary status:

- A semester with a GPA less than 2.00.
- An ASU cumulative GPA less than 2.00.

A student on probation is subject to disqualification if:

- A semester GPA of 2.00 is not attained and the cumulative GPA is below 2.00 at the end of the probationary semester, or
- the student is placed on probation for two consecutive semesters and is unable to achieve the cumulative GPA stated in number one.
Students on academic probation are not allowed to register for more than 13 credit hours. Probationary students may not register for the semester following the semester in which they were declared probationary without advising. Advising clearance will be given only after the registrar records grades for the current semester.

Disqualification
During a semester on academic probation, a student who fails to meet the retention standards is disqualified. Students may request a review of their disqualification status by contacting the associate dean in the College of Technology and Innovation. Any disqualified student who is accepted by another college at ASU may not register for courses in the College of Technology and Innovation unless the courses are required in the new major. Disqualified students who register for courses in the college may be withdrawn from these courses any time during the semester.

Reinstatement
The college does not accept an application for reinstatement until the disqualified student has remained out of the college for at least a 12-month period. Merely having remained in disqualified status for this period of time does not, in itself, constitute a basis for reinstatement. Proof of ability to do satisfactory college work in the chosen discipline is required; for example, completing pertinent courses in the discipline at a community college with higher-than-average grades.

Graduate Policies

Advising and Program of Study

The program of study is planned in consultation with an appointed supervisory committee. It is designed for flexibility, permitting the student to select a combination of courses in a technological area and a supporting area to meet individual career goals. A minimum of 33 credit hours is required for the degree program. Of these, a minimum of 15 credit hours must be 500-level courses and part of the approved program. A maximum of 12 hours of course work may be taken from offerings outside the College of Technology and Innovation with approval of the appropriate academic program or department. Programs of study for the M.S.Tech., with an interdisciplinary area of concentration, may have up to but not more than 15 hours of course work drawn from areas outside the College of Technology and Innovation at the discretion of the program or department in which the concentration is administered. A maximum of nine credit hours of appropriate course work completed before admission may be included in the program of study.

Source URL: http://catalog.asu.edu/policies/tech_innov
University College Policies

Undergraduate Policies

Exploratory Major Students Critical Requirements

All incoming ASU freshmen participate in the critical requirements program. Critical requirements are designed to help students graduate in four years by clearly outlining course requirements and course progression and by placing critical courses in the early semesters to help students determine degree fit and suitability.

To that end, University College has developed major maps that support students exploring potential majors during their first few semesters at the university. Upon admission to University College, all first-year exploratory majors are required to declare an exploratory major track in one of four areas:

- Exploratory social and behavioral sciences.
- Exploratory health and life sciences.
- Exploratory humanities and fine arts.
- Exploratory math, physical sciences, engineering and technology.

Each of these major tracks is designed to provide students with introductory courses in a field of choice (e.g., introduction to psychology, introduction to environmental design), general studies education and elective courses that reinforce current interests. By strategically selecting courses, students can make progress toward choosing a major with the appropriate fit. Each exploratory track is composed of a three-semester major map, with the end goal of having students declare their major by no later than completion of 45 credit hours. Students are required to maintain a GPA that keeps them in good academic standing with the university and allows them to declare the major of their choosing. All exploratory students are required to enroll in a university major and career exploration class each semester.

Major maps for each of these exploratory tracks are available at https://webapp.asu.edu/eadvisor/MajorMaps.html.

Academic Integrity

Academic honesty is expected of all students in all examinations, papers, academic transactions and records. The possible sanctions include, but are not limited to, appropriate grade penalties, loss of registration privileges, disqualification and dismissal. University College adheres strictly to the Student Code of Conduct regarding academic dishonesty. A copy of the Student Code of Conduct may be obtained from your academic advisor, or online at http://provost.asu.edu/academicintegrity.

School of Letters and Sciences
The School of Letters and Sciences offers a liberal arts core curriculum on the Downtown Phoenix campus and a university-wide bachelor’s degree in interdisciplinary studies. We provide foundational instruction in humanities, social sciences and natural sciences for all students on the Downtown Phoenix campus, and we are invested in the development of learning-centered course work for students in the College of Nursing and Healthcare Innovation, College of Public Programs and Walter Cronkite School of Journalism and Mass Communication.

The School of Letters and Sciences is designed to respond to the needs of ASU students, faculties of the downtown schools and colleges, the challenges of higher education and our constituent communities. Guiding principles of the school are embedded student success programs, strategic partnerships both inside the university and in the community and interdisciplinary inquiry.

**Academic Good Standing**

For purposes of retention, academic good standing for all students in University College is defined as follows:

<table>
<thead>
<tr>
<th>Total Hours Earned</th>
<th>Minimum Cumulative GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 or fewer</td>
<td>1.60</td>
</tr>
<tr>
<td>25–55</td>
<td>1.75</td>
</tr>
<tr>
<td>56 or more</td>
<td>2.00</td>
</tr>
</tbody>
</table>

A student who does not maintain the minimum GPA after each fall or spring semester is placed on academic probation. A student placed on academic probation or continuing probation must meet with an academic advisor before registration for the subsequent semester. A student placed on academic probation has one semester to raise his or her cumulative or semester GPA to meet the academic good standing criteria; otherwise, the student may be disqualified. A student who has been disqualified is not permitted to enroll for the fall or spring semester.

Students may remain designated as exploratory major status until they complete 45 credit hours. Students who have not declared a major by the time they have completed 45 credit hours are placed on hold, which prevents registration for future ASU semesters, until the student has declared a major.

Source URL: http://catalog.asu.edu/policies/univ_college

Links:


Academic Programs

Concurrent and Dual Degrees

Architecture (MArch)/Business Administration (MBA) [1]
Herberger Institute for Design and the Arts [2]/W. P. Carey School of Business [3]

Business Administration (MBA)/Electrical Engineering (MSE) [4]
W. P. Carey School of Business [3]/Department of Electrical Engineering [5]

Business Administration (MBA)/Health Sector Management (MHSM) [6]
W. P. Carey School of Business [3]

Business Administration (MBA)/Industrial Engineering (MSE)
W. P. Carey School of Business [3]/Ira A. Fulton School of Engineering [7]

Business Administration (MBA)/Information Management (MSIM) [8]
W. P. Carey School of Business [3]

Business Administration (MBA)/International Management (MIM)
W. P. Carey School of Business [3]/Carlos III University of Madrid [9] (Spain); Graduate School of Business Administration [10] (Peru); Graduate School of Commerce [11] (France); and Monterrey Institute for Technical and Superior Studies [12], Mexico State Campus (Mexico)

Business Administration (MBA)/Master of Engineering (MENG) Specialization in Embedded Systems
W. P. Carey School of Business [3]/Ira A. Fulton School of Engineering [7]

Business Administration (MBA)/Master of Engineering (MENG) Specialization in Software Engineering
W. P. Carey School of Business [3]/Ira A. Fulton School of Engineering [7]

Business Administration (MBA)/Master of Engineering (MENG) Specialization in Systems Engineering
W. P. Carey School of Business [3]/Ira A. Fulton School of Engineering [7]

Business Administration (MBA)/Taxation (MTax) [13]
W. P. Carey School of Business [3]

Law (JD)/Business Administration (MBA) [14]
Sandra Day O’Connor College of Law [15]/W. P. Carey School of Business [3]

Law (JD)/Justice Studies (PhD) [16]
Sandra Day O’Connor College of Law [15]/School of Justice and Social Inquiry [17]
Law (JD/Medicine (MD)) [18]
Sandra Day O'Connor College of Law [15]/Mayo Medical School [19]

Law (JD)/Psychology (PhD) [20]
Sandra Day O'Connor College of Law [15]/Department of Psychology [21]

Professional Accountancy (MPAC)/Business Administration (MBA)
W. P. Carey School of Business [3]

Public Administration (MPA)/Social Work (MSW) [22]
College of Public Programs[23]

* Applications for this program are not being accepted at this time.
Please contact the department for more information.

Source URL: http://catalog.asu.edu/concurrent_dual

Links:
Accelerated Bachelor’s and Master’s Programs

Accounting (BS)/Accountancy (MACC)  
W. P. Carey School of Business [1]

Accounting (BS)/Taxation (MTAX)  
W. P. Carey School of Business [1]

Aerospace Engineering (BSE/MS)  
Ira A. Fulton School of Engineering [2]

Aerospace Engineering (BSE/MSE)  
Ira A. Fulton School of Engineering [2]

American Studies (BA)/Interdisciplinary Studies (MA)  
New College of Interdisciplinary Arts and Sciences [3]

Biochemistry (BS/MS) - Emphasis in Medicinal Chemistry  
College of Liberal Arts and Sciences [4]

Bioengineering (BSE/MS)  
Ira A. Fulton School of Engineering [2]

Biology (BS/MS) [5]  
College of Liberal Arts and Sciences [4]

Civil Engineering (BSE)/Civil and Environmental Engineering (MS)  
Ira A. Fulton School of Engineering [2]

Civil Engineering (BSE)/Civil and Environmental Engineering (MSE)  
Ira A. Fulton School of Engineering [2]
Computational Mathematical Sciences (BA)/Mathematics (MA) [6]
Department of Mathematics and Statistics [7]

Computer Science (BS/MS) [8]
School of Computing and Informatics [9]

Computer Systems Engineering (BSE)/Computer Science (MS) [10]
Ira A. Fulton School of Engineering [2]

Criminology (BS)/Criminal Justice (MA)
College of Public Programs [11]

Criminology (BS)/Criminal Justice (MS)
College of Public Programs [11]

Electrical Engineering (BSE/MSE)
Ira A. Fulton School of Engineering [2]

Engineering (BS/MS/MSE)
Ira A. Fulton School of Engineering [2]

Ethnicity, Race and First Nation Studies (BA)/Interdisciplinary Studies (MA)
New College of Interdisciplinary Arts and Sciences [3]

History (BA/MA)
College of Liberal Arts and Sciences [4]

Industrial Engineering (BSE/MS/MSE)
Ira A. Fulton School of Engineering [2]

Integrative Studies (BA)/Interdisciplinary Studies (MA)
New College of Interdisciplinary Arts and Sciences [3]

Interdisciplinary Studies (BA/BS/MA)
New College of Interdisciplinary Arts and Sciences [3]

Journalism and Mass Communication (BA/MMC) [12]
Walter Cronkite School of Journalism and Mass Communication [13]

Materials Science and Engineering (BSE/MS)
Ira A. Fulton School of Engineering [2]

Materials Science and Engineering (BSE/MSE)
Ira A. Fulton School of Engineering [2]

Mathematics (BS/MA) [6]
College of Liberal Arts and Sciences [4]

Mechanical Engineering (BSE/MS)
Ira A. Fulton School of Engineering [2]
Parks and Recreation Management (BS)/Recreation and Tourism Studies (MS) [14]
College of Public Programs [11], School of Community Resources and Development [15]
Planning (BSP/MUEP) [6]
College of Liberal Arts and Sciences [4], Herberger Institute for Design and the Arts [16]

Political Science (BA/MA) [17]
College of Liberal Arts and Sciences [4]

Social and Behavioral Sciences (BA or BS)/Interdisciplinary Studies (MA) [6]
New College of Interdisciplinary Arts and Sciences [3]

Tourism Development and Management (BS)/Recreation and Tourism Studies (MS) [14]
College of Public Programs, School of Community Resources and Development

Women’s Studies (BA or BS)/Interdisciplinary Studies (MA)
New College of Interdisciplinary Arts and Sciences [3]

Source URL: http://catalog.asu.edu/accelerated

Links:


GRADUATE PROGRAMS

Graduate Degrees and Certificates (Program Descriptions and Requirements)

Business, W. P. Carey School of

Accountancy (MACC) BAACCMACC
W. P. Carey School of Business

Official Degree Awarded: MAcc Accountancy

Program Description: The M.Acc. program is structured to provide students with an in-depth working knowledge of advanced accounting topics that are most relevant in today’s business environment. The program prepares students for a wide range of professional careers in accounting and also aids significantly in preparation for the certified public accountant examination. The M.Acc. program also offers an emphasis in information systems.

Program Requirement: The M.Acc. offers a cohort-based, part-time and a cohort-based, full-time program. The full-time program, which requires a bachelor's degree in accountancy, consists of 30 credit hours which span over three ten-week trimesters (August through May). The part-time program, which requires a bachelor's degree in an area of business, consists of 36 credit hours over a two-year period of study. The curriculum is constantly updated.

Admission Requirements: All applicants are required to submit an online application to the Graduate College. Complete application instructions may be obtained from the school’s Web site. Students applying to this program must submit scores from the GMAT. International applicants whose native language is not English must submit scores from the Test of English as a Foreign Language (TOEFL) examination. Preference in admission is given to those with degrees in accounting and business, although other exceptional candidates are considered.

Contact:
School of Accountancy
http://wpcarey.asu.edu/acc/macc.cfm
wpcareyacc@asu.edu
BA 223Q
480/965-3631

Accountancy (PhD) BAACCTPHD
W.P. Carey School of Business

Official Degree Awarded: PHD Business Administration (Accountancy)
Program Description: The objective of the Ph.D. in business administration with a concentration in accountancy is to prepare scholars to conduct high-quality research and to teach in the fields of:

- Financial and managerial accounting.
- Auditing.
- Information systems.
- Taxation.

This program allows students to develop the capability to review, analyze, conduct and publish research through a series of research seminars and theory-building and statistical course work that supplement and complement students’ abilities and desires. In addition, Ph.D. students participate in ongoing research projects in conjunction with faculty members in the School of Accountancy.

Program Requirement:

Program of Study

A minimum of 84 credit hours is required for the Ph.D. degree; 12 (and only 12) of these hours must be 799 Dissertation. Of the 84 credit hours, at least 30 hours (which may include research credit) of the approved Ph.D. program and 12 dissertation hours must be completed after admission to the student’s Ph.D. program. Students may not apply credit hours earned for a doctoral degree previously awarded at ASU or another institution toward their current ASU doctoral degree. However, at the individual academic unit’s discretion, students may apply up to 30 credit hours from a previously awarded master’s degree toward their doctoral program of study.

Students work with their study committees to determine an appropriate program of study. Common areas of functional specialization among doctoral studies include financial and managerial accounting, auditing, information systems and taxation. With these functional areas, doctoral studies may emphasize experimental or archival research methods. All accountancy doctoral students are required to take a three-semester sequence of accountancy doctoral course work. A maximum of six approved graduate credit hours can be transferred to satisfy program requirements.

Comprehensive Examinations

Upon completion of all necessary course work on a student’s approved program of study, the academic unit may initiate the scheduling and administering of a student’s comprehensive examinations. The comprehensive examination consists of a minimum of a written exam; at the discretion of the academic unit, an oral exam may also be required.

Candidacy
Ph.D. students achieve candidacy status in a letter from the dean of the Graduate College upon:

1. Passing the comprehensive examinations.
2. Successfully defending the dissertation prospectus.

**Dissertation Requirements**

Students are required to present a dissertation to satisfy the research requirement for the Ph.D. degree. The dissertation is defended in an oral examination commonly known as the dissertation defense.

Students must be enrolled for at least one credit hour that appears on the program of study or one hour of appropriate graduate-level credit (such as 795 Continuing Registration) during the semester (including summer session) in which the student defends the dissertation.

Note: For detailed information regarding the university's doctoral degree requirements, please refer to the Graduate College's Doctor of Philosophy policy and procedures.

**Maximum Time Limit**

Doctoral students must complete all program requirements within a 10-year period. The 10-year period starts with the initial enrollment into the doctoral program. In addition, the student must take the final oral examination in defense of the dissertation within five years after passing the comprehensive examinations. Any exception must be approved by the supervisory committee and the dean of the Graduate College, and ordinarily involves repetition of the comprehensive examinations.

*Admission Requirements:* All applicants must submit the Graduate College online application. Applications are initially reviewed by a School of Accountancy doctoral committee using a portfolio approach. In addition to GMAT scores and prior academic performance, letters of recommendation and a personal statement are reviewed to ensure a good “fit” between the student’s goals and the school. A recommendation for action is then made to the associate dean in the W. P. Carey School of Business, who in turn makes a recommendation to the Graduate College. The Graduate College either admits or denies each applicant and notifies them in writing.

*Contact:*
School of Accountancy
http://wpcarey.asu.edu/acc/doctoral.cfm
wpcareyacc@asu.edu
BA 223Q
480/965-3631
Official Degree Awarded: MS Agribusiness

Program Description: The Morrison School of Management and Agribusiness at the Polytechnic campus, offers the M.S. in agribusiness. In general, this degree is designed to prepare students from a variety of backgrounds with a set of critical and analytical business skills, while recognizing the unique demands of the agribusiness and resource management sectors. Graduates are well prepared for successful administrative or managerial careers with either government or private-sector organizations in either field.

Students are able to select either a research-oriented program, which leads to the completion of a supervised thesis, or a program consisting of course work only (nonthesis option). The nonthesis option allows students to develop an area of specialization and apply these skills to a real-world agribusiness problem through an integrative, capstone course experience. Both the thesis and nonthesis options require the completion of a common set of core courses. These options also apply to the concentrations in 1) agribusiness management and marketing, and 2) food quality assurance.

Program Requirement: All M.S. candidates must complete a minimum of 36 hours of approved graduate-level course work, excluding courses taken to address deficiencies. Of these 36 hours, 21 must be taken to satisfy core requirements. Thesis students fulfill the remaining 15 credit hours by taking three research credits, six thesis credits and six hours of electives. Nonthesis students fulfill the remaining hours by taking 15 hours of electives.

It is suggested that students take a coherent sequence of courses such as those indicated below, but considerable flexibility is possible based on individual backgrounds and interests.

Thesis and Nonthesis M.S. in Agribusiness

Semester I
AGB 528 Advanced Agribusiness Marketing (3)
AGB 560 Advanced Agribusiness Management Systems (3)
AGB 561 Agribusiness Research Methods (3)

Semester II
AGB 511 Advanced Agribusiness Management (3)
AGB 532 Advanced Agribusiness Finance (3)
AGB 570 Managerial Economics for Agribusiness (3)
Semester III
AGB 589 Agribusiness Capstone (3)
500-level AGB emphasis electives (6)

Semester IV
Nonthesis Option
500-level AGB emphasis or other electives (9)

Thesis Option
AGB 592 Research (3)
AGB 599 Thesis (6)

Admission Requirements:

1. Applicants to the program are expected to meet the minimum requirements for admission to the Graduate College.
2. Scores from the GRE, Miller Analogies Test or GMAT are required.
3. Applications must include a curriculum vitae and statement of purpose. The statement of purpose must offer evidence of the applicant’s basic skills in economics, accounting, statistics and computer use, as well as some experience or knowledge in an area related to agribusiness.
4. Letters of recommendation are suggested.

Applicants not meeting this last requirement may be considered for admission with deficiencies. The application deadline for admission in the fall semester is Feb. 1.

The Morrison School of Management and Agribusiness awards assistantships to selected candidates. These support ongoing research and teaching activities. The awards are made on the basis of availability and according to the needs of the faculty and interests of the students. Scholarships are also available on a competitive basis for qualified candidates.

Contact:
Morrison School of Management and Agribusiness
http://www.poly.asu.edu/msma
morrisonSchool@asu.edu
PRLTA 330X
480/727-1312

Economics (PhD) BAECONPHD
W.P. Carey School of Business

Official Degree Awarded: PHD Economics

Program Description: The Ph.D. program in economics is a full-time program intended to prepare students for teaching and research positions at four-year institutions of higher education, and research positions in public agencies or private business organizations. The Ph.D. program is relatively small in size, with about 40
doctoral students in residence at any time. The low student-faculty ratio allows us to provide greater faculty attention and mentoring compared to larger programs. Students are involved in teaching, research and seminar activities, becoming valued members of the department. Most of our Ph.D. students are supported through teaching and research assistantships for four years. Stipends are highly competitive with any graduate program in the country.

*Program Requirement:* In addition to completing 60 credit hours beyond the bachelor’s degree (30 credit hours beyond the master’s degree) and 24 credit hours of research and dissertation for a minimum of 84 credit hours, the Ph.D. student must accomplish five tasks:

1. Meet the qualification requirement.
2. Present at least two fields of study.
3. Pass the comprehensive examination.

See the Department of Economics graduate student handbook for details concerning these tasks.

*Admission Requirements:* All applicants to the Ph.D. program in economics must have a bachelor’s degree or the equivalent. Each applicant must submit an application form, fee and other materials to the ASU Graduate College; an application packet and list of guidelines are available from the Graduate College. The Department of Economics requires applicants to send scores from the aptitude portion of the GRE. Applications will not be reviewed until the GRE score is received. Applicants whose first language is not English must also submit a Test of English as a Foreign Language (TOEFL) score, unless he/she received a degree from a U.S. college or university.

In addition, all applicants are required to submit three letters of reference to the Ph.D. program director in the Department of Economics. Our admissions policy weighs several factors including letters of reference, overall GPA, GRE scores and performance in selected mathematics and economics courses. We have no absolute standards for any of the factors, but performance on each clearly should suggest academic potential that is far above those of the normal undergraduate student. Application deadline for fall admission is Jan. 15.

*Contact:*
Department of Economics
http://wpcarey.asu.edu/grad/phd/phd_economics.cfm
wpcareyecn@asu.edu
BAC 659
480-965-3531
Finance (PhD) BAFINANPHD
W.P. Carey School of Business

Official Degree Awarded: PHD Business Administration (Finance)

Program Description: The primary objective of the Ph.D. program in finance is to train students for careers as professors of finance at major research universities. The program provides a challenging course of study in the most recent developments in both the theoretical and empirical aspects of financial economics. This course of study, along with work in economics and statistics, serves as preparation for understanding and critical analysis of current issues in finance.

Program Requirement:

Program of Study

A minimum of 84 credit hours is required for the PhD degree; 12 (and only 12) of these hours must be 799 Dissertation. Of the 84 credit hours, at least 30 hours (which may include research credit) of the approved Ph.D. program and 12 dissertation hours must be completed after admission to the student’s Ph.D. program. Students may not apply credit hours earned for a doctoral degree previously awarded at ASU or another institution toward their current ASU doctoral degree. However, at the individual academic unit's discretion, students may apply up to 30 relevant credit hours from a previously awarded master's degree toward their doctoral program of study.

Comprehensive Examinations

Upon completion of all necessary course work on a student's approved program of study, the academic unit may initiate the scheduling and administering of a student's comprehensive examination. The comprehensive examination consists of a minimum of a written exam; at the discretion of the academic unit, an oral exam may also be required.

Candidacy

Ph.D. students achieve candidacy status in a letter from the dean of the Graduate College upon:

1. Passing the comprehensive examinations.
2. Successfully defending the dissertation prospectus.

Dissertation Requirements

Students are required to present a dissertation to satisfy the research requirement for the Ph.D. degree. The dissertation is defended in an oral examination commonly known as the dissertation defense.
Students must be enrolled for at least one credit hour that appears on the program of study or one hour of appropriate graduate-level credit (such as 795 Continuing Registration) during the semester (including summer session) in which the student defends the dissertation.

Note: For detailed information regarding the university's doctoral degree requirements, please refer to the Graduate College's Doctor of Philosophy policy and procedures at http://graduate.asu.edu/academic_policies/doctoral.html.

**Maximum Time Limit**

Doctoral students must complete all program requirements within a 10-year period. The 10-year period starts with the initial enrollment into the doctoral program. In addition, the student must take the final oral examination in defense of the dissertation within five years after passing the comprehensive examinations. Any exception must be approved by the supervisory committee and the dean of the Graduate College, and ordinarily involves repetition of the comprehensive examinations.

**Admission Requirements:** Admission to the Ph.D. in business administration with a concentration in finance is granted to applicants who present convincing evidence of high-order analytical skills, intellectual curiosity, and the ability to work independently in pursuing scholarly research. Applicants should possess the intellectual curiosity and discipline required for original inquiry. In addition to the general requirements of the Graduate College, applicants must submit three academic letters of recommendation, scores from the GMAT or GRE, and a brief statement of their career objectives. In addition, applicants should also submit a resume. While many accepted students have an M.B.A. or M.S. in a business-related field, others have a background in other areas, such as engineering, economics, mathematics, physics or political science. See http://graduate.asu.edu/admissions/index.html and http://graduate.asu.edu/admissions/checklist.html.

**Contact:**
Department of Finance
http://wpcarey.asu.edu/fin
wpcareyfin@asu.edu
BA 519
480/965-3131

**Information Management (MS) BAINFOMS**
W.P. Carey School of Business

**Official Degree Awarded:** MS Information Management
Program Description: The M.S.I.M. is a one-year, evening degree program designed for working professionals. The W. P. Carey School of Business understands the importance of teaching strong business management and technological skills. The M.S.I.M. program will prepare students to manage in an information technology (IT) environment. Students will also learn the business skills needed to leverage IT to gain a competitive advantage in the global economy.

Program Requirement: The M.S.I.M. is a one-year program requiring a minimum of 30 credit hours with an intensive state-of-the-art curriculum. Please access the department’s Web site for a list of courses. This lock-step program consists of 10 courses that begin in June and end in May, including an applied project. The M.S.I.M. program offers evening classes that meet twice a week, and are customized for full-time working professionals.

Admission Requirements: Minimum requirements for admission to the M.S.I.M. program are having:

1. Two years of full-time related work experience.
2. An undergraduate degree in a related field from an accredited university.
3. Completed prerequisite college-level courses or equivalent experience in statistics, brief calculus and a programming language.

All applicants are required to submit the Graduate College online application and the supplemental application materials required by the department. Complete application instructions, including GMAT requirements, may be obtained from the department’s Web site. International applicants, whose native language is not English, must submit scores from the Test of English as a Foreign Language (TOEFL).

Contact:
Department of Information Systems
http://www.wpcarey.asu.edu/is/msim
wpcareymsim@asu.edu
BA 301P
480/965-3252

Marketing (PhD) BAMARKPHD
W.P. Carey School of Business

Official Degree Awarded: PHD Business Administration (Marketing)

Program Description: The Ph.D. program is for those students who want to become full-time professors at research-oriented universities. It is not intended for people who want to work in industry positions. It is a full-time program only, and students take all of their courses on-campus.

All students complete a core curriculum, yet tailor their work to achieve personal goals. For those who already hold a master’s degree, our program is designed to be
completed in four years. For those who hold a bachelor's degree, the program is designed to be completed in five years.

*Program Requirement:*

**Program of Study**

A minimum of 84 credit hours is required for the PhD degree; 12 (and only 12) of these hours must be 799 Dissertation. Of the 84 credit hours, at least 30 hours (which may include research credit) of the approved Ph.D. program and 12 dissertation hours must be completed after admission to the student's Ph.D. program. Students may not apply credit hours earned for a doctoral degree previously awarded at ASU or another institution toward their current ASU doctoral degree. However, at the individual academic unit's discretion, students may apply up to 30 credit hours from a previously awarded master's degree toward their doctoral program of study.

**Comprehensive Examinations**

Upon completion of all necessary course work on a student’s approved program of study, the academic unit may initiate the scheduling and administering of a student's comprehensive examinations. The comprehensive examination consists of a minimum of a written exam; at the discretion of the academic unit, an oral exam may also be required.

**Candidacy**

Ph.D. students achieve candidacy status in a letter from the dean of the Graduate College upon:

1. Passing the comprehensive examinations.
2. Successfully defending the dissertation prospectus.

**Dissertation Requirements**

Students are required to present a dissertation to satisfy the research requirement for the Ph.D. degree. The dissertation is defended in an oral examination commonly known as the dissertation defense.

Students must be enrolled for at least one credit hour that appears on the program of study or one hour of appropriate graduate-level credit (such as 795 Continuing Registration) during the semester (including summer session) in which the student defends the dissertation.

Note: For detailed information regarding the university's doctoral degree requirements, please refer to the Graduate College’s Doctor of Philosophy policy and procedures.
**Maximum Time Limit**

Doctoral students must complete all program requirements within a 10-year period. The 10-year period starts with the initial enrollment into the doctoral program. In addition, the student must take the final oral examination in defense of the dissertation within five years after passing the comprehensive examinations. Any exception must be approved by the supervisory committee and the dean of the Graduate College, and ordinarily involves repetition of the comprehensive examinations.

**Admission Requirements:** All applicants must submit the Graduate College's online application. Applications are initially reviewed by a faculty committee using a portfolio approach. In addition to GMAT scores and prior academic performance, letters of recommendation and a personal statement are reviewed to ensure a good "fit" between the student's goals and the department. A recommendation for action is then made to the Graduate College. The Graduate College either admits or denies each applicant and notifies them in writing.

**Contact:**
Business Administration  
http://www.wpcarey.asu.edu/mkt  
wpcareymkt@asu.edu  
BAC 460  
480/965-3621

**Statistics (Grad Certificate) GCSTATCE**  
**Official Degree Awarded:** CERT Statistics (certificate)

**Program Description:** The committee on statistics offers a program leading to the certificate in statistics. The program is interdisciplinary in that it draws upon faculty research and teaching interests from various academic units so that programs of study can be tailored to reflect individual needs and goals. The committee, which sets program requirements and supervises programs of study, is composed of faculty from departments in the Ira A. Fulton School of Engineering, the College of Liberal Arts and Sciences, the W. P. Carey School of Business and the New College of Interdisciplinary Arts and Sciences.

The certificate seeks to provide statistical training for graduate students at ASU and professionals in the metro Phoenix area. It is administered by the committee on statistics, which also administers the M.S. in statistics through the Graduate College.

**Program Requirement:** The certificate program requires a minimum of 15 credit hours of course work. To qualify for the certificate, a student must complete courses in applied regression analysis (IEE 578, ECN 525, or STP 530) and analysis of variance/experimental design (IEE 572, ECN 530, or STP 531). The remaining nine credits are taken from the set of courses approved by the committee on statistics.
The certificate program requires no applied project. A maximum of nine hours from the approved list of certificate courses can be transferred to the M.S. in statistics. Students must have a GPA of at least 3.00 in the courses which apply to the certificate.

Certificate students interested in industrial statistics may choose to emphasize this area of study. The certificate in statistics with emphasis in industrial statistics and six sigma methodology requires the following courses:

1. Applied regression analysis (IEE 578, ECN 525, or STP 530).
2. IEE 572 Design of Experiments.
3. IEE 570 Advanced Quality Control.
4. IEE 581 Six Sigma Methodology.
5. IEE 585 Six Sigma Capstone.

Course work for the certificate in statistics with emphasis in industrial statistics may be applied to the six sigma black belt certification program offered by the Center for Professional Development.

Admission Requirements: All applicants to the statistics certificate program must submit the Graduate College’s online application. The applicant must have a bachelor's degree, and should have completed the following courses (equivalents at ASU are given in parentheses):

1. One semester of calculus (MAT 210 or 270 which is required for industrial statistics emphasis).
2. Introductory applied statistics (QBA 221 or STP 420).

The applicant is also required to have some computer literacy with knowledge of a programming language, a spreadsheet program or a statistical software program.

CSE 100 Computer Programming is required for the emphasis in industrial statistics.

Contact:
Interdisciplinary Statistics Program
http://graduate.asu.edu/statistics/Certificate.html
statistics@asu.edu
GWC 551
480/965-2671

Supply Chain Management (PhD) BASCMPHD
W.P. Carey School of Business

Official Degree Awarded: PHD Business Administration (Supply Chain Management)

Program Description: The objective of the Ph.D. in business administration with a concentration in supply chain management is to prepare scholars to conduct high-
quality research and to teach in the field of supply chain management.

During their course of study, students have a variety of experiences that enhance their prospects for success as faculty members at leading institutions of higher education. Students develop the capability to review, analyze, conduct and publish research through a series of research seminars and courses that supplement and complement each student’s background, abilities and aspirations. The Ph.D. in business administration with a concentration in supply chain management is a full-time, residential program.

Program Requirement:

Program of Study

A minimum of 84 credit hours is required for the PhD degree; 12 (and only 12) of these hours must be 799 Dissertation. Of the 84 credit hours, at least 30 hours (which may include research credit) of the approved Ph.D. program and 12 dissertation hours must be completed after admission to the student’s PhD program. Students may not apply credit hours earned for a doctoral degree previously awarded at ASU or another institution toward their current ASU doctoral degree. However, at the individual academic unit's discretion, students may apply up to 30 credit hours from a previously awarded master's degree toward their doctoral program of study.

Students work with their study committees to determine an appropriate program of study. Common areas of functional specialization among doctoral studies include financial and managerial accounting, auditing, information systems and taxation. With these functional areas, doctoral studies may emphasize experimental or archival research methods. All accountancy doctoral students are required to take a three-semester sequence of accountancy doctoral course work. A maximum of six approved graduate credit hours can be transferred to satisfy program requirements.

Comprehensive Examinations

Upon completion of all necessary course work on a student’s approved program of study, the academic unit may initiate the scheduling and administering of a student’s comprehensive examinations. The comprehensive examination consists of a minimum of a written exam; at the discretion of the academic unit, an oral exam may also be required.

Candidacy

Ph.D. students achieve candidacy status in a letter from the dean of the Graduate College upon:

1. Passing the comprehensive examinations.
2. Successfully defending the dissertation prospectus.

**Dissertation Requirements**

Students are required to present a dissertation to satisfy the research requirement for the Ph.D. degree. The dissertation is defended in an oral examination commonly known as the dissertation defense.

Students must be enrolled for at least one credit hour that appears on the program of study or one hour of appropriate graduate-level credit (such as 795 Continuing Registration) during the semester (including summer session) in which the student defends the dissertation.

Note: For detailed information regarding the university's doctoral degree requirements, please refer to the Graduate College's Doctor of Philosophy policy and procedures.

**Maximum Time Limit**

Doctoral students must complete all program requirements within a 10-year period. The 10-year period starts with the initial enrollment into the doctoral program. In addition, the student must take the final oral examination in defense of the dissertation within five years after passing the comprehensive examinations. Any exception must be approved by the supervisory committee and the dean of the Graduate College, and ordinarily involves repetition of the comprehensive examinations.

**Admission Requirements**: All applicants must submit the Graduate College online application. Applications are initially reviewed by a faculty committee using a portfolio approach. In addition to GMAT scores and prior academic performance, letters of recommendation and a personal statement are reviewed to ensure a good “fit” between the student's goals and the department. A recommendation for action is then made to the associate dean in the W. P. Carey School of Business who in turn makes a recommendation to the Graduate College. The Graduate College either admits or denies each applicant and notifies them in writing.

**Contact:**
Business Administration
http://wpcarey.asu.edu/scm
wpcarey.scm@asu.edu
BA 446
480/965-6044

**Taxation (MTax) BATAMTAX**
W.P. Carey School of Business

**Official Degree Awarded**: MTax Taxation
Program Description: The faculty in the School of Accountancy offer a specialized professional program leading to the M.Tax. The M.Tax. is a specialized degree program designed to equip students with the highly technical and demanding skills required to provide tax and business advice in the private sector and to administer tax laws in the public sector of the economy. The program prepares students for positions in taxation and provides graduate-level education for tax professionals who desire to enhance their skills.

Program Requirement: The M.Tax. program is offered as a cohort-based, part-time program and a cohort-based, full-time program. The part-time program consists of 30 credit hours over the course of two years, and the full-time program consists of 30 credit hours and may be completed in one academic year. Both programs are offered in the evening.

Admission Requirements: All applicants are required to submit an application to the Graduate College online. Complete application instructions may be obtained from the school's Web site. Students applying to this program must submit scores from the GMAT. International applicants whose native language is not English must submit scores from the Test of English as a Foreign Language (TOEFL) exam. Preference in admission is given to those with degrees in accounting and business, although other exceptional candidates are considered.

Contact:
School of Accountancy
http://wpcarey.asu.edu/acc/mtax.cfm
wpcareyacc@asu.edu
BA 223Q
480/965-3631

W. P. Carey MBA - Custom Corporate Program BACORPMBA
W.P. Carey School of Business

Official Degree Awarded: MBA W. P. Carey MBA

Program Description: The Custom Corporate M.B.A. Program is designed for participants from a single company. Participants are nominated to attend the program by their company, and receive a solid, core curriculum with optional specializations. The Custom Corporate M.B.A. Program offers flexible part-time delivery modes, using online, on-ground and blended courses. Possible features that can be incorporated into the custom programs are: company-specific applied projects, guest teaching from corporate leaders and intensive residential sessions.

Program Requirement: The Custom Corporate M.B.A. Program requires that participants be nominated into the program by the sponsoring company. Students must complete a minimum of 48 credit hours which includes the capstone course, MGT 589.
Admission Requirements: Participants must apply to ASU, meet Graduate College admission requirements and the guidelines established by the Custom Corporate M.B.A. Program.

Contact:
MBA Programs
http://wpcarey.asu.edu/mba/custom-corporate/index.cfm
wpcarey.execed@asu.edu
480/965-7579

W. P. Carey MBA - Evening Accelerated Program BAEVEAMBA
W.P. Carey School of Business

Official Degree Awarded: MBA W. P. Carey MBA

Program Description: The purpose of the program is to build knowledge and analytic capabilities in the functional areas of business and to develop interpersonal and leadership skills. Essential skills include computing, writing and critical thinking, presentation and speaking, team and group work, interpersonal relations and time management. There is a strong team emphasis throughout the curriculum.

The M.B.A. program is supported by each of the eight academic units within the W. P. Carey School of Business. Curriculum information can be found online at http://wpcarey.asu.edu/mba/current_students/.

Program Requirement: While there are no business course prerequisites, applicants must have computer proficiency and expertise in using spreadsheet, word processing, e-mail and presentation software and an Internet browser. Potential students must also demonstrate strong quantitative ability, and effective written and oral communication skills.

At least 48 credit hours are required to complete the evening accelerated program. The core courses are designed to provide a foundation in business knowledge, and skills and must be taken in the prescribed sequence. Elective, specialization or technical certificate courses build upon the business core and focus on the further development of an area of study. There may be additional requirements that vary by area of study. The program is typically completed in less than two years.

The business school does not accept graduate credits earned while students are in nondegree status and/or courses taken prior to admission to the M.B.A. program. Registration in school of business courses numbered 501 and above is limited to students who have been admitted to a graduate degree program, have the approval of the M.B.A. program office and have the prerequisites of calculus and computer literacy.

Foreign Language Requirements
Thesis Requirements

None.

Comprehensive Examination

All students must successfully complete the comprehensive requirement established by the school of business and Graduate College for the M.B.A. The comprehensive culminating experience is integrated with MGT 589 Strategic Management. Students passing this course with a grade of “B” (3.00) or higher satisfy the comprehensive examination requirement.

Concurrent Degree Programs

For more information, see http://graduate.asu.edu/dualdegree.html.

Admission Requirements: All applicants must submit the Graduate College online application. All students applying to the Evening Accelerated M.B.A. Program are required to take the GMAT. The Test of English as a Foreign Language (TOEFL) is required of all international applicants whose native language is not English, or who are not graduates of an institution located in the United States. The Test of Spoken English is not required for admission to this M.B.A. program. For more information on GMAT, see http://www.mba.com; for more information on TOEFL and TSE, see http://www.ets.org.

Students applying to the Evening Accelerated M.B.A. Program should have at least two years of full-time work experience by the date of enrollment. Applicants should submit three essays for the degree program addressing commitment, career goals, professional accomplishments, qualifications and reasons for interest in the program. One set of sealed, official transcripts from every college and university attended must be submitted. Applicants are to provide two letters of recommendation commenting on the student’s motivation, commitment, achievements, work experience and opportunity for success in the program. A personal interview may also be required.

Contact:
MBA Programs
http://www.wpcarey.asu.edu/mba
wpcareymba@asu.edu
BA 160
480/965-3332

W. P. Carey MBA - Evening Program BAEVENMBA
W.P. Carey School of Business
Program Requirement: While there are no business course prerequisites, applicants must have computer proficiency and expertise in using spreadsheet, a word processing and presentation software, e-mail and an Internet browser. Potential students must also demonstrate strong quantitative ability, and effective written and oral communication skills.

At least 48 credit hours are required to complete the evening program. The core courses are designed to provide a foundation in business knowledge and skills and must be taken in the prescribed sequence. Elective, specialization or technical certificate courses build upon the business core and focus on the further development of an area of study. There may be additional requirements that vary by area of study. The program is typically completed in less than two years. Both fall and spring start dates may be available, depending on program.

The business school does not accept graduate credits earned while students are in nondegree status and/or courses taken prior to admission to the M.B.A. program. Registration in school of business courses numbered 501 and above is limited to students who have been admitted to a graduate degree program, have the approval of the M.B.A. program office, and have the prerequisites of calculus and computer literacy.

Foreign Language Requirements

None.

Thesis Requirements

None.

Comprehensive Examination

All students must successfully complete the comprehensive requirement established by the school of business and Graduate College for the M.B.A. degree. The comprehensive culminating experience is integrated with MGT 589 Strategic
Management. Students passing this course with a grade of "B" (3.00) or higher satisfy the comprehensive examination requirement.

Concurrent Degree Programs

For more information, see http://graduate.asu.edu/dualdegree.html.

Admission Requirements: All applicants must submit the Graduate College online application. All students applying to the Evening M.B.A. Program are required to take the GMAT. The Test of English as a Foreign Language (TOEFL) is required of all international applicants whose native language is not English, or who are not graduates of an institution located in the United States. The TSE is not required for admission to this M.B.A. program. However, it may be required for a dual degree program. For more information on GMAT, see http://www.mba.com; for more information on TOEFL and TSE, see http://www.ets.org.

Students applying to the Evening M.B.A. Program should have at least two years of full-time work experience by the date of enrollment. Applicants should submit three essays for the degree program addressing commitment, career goals, professional accomplishments, qualifications and reasons for interest in the program. One set of sealed, official transcripts from every college and university attended must be submitted. Applicants are to provide two letters of recommendation commenting on the student’s motivation, commitment, achievements, work experience and opportunity for success in the program. A personal interview may also be required.

Contact:
MBA Programs
http://www.wpcarey.asu.edu/mba
wpcareymba@asu.edu
BA 160
480/965-3332

W. P. Carey MBA - Executive Program BAEXECMBA
W.P. Carey School of Business

Official Degree Awarded: MBA W. P. Carey MBA

Program Description: The purpose of the program is to build knowledge and analytic capabilities in the functional areas of business and to develop interpersonal and leadership skills. Essential skills include computing, writing and critical thinking, presentation and speaking, team and group work, interpersonal relations and time management. There is a strong team emphasis throughout the curriculum.

The M.B.A. program is supported by each of the eight academic units within the W. P. Carey School of Business. Curriculum information can be found online at http://wpcarey.asu.edu/mba/current_students/.
Program Requirement: While there are no business course prerequisites, applicants must have computer proficiency and expertise in using spreadsheet, word processing and presentation software, e-mail and an Internet browser. Potential students must also demonstrate strong quantitative ability, and effective written and oral communication skills.

At least 48 credit hours are required to complete the executive program. The core courses are designed to provide a foundation in business knowledge and skills, and must be taken in the prescribed sequence. Elective, specialization, or technical certificate courses build upon the business core and focus on the further development of an area of study. There may be additional requirements that vary by area of study. The program is typically completed in less than two years. Both fall and spring start dates may be available, depending on program.

The business school does not accept graduate credits earned while students are in nondegree status and/or courses taken prior to admission to the M.B.A. program. Registration in school of business courses numbered 501 and above is limited to students who have been admitted to a graduate degree program, have the approval of the M.B.A. program office, and have the prerequisites of calculus and computer literacy.

Foreign Language Requirements

None.

Thesis Requirements

None.

Comprehensive Examination

All students must successfully complete the comprehensive requirement established by the school of business and Graduate College for the M.B.A. degree. The comprehensive culminating experience is integrated with MGT 589 Strategic Management. Students passing this course with a grade of “B” (3.00) or higher satisfy the comprehensive examination requirement.

Concurrent Degree Programs

For more information, see http://graduate.asu.edu/dualdegree.html.

Admission Requirements: All applicants must submit the Graduate College online application. Applicants applying to the Executive M.B.A. Program should have significant work experience managing projects, people and budgets.

The Test of English as a Foreign Language (TOEFL) is required of all international
applicants whose native language is not English or who are not graduates of an institution located in the United States. The Test of Spoken English is not required for admission to the Executive M.B.A. Program. For more information on TOEFL, see http://www.ets.org.

Applicants should submit three essays for the degree program addressing commitment, goals, qualifications, professional accomplishments and reasons for interest in the program. Applicants are to provide two letters of recommendation commenting on the student's motivation, commitment, achievements, work experience and opportunity for success in the program. In addition, one set of sealed, official transcripts from every college and university attended must be submitted. A personal interview is also required.

Contact:
MBA Programs
http://www.wpcarey.asu.edu/mba/exe
wpcareymba@asu.edu
BA 160
480/965-3332

W. P. Carey MBA - Full-Time Program BAFULLMBA
W.P. Carey School of Business

Official Degree Awarded: MBA W. P. Carey MBA

Program Description: The purpose of the program is to build knowledge and analytic capabilities in the functional areas of business and to develop interpersonal and leadership skills. Essential skills include computing, writing and critical thinking, presentation and speaking, team and group work, interpersonal relations and time management. There is a strong team emphasis throughout the ASU curriculum.

The M.B.A. program is supported by each of the eight academic units within the W. P. Carey School of Business. Curriculum information can be found online at http://wpcarey.asu.edu/mba/current_students/.

Program Requirement: While there are no business course prerequisites, applicants must have computer proficiency and expertise in using spreadsheet, word processing and presentation software package, e-mail and an Internet browser. Potential students must also demonstrate strong quantitative ability, as well as effective written and oral communication skills.

At least 48 credit hours are required to complete the full-time program. The core courses are designed to provide a foundation in business knowledge and skills, and must be taken in the prescribed sequence. Elective, specialization or technical certificate courses build upon the business core and focus on the further development of an area of study. There may be additional requirements that vary by area of study. The program is typically completed in less than two years.
The business school does not accept graduate credits earned while students are in nondegree status and/or courses taken prior to admission to the M.B.A. program. Registration in school of business courses numbered 501 and above is limited to students who have been admitted to a graduate degree program, have the approval of the M.B.A. program office, and have the prerequisites of calculus and computer literacy.

**Foreign Language Requirements**

None.

**Thesis Requirements**

None.

**Comprehensive Examination**

All students must successfully complete the comprehensive requirement established by the school of business and Graduate College for the M.B.A. degree. The comprehensive culminating experience is integrated with MGT 589 Strategic Management. Students passing this course with a grade of “B” (3.00) or higher satisfy the comprehensive examination requirement.

**Concurrent Degree Programs**

For more information, see [http://graduate.asu.edu/dualdegree.html](http://graduate.asu.edu/dualdegree.html).

*Admission Requirements:* All applicants must submit the Graduate College online application. All students applying to the Full-time M.B.A. Program are required to take the GMAT. The Test of English as a Foreign Language (TOEFL) is required of all international applicants whose native language is not English, or who are not graduates of an institution located in the United States. The Test of Spoken English is not required for admission to the M.B.A. program. However, it may be required for a dual degree program or a graduate assistantship. For more information on GMAT, see [http://www.mba.com](http://www.mba.com); for more information on TOEFL and TSE, see [http://www.ets.org](http://www.ets.org).

Students applying to the Full-time MBA Program should have at least two years of full-time work experience by the date of enrollment. Applicants should submit three essays for the degree program addressing commitment, career goals, professional accomplishments, qualifications and reasons for interest in the program. One set of sealed, official transcripts from every college and university attended must be submitted. Applicants are to provide two letters of recommendation commenting on the student’s motivation, commitment, achievements, work experience and
opportunity for success in the program. A personal interview is required by invitation only.

Contact:
MBA Programs
http://www.wpcarey.asu.edu/mba
wpcareymba@asu.edu
BA 160
480/965-3332

W. P. Carey MBA - Online Program BAONLINMBA
W.P. Carey School of Business

Official Degree Awarded: MBA W. P. Carey MBA

Program Description: The purpose of the program is to build knowledge and analytic capabilities in the functional areas of business and to develop interpersonal and leadership skills. Essential skills include computing, writing and critical thinking, presentation, team and group work, interpersonal relations and time management. There is a strong team emphasis throughout the curriculum.

The M.B.A. program is supported by each of the eight academic units within the W. P. Carey School of Business. Curriculum information can be found online at http://wpcarey.asu.edu/mba/online/academics/curriculum.cfm.

Program Requirement: At least 48 credit hours are required to complete the Online M.B.A. Program. The core courses are designed to provide a foundation in business knowledge and skills and must be taken in the prescribed sequence. The program is typically completed in less than two years. Both fall (July) and spring (January) start dates are available.

The school of business does not accept graduate credits earned while students are in nondegree status and/or courses taken prior to admission to the M.B.A. program. Registration in school of business courses numbered 501 and above is limited to students who have been admitted to a graduate degree program, have the approval of the M.B.A. program office, and have the prerequisites of calculus and computer literacy.

Foreign Language Requirements

None.

Thesis Requirements

None.

Comprehensive Examination
All students must successfully complete the comprehensive requirement established by the school of business and Graduate College for the M.B.A. degree. The comprehensive culminating experience is integrated with MGT 589 Strategic Management. Students passing this course with a grade of “B” (3.00) or higher satisfy the comprehensive examination requirement.

Concurrent Degree Programs

For more information, see http://graduate.asu.edu/dualdegree.html or http://wpcarey.asu.edu/mba/online/academics/dual-degrees.cfm.

Admission Requirements: All applicants must submit the Graduate College online application. While there are no business course prerequisites, applicants must have computer proficiency and expertise in using spreadsheet, word processing and presentation software package, e-mail and an Internet browser. Potential students must also demonstrate strong quantitative ability, and effective written and oral communication skills.

All students applying to the Online M.B.A. Program are required to take the GMAT. The Test of English as a Foreign Language (TOEFL) is required of all international applicants whose native language is not English, or who are not graduates of an institution located in the United States. The Test of Spoke English is not required for admission to the Online M.B.A. Program. For more information on GMAT, see http://www.mba.com; for more information on TOEFL and TSE, see http://www.ets.org.

Students applying to the W. P. Carey Online M.B.A. Program should have at least two years of full-time work experience from the date of enrollment. Applicants should submit three essays for the degree program addressing commitment, career goals, professional accomplishments, qualifications and reasons for interest in the program. One set of sealed, official transcripts from every college and university attended must be submitted. Applicants are to provide two letters of recommendation commenting on the student's motivation, commitment, achievements, work experience and opportunity for success in the program. A personal interview may also be required.

Contact:
MBA Programs
http://www.wpcarey.asu.edu/mba/online
wpcareymba@asu.edu
BA 160
480/965-3332

W. P. Carey MBA - Shanghai Program BASHANGMBA
W.P. Carey School of Business
Official Degree Awarded: MBA W. P. Carey MBA

Program Description: The W. P. Carey School of Business at Arizona State University is directly involved in the development of top leadership in China. In 2003, we launched an Executive M.B.A. program in Shanghai, China. The program is delivered in collaboration with Shanghai National Accounting Institute, an entity founded by China’s formal Premier, Mr. Zhu Rongji, and is under the governance of China’s Ministry of Finance.

The business leaders emerging from this program will shape U.S.-Sino trade relationships during China’s continued global expansion. These academic programs are just the cornerstone of a number of new offerings that include knowledge transfer and access to the highest level of decision makers in China.

The hallmarks of prestigious programs include two key elements: the faculty and the students. No other M.B.A. program offers a more impressive list of faculty or students than that in the W. P. Carey China Program. The faculty includes some of the world’s most influential thinkers. Internationally renowned faculty from the W. P. Carey School of business lead scholars from other major American business schools. The students are equally impressive, in that many of those enrolled in the program are senior executive leaders of the largest state-owned enterprises in China. For more information, please go to our Web site: http://www.wpcarey.asu.edu/mba/china/index.cfm.

Program Requirement: The curriculum, consisting of 12 courses for a total of 48 credit hours, it is based on the integration of core management principle with an immersion on accounting, finance, supply chain management, service marketing, customer relation management and management of services innovation. At the core of the curriculum delivery is the emphasis on the practical applications with direct business connectivity. The curriculum also prides itself on its integration of global practices and local market characterizations so as to enable participants’ ability to excel in the modern economy.

In addition, the curriculum is designed with a strong interdisciplinary focus, while achieving cycle-time efficiency. Each course will be delivered in an intensive manner over two consecutive weekends, with four full days of face-to-face instruction supplemented by online instruction materials to enable learning interactions between faculty and participants.

All students must successfully complete the comprehensive requirement established by the school of business and Graduate College for the M.B.A. The comprehensive culminating experience is integrated with MGT 589 Strategic Management. Students passing this course with a grade of "B" (3.00) or higher satisfy the comprehensive examination requirement. A thesis is not required.

Admission Requirements: All applicants are required to contact the program coordinator before submitting the Graduate College online application.
Design and the Arts, Herberger Institute

Architecture (MArch) ARARCMARCH
Herberger Institute for Design and the Arts

Official Degree Awarded: MArch Architecture

Program Description: The Master of Architecture is an accredited professional degree program at ASU. There are two programs of study available:

- A two-year program for applicants who have completed the four-year B.S.D. in architectural studies at ASU or an equivalent degree from another school that offers an accredited professional degree in architecture.
- A three-plus-year program for applicants with an undergraduate degree in a discipline or field other than architecture.

Both programs promote broad areas of knowledge, professional skill and a social awareness that the architect must command if architecture is to enhance contemporary life and remain an enduring and valid expression of society.

Program Requirement:

Requirements for the Two-Year Program

The two-year graduate program requires a minimum of 56 credit hours of approved courses and electives and a comprehensive examination. For most students, this program involves an average of 14 credit hours per semester. A summer internship is required after the first full year of study.

Students who can adequately demonstrate competence through experience or previous academic course work for any of the specific requirements outlined below are encouraged to petition the graduate coordinator for a course substitution.

Typical Program of Study

First Year

Fall
- ADE 521 Advanced Architectural Studio I (5)
- ATE 553 Building Systems III (3)
ATE 563 Building Structures III (3)
ATE 598 Sustainability of the Built Environment (3)

Spring

ADE 522 Advanced Architectural Studio II (5)
L/APH 505 Foundation Theory Seminar (3)
ATE 556 Building Development (3)
Herberger Institute professional design elective* (3)

Summer

ARP 584 Clinical Internship (3)

Second Year

ADE 621 Advanced Architectural Studio III (5)
AAD 515 Current Issues and Topics (3)
Herberger Institute professional design elective* (3)
ADE 622 Advanced Architectural Studio IV (5)
L/AAD 652 Architectural Management II (3)
Herberger Institute professional design elective* (3)
Approved elective** (3)

* The list of Herberger Institute design electives can be found on the Herberger Institute for Design and the Arts Web site.

** Elective can be taken outside the college with graduate coordinator approval.

Requirements for the Three-Plus-Year Program

The three-plus-year graduate program requires a minimum of 78 credit hours of graduate-level course work and 24 credit hours of deficiency course work, which make up the total number of 102 credit hours of approved courses and electives, and a comprehensive examination. For most students, this program involves 15 credit hours in the first summer and 14 to 15 credit hours in each of the subsequent six semesters. A summer internship is required after the second full year of study.

Students who can adequately demonstrate previous academic course work for any of the deficiencies are encouraged to petition the graduate coordinator for a course substitution.

Typical Program of Study

Note: Bolded courses are considered deficiencies and do not count toward official program of study.

First Year
Summer
ADE 510 Foundation Architectural Studio (6)
ALA 102 Architecture, Landscape Architecture and Society (1st five-week session) (3)
ALA 236 Computers in Landscape Architecture (1st five-week session) (3)
APH 509 Foundation Seminar (2nd five-week session) (3)

Fall
ADE 511 Core Architectural Studio (6)
APH 313 History of Architecture I (3)
ATE 361 Building Structures I (3)
ATE 451 Building Systems I (3)

Spring
ADE 512 Core Architectural Studio (6)
APH 314 History of Architecture II (3)
ATE 452 Building Systems II (3)
ATE 462 Building Structures II (3)

After the first summer and academic year, the three-plus-year curriculum merges with the two-year curriculum and they are the same.

Admission Requirements:

Applicants to the two-year program must:

1. Submit a Graduate College online application and hold an undergraduate or graduate degree from a college or university recognized by ASU.
2. Have completed a four-year B.S. in architectural studies or similar preprofessional degree in architecture. The bachelor’s degree must be granted by an institution that offers the National Architectural Accrediting Board (NAAB) accredited degree program in architecture.
3. Meet the minimum GPA requirements as established by the Graduate College.
4. Provide an official copy of GRE scores (unofficial copies will not be accepted). For more information on the GRE see http://www.gre.org, or if you live near ASU, see http://www.asu.edu/uts). The School of Architecture and Landscape Architecture does not have a minimum score for admission, however, the average scores of admitted students are between 500-600 for each section.

In addition to the above requirements, international students are required to submit an official Test of English as a Foreign Language (TOEFL) score (http://www.toefl.org). The minimum score for admission to the program is 100 (Internet-based), 250 (computer-based) or 600 (paper-based). Other information
for international applicants can be found on the Graduate College Web site at http://graduate.asu.edu/admissions/international.html.

Admission to the Master of Architecture program is selective, and the Master of Architecture program does not defer admission. Students must enroll in the semester for which they are admitted, otherwise they will need to go through the entire application process again for the year in which they are applying.

Applicants may be admitted to the two-year program with deficiencies if their previous course work is not equivalent to the ASU undergraduate requirements and standards. Deficiencies must be completed prior to taking the required course(s) if necessary. Please keep in mind that this may cause the student to take longer than two years to complete the program.

A personal interview is not required; however, a candidate wishing to visit the school is welcome and should make arrangements by contacting the department.

Additional Master of Architecture Two-Year Program Admission Requirements

1. Applicants should write their name in a clear and consistent manner on all materials submitted, preferably in the “family name, first name” format (e.g. Smith, John).
2. Statement of Intent. A personal narrative (maximum 600 words or two pages typed) indicating the applicant’s interest, previous academic and practical background, as well as personal and professional educational objectives.
3. Letters of Recommendation. A minimum of three letters of recommendation in support of the applicant must be mailed directly to the graduate admissions committee, School of Architecture and Landscape Architecture. The references should be from professionals or educators familiar with the applicant’s experience and capability for graduate work.
4. Portfolio. Candidates applying for the two-year Master of Architecture program must also provide a portfolio. See the portfolio requirements outlined on the School of Architecture and Landscape Architecture Web site for more information.

Submit the statement of intent, recommendation letters, creative works portfolio, and the contact information sheet to the following address:

Master of Architecture Admissions Committee  
School of Architecture and Landscape Architecture  
Arizona State University  
P.O. Box 871605  
Design North, room 162  
Tempe, AZ 85287-1605
Please submit your online application and fees, test scores (GRE or TOEFL) and official transcripts from all p

Contact:
School of Architecture and Landscape Architecture
http://herbergerinstitute.asu.edu/
sala.grad@asu.edu
CDN 162D
480/965-1033

Art - Digital Technology (MFA) FADIGITMFA
Herberger Institute for Design and the Arts

Official Degree Awarded: MFA Art (Digital Technology)

Program Description: The M.F.A. in digital technology is offered by the School of Art in collaboration with the Arts, Media and Engineering Program (AME). It is a hybrid degree that combines technological and artistic goals, and requires students with skills and experience in both realms. Applicants will be required to demonstrate accomplishment in both art and technology, particularly in having developed new digital technology for the arts. Course work will be required in both the School of Art and AME. In this field, the School of Art offers graduate level courses in digital audio, video, photography, animation, compositing and rapid prototyping.

Program Requirement: A minimum of 60 credit hours of graduate credit subject to committee approval is required, including:

1. Twenty-seven to 32 graduate studio credit hours in the major area(s) of concentration (with the exception of digital technology where 18 credit hours are studio classes and 18 credit hours are AME classes).
2. Six credit hours of graduate-level art history and three credit hours of other interdisciplinary graduate credit to supplement M.F.A. work (nonstudio courses), except for digital technology, which requires six credit hours of art history.
3. Nine credit hours of graduate-level course work outside of the major area of concentration, of which three credit hours must begin with the ART prefix and the remaining six credit hours may be outside the School of Art (except for digital technology, which requires nine credit hours of electives in the School of Art and Arts Media and Engineering).
4. Ten to 15 hours of ART 680 Practicum, resulting in an M.F.A. exhibition; except digital technology, where six hours will be ART 600 and six hours will be AME 593.

Admission Requirements: All applicants must submit a Graduate College application.

1. A bachelor’s degree from a college or university recognized by ASU is required. All students applying for the M.F.A. must submit to the graduate coordinator:
A portfolio of images of their work on a CD-ROM disk containing 20 JPEG files (1000 pixels in the long dimension) or 20 images assembled as a PowerPoint presentation. If appropriate, a DVD is also acceptable.

2. Three letters of recommendation.
3. A current curriculum vitae.
4. Statement of intent pertaining to the student's educational objectives.

Applications for the digital technology concentration program must also include:

1. A statement and evidence of work demonstrating digital technology skills beyond end user applications.
2. An art and digital technology resume.

Contact:
School of Art
http://art.asu.edu
ART 102
480/965-6303

Art Education (MA) FAARTEDMA
Herberger Institute for Design and the Arts

Official Degree Awarded: MA Art (Art Education)

Program Description: The faculty in the School of Art offer a program with a major in art leading to the M.A. with concentrations in art education and art history. Students admitted to the M.Ed. program with a major in secondary education may also elect art as the subject matter field.

Program Requirement:

The degree program requires:

1. A minimum of 30 credit hours in art education.
2. Eighteen hours of core courses.
3. Six hours of special topics on research related to integrating the teaching of studio art, art history and criticism or aesthetics.
4. Six hours of research and thesis.

To meet the core requirements, students must take the following core courses:

- ARE 510 Visual Culture Research (3)
- ARE 520 Issues in Teaching Inquiry in Art (3)
- ARE 525 Research on Art Instruction (3)
- ARE 530 Issues in Teaching Studio Art (3)
- ARE 535 Research on Teaching Studio Art (3)
- ARE 540 Teaching Art in Cultural Contexts (3)
Before the end of the first semester of course work (six or more credit hours), a program of study must be submitted to the Graduate College. Additional program requirements are indicated in the M.A. in art education guidelines.

**Admission Requirements:** All applicants must submit a Graduate College online application.

An applicant must have a bachelor’s degree from a regionally accredited college or university with a major of not less than 45 credit hours of art, including 12 hours of art history and six hours of art education. Additional hours may be required by the school.

An applicant must have a GPA of at least “B” (3.00) in undergraduate course work during the junior and senior years. Applicants who do not meet these requirements must submit scores from the MAT or the GRE. Applicants should submit a formal art education research paper for review. Applications are accepted throughout the year.

**Contact:**
School of Art  
http://art.asu.edu  
Art Building 121  
480/965-6303

**Art History (MA) FAARTHISMA**  
Herberger Institute for Design and the Arts

**Official Degree Awarded:** MA Art History

**Program Description:** The faculty in the School of Art offer a program with a major in art leading to the M.A. with concentrations in art education and art history.

**Program Requirement:** The degree program requires 30 credit hours, including a minimum of 21 hours in art history, with at least 12 of these earned in 500-level seminars. At least one course must be taken in each of the four core areas:

- Non-Western.
- Ancient/medieval.
- Renaissance/baroque.
- Modern.

Satisfactory completion of ARS 501 Methodologies and Art History is required during the first semester of residence. The remaining hours include ARS 599 Thesis, approved electives and other courses specified by the faculty.

**Admission Requirements:**

1. All applicants must submit a Graduate College online application.
2. An applicant must have a bachelor's degree from a regionally accredited university with an undergraduate major or minor in art history, or at least four upper-division art history courses, in which a GPA of 3.00 or higher was maintained.
3. GRE scores must be submitted in support of the application, along with three letters of recommendation.
4. Applicants should submit one formal research paper for review.
5. Applicants should submit a one-page statement of intent indicating their objectives for graduate study.

The application deadline is Jan. 15.

Contact:
School of Art
http://art.asu.edu
Art Building 102
480/965-6303

Building Design: Energy Perf/Climate Responsive Arch (MS) ARENERGYMS
Herberger Institute for Design and the Arts

Official Degree Awarded: MS Building Design (Energy Performance & Climate Responsive Architecture)

Program Description: The building design M.S. program with a concentration in energy performance and climate-responsive architecture educates students to become experts in energy efficient design and technology. The program is concerned with the relationships between climate and site, thermal and visual comfort, and energy demand and consumption. Courses in this concentration establish a basic core of knowledge of the principles of the natural energies available at the building boundary due to climate and site; thermal and optic behavior of building materials and components; passive and low-energy architectural systems for heating, cooling, and lighting; and appropriate integration with mechanical systems. Additional courses are available to support advanced study and research in a variety of related specialties.

Program Requirement: The student will complete a minimum of 30 credit hours.

First Year

Fall (9)
ATE 560 Building Energy Analysis (3)  
ATE 521 Building Environmental Science (3)  
ATE 598 Sustainability In the Built Environment (3)

Spring (9)
ATE 598 Renewable Energy Systems (3)  
ATE 598 Building Energy Analysis II (3)
ATE 562 Experimental Evaluation (3)
ATE 591 Seminar: Energy and Climate (1)*

Second Year

Fall (9)

Environmental Control Systems (3)
Passive Heating and Cooling (3)
Professional Electives (3)

Spring (3)

ATE 599 Thesis (3)

*This is not a required course for the degree; however, it is a recommended elective.

Admission Requirements: Applicants to the program must:

1. Submit an online Graduate College application.
2. Have a previous five- or six-year National Architectural Board (NAAB) accredited degree in architecture (B.Arch. or M.Arch.).
3. Hold an undergraduate or graduate degree from a college or university recognized by ASU.
4. Meet the minimum GPA requirements as established by the Graduate College.
5. Provide an official copy of GRE scores (unofficial copies will not be accepted). For more information on the GRE see (http://www.gre.org, or if you live near ASU, see http://www.asu.edu/uts). The School of Architecture and Landscape Architecture does not have a minimum score for admission, however, the average scores of admitted students are between 500-600 for each section.

In addition to the above requirements, international students are required to submit an official Test of English as a Foreign Language (TOEFL) score (http://www.toefl.org). The minimum score for admission to the program is 100 (Internet-based) or 600 (paper-based). Other information for international applicants can be found on the Graduate College Web site at http://graduate.asu.edu/admissions/international.html.

Admission to the program is selective, and the M.S. in building design program does not defer admission. Students must enroll in the semester for which they are admitted otherwise they will need to go through the entire application process again for the year in which they are applying.

A personal interview is not required; however, a candidate wishing to visit the school is welcome and should make arrangements by contacting the department.
Additional Admission Requirements

1. Applicants should write their name in a clear and consistent manner on all materials submitted, preferably in the “family name, first name” format (e.g. Smith, John).

2. Statement of Intent. A personal narrative (maximum 600 words or two pages typed) indicating the applicant’s interest, previous academic and practical background, as well as personal and professional educational objectives.

3. Letters of Recommendation. A minimum of three letters of recommendation in support of the applicant must be mailed directly to the graduate admissions committee, School of Architecture and Landscape Architecture. The references should be from professionals or educators familiar with the applicant’s experience and capability for graduate work.

4. Portfolio. Candidates applying for the M.S. in building design program must also provide a portfolio. See the portfolio requirements outlined on the Herberger Institute for Design and the Arts Web site for more information.

Submit the statement of intent, recommendation letters, portfolio, and the contact information sheet to the following address:

Master of Science in Building Design Admissions Committee
School of Architecture and Landscape Architecture
Arizona State University
P.O. Box 871605
Design North, room 162
Tempe, AZ 85287-1605

Please submit your online application and fee, test scores (GRE or TOEFL) and official transcripts from all post-secondary institutions directly to the Graduate College.

Application Deadlines

All materials must be received by the School of Architecture and Landscape Architecture and the Graduate College by Jan. 15 for summer semester consideration. Priority will be given to students who have submitted all the required application materials to both the Graduate College and the School of Architecture and Landscape Architecture by deadline of Jan. 15. The M.S. in building design program does not admit students for the spring semester of fall semester.

Applications for assistantships and scholarships are generally considered at the same time as the application for admission.

Contact:
School of Architecture and Landscape Architecture
http://design.asu.edu/sala/index.shtml
**Ceramics (MFA) FACERAMMFA**
Herberger Institute for Design and the Arts

**Official Degree Awarded:** MFA Art (Ceramics)

**Program Description:** World-renowned faculty strive to ensure that graduates learn the techniques and concepts that will enable their work to take any direction they wish. A strong guest artist schedule enhances the program. Artists come from the world over, including Thailand, China, Australia and Turkey.

The recent addition of the nationally important Ceramics Research Center at the ASU Art Museum, with its collection of more than 3,000 pieces, provides unparalleled opportunities to study and research ceramics.

**Program Requirement:** A minimum of 60 hours of graduate credit subject to committee approval is required, including:

1. Twenty-seven to 32 graduate studio credit hours in the major area(s) of concentration (with the exception of digital technology where 18 credit hours are studio classes and 18 credit hours are individual study classes).
2. Six credit hours of graduate-level art history and three credit hours of other interdisciplinary graduate credit to supplement M.F.A. work (nonstudio courses), except for digital technology, which requires six credit hours of art history.
3. Nine credit hours of graduate-level course work outside of the major area of concentration, of which three credit hours must begin with the ART prefix and the remaining six credit hours may be outside the School of Art (except for digital technology, which requires nine credit hours of electives in the School of Art and Arts, Media and Engineering).
4. Ten to 15 hours of ART 680 Practicum, resulting in an M.F.A. exhibition (except for digital technology, where six hours will be ART 680 and six hours will be AME 593).

**Admission Requirements:** A bachelor's degree from a college or university recognized by ASU is required. All applicants must submit the Graduate College online application. All students applying for the M.F.A. must submit to the graduate coordinator:

1. A portfolio of images of their work on a CD-ROM disk containing 20 JPEG files (1000 pixels in the long dimension) or 20 images assembled as a PowerPoint presentation.
2. Three letters of recommendation.
3. A current curriculum vitae.
4. Statement of intent pertaining to the students educational objectives are also required.

Contact:
School of Art
http://art.asu.edu
Art Building 102
480/965-6303

Conducting (DMA) FACONDDMA
Herberger Institute for Design and the Arts

Official Degree Awarded: DMA Music (Conducting)

Program Description: The D.M.A. is a professional degree program designed for students desiring high levels of performance, academic proficiency and preparation for teaching positions at the university level. The major is music with four concentrations:

- Conducting.
- Music composition.
- Music education
- Performance (instrumental, keyboard, collaborative piano, piano pedagogy, voice).

Program Requirement: A total of 90 credit hours beyond the bachelor's degree is required. Only 30 hours from a master's degree or other postgraduate work will be counted toward the 90 hour requirement. Once admitted to a D.M.A. degree program, the student is expected to be enrolled continuously, excluding summer sessions, until all requirements for the degree have been fulfilled. In general, the D.M.A. degree student should expect to spend at least the equivalent of three academic years beyond the bachelor's degree in the program. A minimum of two semesters must be spent in continuous full-time residence at ASU. At least 54 hours must be completed in residence at ASU. The conducting concentration requires the completion of research papers/projects in conjunction with performances (one of which must be a lecture-recital).

Admission Requirements: The applicant must submit the Graduate College application. Students seeking admission normally hold the M.Mus. Applicants with other degrees are considered if they have received graduate training similar to that normally expected in a M.Mus. program. The application for admission must be accompanied by:

1. An applicant's statement relating to goals, preparation and educational background.
2. Scores for the GRE (quantitative, verbal and analytical) or the MAT.
3. Three letters of recommendation are required.
5. Additional audiotapes may be submitted to reflect the applicant's ability to refine music in a performance setting.

Once reviewed, an applicant may be asked for a live audition. The deadline is Feb. 15 for teaching assistantship applications.

Contact:
School of Music
http://music.asu.edu
SOMadmissions@asu.edu
Music E167
480/965-5069

Dance (MFA) FADANCEMFA
Herberger Institute for Design and the Arts

Official Degree Awarded: MFA Dance

Program Description: The M.F.A. in dance at ASU is a highly flexible program which offers a solid foundation in practical and theoretical course work. The department actively welcomes a diversity of applicants, including returning professionals, with experience and/or interest in:

- Community-based practice.
- Creative practice.
- Dance history.
- Dance making.
- Dance science and somatics.
- Educational and professional partnerships.
- Interdisciplinary and/or cross-cultural approaches.
- Philosophy and criticism.
- Sance and technology.

The ASU Department of Dance seeks individuals who are self-motivated, have clear and demonstrated objectives and are willing to explore new possibilities in the field of dance and beyond.

Program Requirement: The M.F.A. in dance requires 60 credit hours. Incoming students are encouraged to take foundational course work, which has been designed to be a broad and fundamental preparation for future careers in:

- Community colleges.
- Community partnerships.
- High schools.
- Higher education.
- Independent artistic practice.
- Private studios.
• Professional dance companies.
• Technology.
• The wellness industry.

In addition to the foundational course work, approximately 18 credit hours are available to pursue a specialization of interest.

The M.F.A. project in dance, worth eight credits, serves as the capstone experience in the graduate dance curriculum. Students have the opportunity to select the format and structure of their project in conjunction with their M.F.A. committee. Conceived as a bridge to career, the project should take into consideration the future goals of the student.

Flexibility in program design is strongly encouraged. The department recognizes and encourages individual strengths and professional experience that may strongly affect the student.

Admission Requirements: To apply for admission to the M.F.A. in dance program, a student must complete an application form and supply official copies of all transcripts from previous institutions to the Graduate College.

The Department of Dance requires:

1. A current resume.
2. DVD of recent work.
3. Three letters of recommendation from professionals in the field.
4. A personal artistic statement that relates to department core values as described by the learning lens.

Contact:
School of Dance
http://dance.asu.edu/
asudance@asu.edu
PEBE 170A
480/965-1208

Dance - Interdisciplinary Digital Media & Perform. (MFA) FADANDIMFA
Herberger Institute for Design and the Arts

Official Degree Awarded: MFA Dance (Interdisciplinary Digital Media and Performance)

Program Description: The concentration in interdisciplinary digital media and performance (IDMP) expands on the strength of the Department of Dance in the specific area of interactive arts, and provides a highly select group of graduate students with a more rigorous, in-depth and fully supported opportunity to specialize in dance and interdisciplinary digital arts.
The interdisciplinary classes and research activities of the transdisciplinary Arts, Media and Engineering Program (AME) that form part of this concentration give students access to the high-end media technology studios of AME, to project funding and to interdisciplinary collaborators. The M.F.A. project, which may involve producing original creative work, presenting a lecture demonstration on a body of research or another form of original work, acts as the culminating experience of the program. A final written thesis, reflective in nature, as well as an oral defense complete the process.

**Program Requirement:** The degree requires 60 credit hours and normally involves three years of residency:

1. Interview for admission into the program.
2. Ongoing showings of work.
3. 18 credit hours of required course work in the concentration taught by AME.
4. 19 required credit hours in the Department of Dance.
5. 15 credits of electives.
6. A final M.F.A. project (eight credits).
8. An oral defense.

The current M.F.A. in dance is a 60-credit-hour program, normally accomplished during three years of residency in the department. Ongoing showings of choreography and/or other creative work are required. Foundational course work is offered in areas of:

- Choreography.
- Education.
- Professional development.
- Technique.
- Technology.
- Theory.

Students enrolled in the IDMP specialize in areas related to independent research. The M.F.A. project, which may involve producing original choreography, presenting a lecture demonstration on a body of research or another form of original work, acts as the culminating experience of the program. A final written thesis, reflective in nature, as well as an oral defense complete the process.

**Admission Requirements:** To apply for admission to the M.F.A. program in dance, a student must complete an application form and supply official copies of all transcripts from previous institutions to the Graduate College.

The Department of Dance requires:

1. A current resume.
2. DVD of recent work.
3. Three letters of recommendation from professionals in the field.
4. A personal artistic statement that relates to department core values as described by the learning lens.

Contact:
School of Dance
http://dance.asu.edu/
asudance@asu.edu
PEBE 170A
480/965-1208

Design (Interaction Design) (MSD) ARDSCIMSD
Herberger Institute for Design and the Arts

Official Degree Awarded: MSD Design (Interaction Design)

Program Description: Interaction design is about people: how people connect through products and services. The interaction design concentration focuses on the study of principles, tools, complexities and change that prepare students for endeavors such as creating effective physical and virtual shopping, creating effective information retrieval systems and numerous such human-spatial interactions. Design principles guide the students in the methods of creating dynamic, expressive and communicative forms.

Program Requirement: This program requires 36 credit hours and a thesis or 36 credit hours and an applied project. Students may choose to complete their graduate work by way of a thesis or an applied project. A master’s thesis is a scholarly endeavor that demonstrates the ability of the author to do supervised research and intellectual writing. The applied project is somewhat different. It includes both a project and a written document and is a scholarly endeavor that demonstrates the ability of the designer to do supervised research and present substantial evidence of the ability to apply research creatively to a design situation.

Admission Requirements: Applicants to the M.S.D. program must hold a bachelor’s degree in graphic design, industrial design, interior design or a related design discipline. When applying for admission, applicants must declare one of seven concentrations:

- Arts, media and engineering.
- Healthcare and healing environments.
- Industrial design.
- Interactive design.
- Interior design.
- New product innovation.
- Visual communication design.
Further information can be found in the program description on the admissions Web page at http://www.design.asu.edu/msd/admission.shtml.

Admission is a two-step process. Although applicants fill out one application through the online Graduate College application process, they must be admitted into both the concentration in the M.S.D. program and the Graduate College.

**M.S.D. Program Requirements**

1. A 3.00 or higher undergraduate GPA.
2. Minimum score of 550 on the paper-based Test of English as a Foreign Language (TOEFL) or 80 on the Internet-based test, for international students whose native language is not English.
3. GRE scores are not required.

Applicants are required to submit the following materials with their application in addition to Graduate College requirements:

1. A mandatory statement of intent, utilizing the required form found at http://www.design.asu.edu/msd/admission.shtml, which will include the following points:
   - Intended concentration.
   - Proposed research topic. What will be your research focus? Why is this research important to you, the design community and the general population?
   - Proposed mentor for intended research. Faculty biographies can be found on the Web site at http://design.asu.edu/msd/faculty.shtml.
   - Personal academic background and professional experience that has prepared you for or will support your proposed research topic.
2. Three letters of recommendation from persons who are qualified to comment on your potential in the selected concentration. Students will provide the names and contact information of three recommenders at the time of their online application. Recommenders will receive an email with a link to the online letter of recommendation to complete. Students are able to see which recommenders have already completed their recommendation by logging into the My ASU system and viewing their “To Do” list. Once a recommender has submitted the letter of recommendation, the recommender’s name will be removed from the “To Do” list. All letters must be in English.
3. Applicants wishing to be considered for teaching or research assistantships (T.A./R.A.) should submit an additional statement outlining areas in which they feel competent to serve as a teaching or research assistant and inexpensive copies of samples of work that will not be returned. All interested applicants can apply for a T.A. position online. The link to the application will be provided on the M.S.D. Web site.
All international teaching or graduate assistants whose primary language is not English are required to be certified in their English language abilities. Those individuals whose native language is not English will be required to submit a Speaking Proficiency English Assessment Kit (SPEAK) score, which is administered at ASU. Students also have the option of completing the Test of Spoken English (TSE), administered directly by the Educational Testing Service (ETS). For this group, no Personnel Action form (PAF) will be signed until this examination has been successfully completed.

The ASU American English and Culture Program (AECP) will certify all T.A.s who take the SPEAK. International students whose primary language is not English will not be permitted to serve as T.A.s unless they have AECP certification. Information about AECP certification can be found online at http://www.asu.edu/aecp/ITAinfo/. You will need to have this certification on order to receive a T.A. appointment in the Herberger Institute for Design and the Arts.

4. A current résumé.

5. An 8.5 x 11 portfolio documenting papers and imaginative projects that support the intended concentration and demonstrate drawing, rendering, graphic and modeling skills. The portfolio is returned after final admission procedures, provided sufficient prepaid postage is enclosed or the materials are claimed in person within one year of submission. Unclaimed portfolios are retained for only one year. The M.S.D. program assumes no liability for lost or damaged materials.

Important Note: Items one through four must be uploaded at the time of application. Item five must be sent to the M.S.D. program address. Do not send these materials to the Graduate College. If these materials are sent to any area other than the M.S.D. program, they will not be reviewed and your application will be denied.

M.S.D. Program
School of Design Innovation
Herberger Institute for Design and the Arts
Arizona State University
P.O. Box 872105
Tempe, AZ 85287-2105

For delivery, please use this address:
ASU Herberger Institute for Design and the Arts
Attn: MSD Program
810 S. Forest Mall
Tempe, AZ 85287

Contact:
School of Design Innovation
Design (New Product Innovation) (MSD) ARDSCNMSD
Herberger Institute for Design and the Arts

**Official Degree Awarded:** MSD Design (New Product Innovation)

**Program Description:** The M.S.D. with a concentration in new product innovation is a research-oriented graduate degree. In this degree program, students will apply the concepts learned in the core and required courses through the execution of an applied project, which could be the design and development of a new product, a new method of doing design research, new design guidelines for medical devices, etc. The focus is on application, and the student will present evidence of knowledge of principles in new product innovation, strategy for implementation or methods of design evaluation. Students will present the projects through a design presentation, executive summary and project document.

**Program Requirement:** This is a 36-credit-hour, project-based concentration that teaches graduate students about the role of design and innovation in the process of new product development within the context of a quickly evolving global economy.

Students complete their graduate work with an applied project. It includes both a project and a written document and is a scholarly endeavor that demonstrates the ability of the designer to do supervised research and present substantial evidence of the ability to creatively apply research to a design opportunity.

**Admission Requirements:** Applicants to the M.S.D. program must hold a bachelor’s degree in graphic design, industrial design, interior design or a related design discipline. When applying for admission, applicants must declare one of seven concentrations:

- Arts, media and engineering.
- Healthcare and healing environments.
- Industrial design.
- Interactive design.
- Interior design.
- New product innovation.
- Visual communication design.

Further information can be found in the program description on the admissions Web page at http://www.design.asu.edu/msd/admission.shtml.

Admission is a two-step process. Although applicants fill out one application through the online Graduate College application process, they must be admitted into
both the concentration in the M.S.D. program and the Graduate College.

**M.S.D. Program Requirements**

1. A 3.00 or higher undergraduate GPA.
2. Minimum score of 550 on the paper-based Test of English as a Foreign Language (TOEFL) or 213 on the computer-based test or 83 on the internet-based test, for international students whose native language is not English.
3. GRE scores are not required.

Applicants are required to submit the following materials with their application in addition to Graduate College requirements:

1. A mandatory statement of intent, utilizing the required form found at http://www.design.asu.edu/msd/admission.shtml, which will include the following points:
   - Intended concentration.
   - Proposed research topic. What will be your research focus? Why is this research important to you, the design community and the general population?
   - Proposed mentor for intended research. Faculty biographies can be found on the Web site at http://design.asu.edu/msd/faculty.shtml.
   - Personal academic background and professional experience that has prepared you for or will support your proposed research topic.
2. Three letters of recommendation from persons who are qualified to comment on your potential in the selected concentration. Students will provide the names and contact information of three recommenders at the time of their online application. Recommenders will receive an email with a link to the online letter of recommendation to complete. Students are able to see which recommenders have already completed their recommendation by logging into the My ASU system and viewing their “To Do” list. Once a recommender has submitted the letter of recommendation, the recommender’s name will be removed from the “To Do” list. All letters must be in English.
3. Applicants wishing to be considered for teaching or research assistantships (T.A./R.A.) should submit an additional statement outlining areas in which they feel competent to serve as a teaching or research assistant and inexpensive copies of samples of work that will not be returned. All interested applicants can apply for a T.A. position online. The link to the application will be provided on the M.S.D. Web site.

All international teaching or graduate assistants whose primary language is not English are required to be certified in their English language abilities. Those individuals whose native language is not English will be required to submit a Speaking Proficiency English Assessment Kit (SPEAK) score, which is administered at ASU. Students also have the option of completing the Test
of Spoken English (TSE), administered directly by the Educational Testing Service (ETS). For this group, no Personnel Action form (PAF) will be signed until this examination has been successfully completed.

The ASU American English and Culture Program (AECP) will certify all T.A.s who take the SPEAK. International students whose primary language is not English will not be permitted to serve as T.A.s unless they have AECP certification. Information about AECP certification can be found online at http://www.asu.edu/aecp/ITAinfo/. You will need to have this certification on order to receive a T.A. appointment in the Herberger Institute for Design and the Arts.

4. A current résumé.
5. An 8.5 x 11 portfolio documenting papers and imaginative projects that support the intended concentration and demonstrate drawing, rendering, graphic and modeling skills. The portfolio is returned after final admission procedures, provided sufficient prepaid postage is enclosed or the materials are claimed in person within one year of submission. Unclaimed portfolios are retained for only one year. The M.S.D. program assumes no liability for lost or damaged materials.

Important Note: Items one through four must be uploaded at the time of application. Item five must be sent to the M.S.D. program address. Do not send these materials to the Graduate College. If these materials are sent to any area other than the M.S.D. program, they will not be reviewed and your application will be denied.

M.S.D. Program
School of Design Innovation
Herberger Institute for Design and the Arts
Arizona State University
P.O. Box 872105
Tempe, AZ 85287-2105

For delivery, please use this address:
ASU Herberger Institute for Design and the Arts
Attn: MSD Program
810 S. Forest Mall
Tempe, AZ 85287

Contact:
School of Design Innovation
http://www.design.asu.edu/msd/index.shtml
design.grad@asu.edu
CDN 162
480/965-7007
Design (Visual Communication Design) (MSD) ARVCDMSD
Herberger Institute for Design and the Arts

Official Degree Awarded: MSD Design (Visual Communication Design)

Program Description: The M.S.D. with a concentration in visual communication design is meant for individuals interested in advanced studies in visual language, history, theory, criticism and methodology, design processes, and technology. This concentration develops an understanding of contemporary graphic design issues through specialized research and design skills. It also prepares the graduate student for a career in graphic design education.

Program Requirement: This program requires 36 credit hours and a thesis or 36 credit hours and an applied project. Students may choose to complete their graduate work by way of a thesis or an applied project. A master's thesis is a scholarly endeavor that demonstrates the ability of the author to do supervised research and intellectual writing. The applied project is somewhat different. It includes both a project and a written document and is a scholarly endeavor that demonstrates the ability of the designer to do supervised research and present substantial evidence of the ability to apply research creatively to a design situation.

Admission Requirements: Applicants to the M.S.D. program must hold a bachelor's degree in graphic design, industrial design, interior design or a related design discipline. When applying for admission, applicants must declare one of seven concentrations:

- Arts, media and engineering.
- Healthcare and healing environments.
- Industrial design.
- Interactive design.
- Interior design.
- New product innovation.
- Visual communication design.

Further information can be found in the program description on the admissions Web page at http://www.design.asu.edu/msd/admission.shtml.

Admission is a two-step process. Although applicants fill out one application through the online Graduate College application process, they must be admitted into both the concentration in the M.S.D. program and the Graduate College.

M.S.D. Program Requirements

1. A 3.00 or higher undergraduate GPA.
2. Minimum score of 550 on the paper-based Test of English as a Foreign Language (TOEFL) or 213 on the computer-based test or 83 on the internet-based test, for international students whose native language is not English.
3. GRE scores are not required.

Applicants are required to submit the following materials with their application in addition to Graduate College requirements:

1. A mandatory statement of intent, utilizing the required form found at http://www.design.asu.edu/msd/admission.shtml, which will include the following points:
   - Intended concentration.
   - Proposed research topic. What will be your research focus? Why is this research important to you, the design community and the general population?
   - Proposed mentor for intended research. Faculty biographies can be found on the Web site at http://design.asu.edu/msd/faculty.shtml.
   - Personal academic background and professional experience that has prepared you for or will support your proposed research topic.

2. Three letters of recommendation from persons who are qualified to comment on your potential in the selected concentration. Students will provide the names and contact information of three recommenders at the time of their online application. Recommenders will receive an email with a link to the online letter of recommendation to complete. Students are able to see which recommenders have already completed their recommendation by logging into the My ASU system and viewing their “To Do” list. Once a recommender has submitted the letter of recommendation, the recommender’s name will be removed from the “To Do” list. All letters must be in English.

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http://www.asu.edu/aecp/ITAinfo/. You will need to have this certification on order to receive a T.A. appointment in the Herberger Institute for Design and the Arts.

4. A current résumé.

5. An 8.5 x 11 portfolio documenting papers and imaginative projects that support the intended concentration and demonstrate drawing, rendering, graphic and modeling skills. The portfolio is returned after final admission procedures, provided sufficient prepaid postage is enclosed or the materials are claimed in person within one year of submission. Unclaimed portfolios are retained for only one year. The M.S.D. program assumes no liability for lost or damaged materials.

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M.S.D. Program
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Herberger Institute for Design and the Arts
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ASU Herberger Institute for Design and the Arts
Attn: MSD Program
810 S. Forest Mall
Tempe, AZ 85287

Contact:
http://design.asu.edu/msd/index.shtml
design.grad@asu.edu
CDN 162
480/965-7007

**Drawing (MFA) FADRAWMFA**
Herberger Institute for Design and the Arts

**Official Degree Awarded:** MFA Art (Drawing)

**Program Description:** Faculty assist students in both artistic and professional development, teaching about portfolio development, photographing artwork, acquiring a gallery affiliation, different types of exhibition venues available.

**Program Requirement:** A minimum of 60 hours of graduate credit subject to committee approval is required, including:
1. Twenty-seven to 32 graduate studio credit hours in the major area(s) of concentration (with the exception of digital technology where 18 credit hours are studio classes and 18 credit hours are independent research).

2. Six credit hours of graduate-level art history and three credit hours of other interdisciplinary graduate credit to supplement M.F.A. work (nonstudio courses), except for digital technology, which requires six credit hours of art history.

3. Nine credit hours of graduate-level course work outside of the major area of concentration, of which three credit hours must begin with the ART prefix and the remaining six credit hours may be outside the School of Art (except for digital technology, which requires nine credit hours of electives in the School of Art and Arts, Media and Engineering).

4. 10 to 15 hours of ART 680 Practicum, resulting in an M.F.A. exhibition (except for digital technology, where six hours will be ART 680 and six hours will be AME 593).

**Admission Requirements:** A bachelor's degree from a college or university recognized by ASU is required. All applicants must submit an online application to the Graduate College. All students applying for the M.F.A. must submit to the graduate coordinator:

- A portfolio of images of their work on a CD-ROM disk containing 20 JPEG files (1000 pixels in the long dimension) or 20 images assembled as a PowerPoint presentation.
- Three letters of recommendation.
- A current curriculum vitae.
- Statement of intent pertaining to the students educational objectives are also required.

**Contact:**
School of Art
http://art.asu.edu
ART 102
4809656303

**Environmental Design/Planning (PhD) ARENVDEPHD**
Herberger Institute for Design and the Arts

**Official Degree Awarded:** PHD Environmental Design/Planning

**Program Description:** The Doctor of Philosophy in environmental design and planning is an individualized college-wide interdisciplinary degree that integrates graduate courses and faculty research expertise with concentrations in design; planning; healthcare and healing environments; or history, theory and criticism. The program is at the cutting edge of creating new knowledge in architecture, design and planning. It complements interdisciplinary research in other disciplines within the university. Broad in scope, the program involves multidisciplinary research interests at both micro- and macro-scale levels of design and planning. The program
provides research experience for students wishing to pursue careers in industry as members of interdisciplinary design and planning teams on environmental and energy issues, as well as for those wishing to teach in the architecture, design or planning fields.

Program Requirement: Students must be thoroughly familiar with design and planning and are expected to demonstrate a high level of academic maturity before being admitted to the program. This program requires 84 credit hours, a dissertation and written and oral comprehensive examinations. Up to 30 credit hours from a previously awarded master's degree can count towards the requirements of the doctoral program.

Of the 54 credit hours, 12 must be dissertation credit and 12 may be research. These 24 hours plus the remaining 30 hours must be completed after admission to the program. No transfer credits are allowed to fulfill the 54-credit-hour minimum requirement completed after admission to the program.

The student is required to take 15 credit hours in the area of concentration and a minimum of nine credit hours of specialized course work outside the area of concentration; a minimum of six credit hours in current research and research methods is required.

Each student entering the doctoral program is required to submit a plan of study during the first year.

Admission Requirements: Students are admitted to the doctoral program only upon completion of a master's degree in architecture, graphic design, industrial design, interior design, landscape architecture, or planning or upon the demonstration of equivalent standing. Students must be familiar with design and planning and will be expected to demonstrate a high level of academic maturity before being admitted to the program.

The doctoral executive committee evaluates the applications and supporting materials during the spring for fall semester admissions. Admission decisions are based on the compatibility of the applicant's career goals with the purpose of the degree program, the research mission of the college and the research interests of faculty, previous academic training and performance, GRE scores, recommendation letters, and the ability of the potential mentor to devote time to the student.

The recommendations of the committee are forwarded to the school directors for their approval. Upon the written recommendation from the program director, the dean of the Graduate College will notify all applicants in writing of the admission decision.

In addition to the Graduate College requirements, applicants must submit the following Doctor of Philosophy application requirements online at the time of
application. The application will be considered incomplete if one of these items is missing.

1. A statement of purpose summarizing career objectives and the reasons for pursuing doctoral education.
2. An indication of proposed area of concentration (design, planning, history, theory, and criticism, or healthcare and healing environments).
3. An indication of a potential mentor in the Herberger Institute for Design and the Arts. We recommend that you e-mail the faculty member(s) that you feel have related research interests to introduce yourself and to inquire about their availability to be a mentor to you.
4. Three letters of recommendation (preferably academic, although could be professional). Students will provide the names and contact information of three recommenders at the time of their online application. Recommenders will receive an e-mail with a link to the online letter of recommendation to complete. Students are able to see which recommenders have already completed their recommendation by logging into the MyASU system and viewing their “To Do” list. Once a recommender has submitted the letter of recommendation, the recommender’s name will be removed from the “To Do” list. All letters must be in English.
5. A sample of sole-authored written work in English or any other evidence relevant to admission to the program (i.e., master’s thesis, research paper, or published articles).
6. GRE scores.
7. A Test of English as a Foreign Language (TOEFL) score of at least 100 iBT or 600 PBT or an overall International English Language Testing System (IELTS) band score of 7.50, with no individual band below 7.00, is required of all applicants whose native language is not English. International applicants who are interested in receiving funding as teaching assistants must take the Speaking Proficiency English Assessment Kit (SPEAK), administered at ASU, and become certified. Additional information is available on the department Web site.

Contact:
School of Design Innovation
http://design.asu.edu/phd
design.grad@asu.edu
CDN 162
480/965-7007

Environmental Design/Planning (Healthcare and Healing Environments) (PHD)
ARENHHEPHD
Herberger Institute for Design and the Arts

Official Degree Awarded: PHD Environmental Design/Planning (Healthcare & Healing Environments)
Program Description: The healthcare and healing environments concentration of the Ph.D. in environmental design/planning focuses on the integration of evidence-based design, sustainable science and best practices benchmarks when planning healthcare facilities. Facility-related responsibilities supported by this area cluster into eight functional work units. They are:

1. Programming (long-range planning).
2. Facilities analysis (physical and environmental).
3. Space management/planning.
5. Interior planning and design.
6. Human factors.
7. Codes and strategic planning.

This multidisciplinary program integrates the principles of medical and clinical innovations, interior architecture, human health services, communication studies, architecture, and behavioral and engineering sciences. Students in this program will be mentored by local healthcare design consultants, teaming with nursing students, working directly with real clients and corresponding with forward-thinking healthcare research centers. Graduating students will be able to address healthcare environments on multiple levels; effectively communicate with clinicians; apply evidence based research techniques; and address contemporary issues facing the healthcare industry. Upon graduation, students may pursue advanced positions in the following arenas:

- Large healthcare systems and corporations as strategic planners.
- Elite consulting firms as facility programmers.
- Research centers as decision makers.
- Leading manufacturers and vendors as expert representatives.
- Planning divisions in architectural and planning firms as medical planners.

Program Requirement: Students will be required to complete a minimum of 84 hours which are detailed below:

- Required core courses: six credit hours
- Required concentration courses: 18 credit hours
- Elective courses: 18 credit hours
- Dissertation: 12 credit hours
- Previously completed a master’s degree: 30 credit hours.

If the student has not completed a master’s degree, elective courses approved by the supervisory committee may substitute.

Admission Requirements: Ideal candidates must already hold a master’s degree in design, interior design, architecture, nursing or other related fields. A statement of intent will express interest in the healthcare research/design concentration. If students come in with no design or healthcare background, they must take certain
deficiency courses students. In addition to meeting Graduate College admission requirements, applicants must submit the following items:

1. A minimum of three letters of reference.
2. A sample of written work and any other evidence relevant to admission to the program.
3. A statement of purpose (summarizing career objectives and the reasons for pursuing a doctoral education, as well as indicating the proposed area of concentration and a potential mentor in the College of Design).
4. A proposed mentor and concentration form.
5. GRE scores.
6. A Test of English as a Foreign Language (TOEFL) score of at least 600 or an overall IELTS band score of 7.5, with no individual band below 7.00, is required of all applicants whose native language is not English. International applicants who are interested in receiving funding as teaching associates must take the Speaking Proficiency English Assessment Kit (SPEAK) test administered at ASU and become certified.

Contact:
School of Design Innovation
http://design.asu.edu/phd
design.grad@asu.edu
CDN 162
480/965-7007

Ethnomusicology (MA) FAETHNMA
Herberger Institute for Design and the Arts

Official Degree Awarded: MA Music (Ethnomusicology)

Program Description: The M.A. with a concentration in ethnomusicology focuses on the systematic scholarly study of the history and study of various ethnomusicological topics. The faculty comprises leading scholars in a variety of world music expressions.

Program Requirement: A minimum of 30 hours of graduate credit is required, of which at least 20 credit hours must be in the field of ethnomusicology or related fields, including six credit hours of thesis and five or six credit hours in music theory. A passing grade on the foreign language reading exam in French or German is required for graduation.

Admission Requirements: In addition to the ASU Graduate College requirements and a School of Music application form, interested students must submit:

1. Evidence of scholarly achievement or potential (e.g., a term paper).
2. Letters of recommendation from two qualified persons in the field.
3. A one- to two-page personal statement explaining the relationship between the student’s professional and/or personal goals and admission into the M.A. program.

Contact:
School of Music
http://music.asu.edu
SOMadmissions@asu.edu
MUSIC E167
480/965-5069

Fibers (MFA) FAFIBERMFA
Herberger Institute for Design and the Arts

Official Degree Awarded: MFA Art (Fibers)

Program Description: The curriculum incorporates training in weaving, felt-making, embroidery and 3-D structures, and numerous methods of painting and printing on fabric, including cyanotype and photo-silkscreen techniques.

Program Requirement: A minimum of 60 hours of graduate credit subject to committee approval is required, including:

1. Twenty-seven to 32 graduate studio credit hours in the major area(s) of concentration (with the exception of digital technology where 18 credit hours are studio classes and 18 credit hours are independent research).
2. Six credit hours of graduate-level art history and three credit hours of other interdisciplinary graduate credit to supplement M.F.A. work (nonstudio courses), except for digital technology, which requires six credit hours of art history.
3. Nine credit hours of graduate-level course work outside of the major area of concentration, of which three credit hours must begin with the ART prefix and the remaining six credit hours may be outside the School of Art (except for digital technology, which requires nine semester hours of electives in the School of Art and Arts, Media and Engineering).
4. Ten to 15 hours of ART 680 Practicum, resulting in an M.F.A. exhibition (except for digital technology, where six hours will be ART 680 and six hours will be AME 593).

Admission Requirements: A bachelor’s degree from a regionally accredited college or university recognized by ASU is required. All applicants must submit an online application to the Graduate College. All students applying for the M.F.A. must submit to the graduate coordinator:

1. A portfolio of images of their work on a CD-ROM disk containing 20 JPEG files (1000 pixels in the long dimension) or 20 images assembled as a PowerPoint presentation.
   Three letters of recommendation.
2. A current curriculum vitae.
3. A statement of intent pertaining to the student’s educational objectives are also required.

Contact:
School of Art
http://art.asu.edu
ART 102
4809656303

Healthcare and Healing Environments (MSD) ARHEMSD
Herberger Institute for Design and the Arts

Official Degree Awarded: MSD Design (Design of Healthcare and Healing Environments)

Program Description: The concentration in healthcare and healing environments is focused on factors that impact the design and planning of healthcare facilities and healing environments, especially the integration of evidence-based design, sustainable science and best practices benchmarks with planning healthcare facilities. This multidisciplinary program integrates the principles of medical and clinical innovations, business administration, interior architecture, human health services, communication studies, architecture and behavioral and engineering sciences. Students in this program will be mentored by local healthcare design consultants, teaming with nursing students, working directly with real clients and corresponding with forward-thinking healthcare research centers.

Program Requirement: This program requires 36 credit hours and a thesis or 36 credit hours and an applied project. Students may choose to complete their graduate work by way of a thesis or an applied project. A master’s thesis is a scholarly endeavor that demonstrates the ability of the author to do supervised research and intellectual writing. The applied project is somewhat different. It includes both a project and a written document and is a scholarly endeavor that demonstrates the ability of the designer to do supervised research and present substantial evidence of the ability to apply research creatively to a design situation.

Admission Requirements: Applicants to the M.S.D. program must hold a bachelor’s degree in graphic design, industrial design, interior design or a related design discipline. When applying for admission, applicants must declare one of seven concentrations:

1. Arts, media and engineering.
2. Healthcare and healing environments.
3. Industrial design.
4. Interactive design.
5. Interior design.
7. Visual communication design.
Further information can be found in the program description on the admissions Web page at http://www.design.asu.edu/msd/admission.shtml.

Admission is a two-step process. Although applicants fill out one application through the online Graduate College application process, they must be admitted into both the concentration in the M.S.D. program and the Graduate College.

M.S.D. Program Requirements

A 3.00 or higher undergraduate GPA.

Minimum score of 550 on the paper-based Test of English as a Foreign Language (TOEFL) or 213 on the computer-based test or 83 on the internet-based test, for international students whose native language is not English. GRE scores are not required.

Applicants are required to submit the following materials with their application in addition to Graduate College requirements:

A mandatory statement of intent, utilizing the required form found at http://www.design.asu.edu/msd/admission.shtml, which will include the following points:

1. Intended concentration.
2. Proposed research topic. What will be your research focus? Why is this research important to you, the design community and the general population?
4. Personal academic background and professional experience that has prepared you for or will support your proposed research topic.

Three letters of recommendation from persons who are qualified to comment on your potential in the selected concentration. Students will provide the names and contact information of three recommenders at the time of their online application. Recommenders will receive an email with a link to the online letter of recommendation to complete. Students are able to see which recommenders have already completed their recommendation by logging into the My ASU system and viewing their “To Do” list. Once a recommender has submitted the letter of recommendation, the recommender’s name will be removed from the “To Do” list. All letters must be in English.

Applicants wishing to be considered for teaching or research assistantships (T.A./R.A.) should submit an additional statement outlining areas in which they feel competent to serve as a teaching or research assistant and inexpensive copies of samples of work that will not be returned. All interested applicants can apply for a
T.A. position online. The link to the application will be provided on the M.S.D. Web site.

All international teaching or graduate assistants whose primary language is not English are required to be certified in their English language abilities. Those individuals whose native language is not English will be required to submit a Speaking Proficiency English Assessment Kit (SPEAK) score, which is administered at ASU. Students also have the option of completing the Test of Spoken English (TSE), administered directly by the Educational Testing Service (ETS). For this group, no Personnel Action form (PAF) will be signed until this examination has been successfully completed.

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A current résumé.

An 8.5 x 11 portfolio documenting papers and imaginative projects that support the intended concentration and demonstrate drawing, rendering, graphic and modeling skills. The portfolio is returned after final admission procedures, provided sufficient prepaid postage is enclosed or the materials are claimed in person within one year of submission. Unclaimed portfolios are retained for only one year. The M.S.D. program assumes no liability for lost or damaged materials.

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Arizona State University
P.O. Box 872105
Tempe, AZ 85287-2105

For delivery, please use this address:
School of Design Innovation
ASU Herberger Institute for Design and the Arts
Attn: MSD Program
810 S. Forest Mall
Tempe, AZ 85287
**Program Description:** The M.S.D. with a concentration in industrial design is meant for individuals interested in advanced studies in human factors, history, theory, criticism and methodology, design processes and technology. This concentration develops an understanding of contemporary industrial design issues through specialized research and design skills. It also prepares the graduate student for a career in industrial design education.

**Program Requirement:** This program requires 36 credit hours and a thesis or 36 credit hours and an applied project. Students may choose to complete their graduate work by way of a thesis or an applied project. A master’s thesis is a scholarly endeavor that demonstrates the ability of the author to do supervised research and intellectual writing. The applied project is somewhat different. It includes both a project and a written document and is a scholarly endeavor that demonstrates the ability of the designer to do supervised research and present substantial evidence of the ability to apply research creatively to a design situation.

**Admission Requirements:** Applicants to the M.S.D. program must hold a bachelor’s degree in graphic design, industrial design, interior design or a related design discipline. When applying for admission, applicants must declare one of seven concentrations:

1. Arts, media and engineering.
2. Healthcare and healing environments.
3. Industrial design.
4. Interactive design.
5. Interior design.
7. Visual communication design.

Further information can be found in the program description on the admissions Web page at [http://www.design.asu.edu/msd/admission.shtml](http://www.design.asu.edu/msd/admission.shtml).

Admission is a two-step process. Although applicants fill out one application through the online Graduate College application process, they must be admitted into both the concentration in the M.S.D. program and the Graduate College.
M.S.D. Program Requirements

A 3.00 or higher undergraduate GPA.

Minimum score of 550 on the paper-based Test of English as a Foreign Language (TOEFL) or 213 on the computer-based test or 83 on the internet-based test, for international students whose native language is not English.

GRE scores are not required.

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For delivery, please use this address:
School of Design Innovation
ASU Herberger Institute for Design and the Arts
Attn: MSD Program
810 S. Forest Mall
Tempe, AZ 85287

Contact:
School of Design Innovation
http://design.asu.edu/msd/index.shtml
design.grad@asu.edu
CDN 162
480/965-7007
**Interior Design (MSD) ARINTDEMSD**
Herberger Institute for Design and the Arts

**Official Degree Awarded:** MSD Design (Interior Design)

**Program Description:** The M.S.D. with a concentration in interior design is meant for individuals interested in advanced studies in facilities planning and management, history, theory, criticism and methodology and human factors. This concentration develops an understanding of contemporary interior design issues through specialized research and design skills. It also prepares the graduate student for a career in interior design education.

**Program Requirement:** This program requires 36 credit hours and thesis or 36 credit hours and an applied project. Students may choose to complete their graduate work by way of a thesis or an applied project. A master's thesis is a scholarly endeavor that demonstrates the ability of the author to do supervised research and intellectual writing. The applied project is somewhat different. It includes both a project and a written document and is a scholarly endeavor that demonstrates the ability of the designer to do supervised research and present substantial evidence of the ability to creatively apply research to a design situation.

**Admission Requirements:** Applicants to the M.S.D. program must hold a bachelor’s degree in graphic design, industrial design, interior design or a related design discipline. When applying for admission, applicants must declare one of seven concentrations:

1. Arts, media and engineering.
2. Healthcare and healing environments.
3. Industrial design.
4. Interactive design.
5. Interior design.
7. Visual communication design.

Further information can be found in the program description on the admissions Web page at http://www.design.asu.edu/msd/admission.shtml.

Admission is a two-step process. Although applicants fill out one application through the online Graduate College application process, they must be admitted into both the concentration in the M.S.D. program and the Graduate College.

**M.S.D. Program Requirements**

A 3.00 or higher undergraduate GPA. Minimum score of 550 on the paper-based Test of English as a Foreign Language (TOEFL) or 213 on the computer-based test or 83 on the internet-based test, for international students whose native language is not English.
GRE scores are not required.

Applicants are required to submit the following materials with their application in addition to Graduate College requirements:

A mandatory statement of intent, utilizing the required form found at http://www.design.asu.edu/msd/admission.shtml, which will include the following points:

1. Intended concentration.
2. Proposed research topic. What will be your research focus? Why is this research important to you, the design community and the general population?
4. Personal academic background and professional experience that has prepared you for or will support your proposed research topic.

Three letters of recommendation from persons who are qualified to comment on your potential in the selected concentration. Students will provide the names and contact information of three recommenders at the time of their online application. Recommenders will receive an email with a link to the online letter of recommendation to complete. Students are able to see which recommenders have already completed their recommendation by logging into the My ASU system and viewing their “To Do” list. Once a recommender has submitted the letter of recommendation, the recommender’s name will be removed from the “To Do” list. All letters must be in English.

Applicants wishing to be considered for teaching or research assistantships (T.A./R.A.) should submit an additional statement outlining areas in which they feel competent to serve as a teaching or research assistant and inexpensive copies of samples of work that will not be returned. All interested applicants can apply for a T.A. position online. The link to the application will be provided on the M.S.D. Web site.

All international teaching or graduate assistants whose primary language is not English are required to be certified in their English language abilities. Those individuals whose native language is not English will be required to submit a Speaking Proficiency English Assessment Kit (SPEAK) score, which is administered at ASU. Students also have the option of completing the Test of Spoken English (TSE), administered directly by the Educational Testing Service (ETS). For this group, no Personnel Action form (PAF) will be signed until this examination has been successfully completed.

The ASU American English and Culture Program (AECP) will certify all T.A.s who take the SPEAK. International students whose primary language is not English will not be permitted to serve as T.A.s unless they have AECP certification. Information about AECP certification can be found online at http://www.asu.edu/aecp/ITAinfo/. You will
need to have this certification on order to receive a T.A. appointment in the Herberger Institute for Design and the Arts.

A current résumé.

An 8.5 x 11 portfolio documenting papers and imaginative projects that support the intended concentration and demonstrate drawing, rendering, graphic and modeling skills. The portfolio is returned after final admission procedures, provided sufficient prepaid postage is enclosed or the materials are claimed in person within one year of submission. Unclaimed portfolios are retained for only one year. The M.S.D. program assumes no liability for lost or damaged materials.

Important Note: Items one through four must be uploaded at the time of application. Item five must be sent to the M.S.D. program address. Do not send these materials to the Graduate College. If these materials are sent to any area other than the M.S.D. program, they will not be reviewed and your application will be denied.

M.S.D. Program
School of Design Innovation
Herberger Institute for Design and the Arts
Arizona State University
P.O. Box 872105
Tempe, AZ 85287-2105

For delivery, please use this address:
School of Design Innovation
ASU Herberger Institute for Design and the Arts
Attn: MSD Program
810 S. Forest Mall
Tempe, AZ 85287

Contact:
School of Design Innovation
http://design.asu.edu/msd/index.shtml
design.grad@asu.edu
CDN 162
480/965-7007

Intermedia (MFA) FAMEDIAMFA
Herberger Institute for Design and the Arts

Official Degree Awarded: MFA Art (Intermedia)

Program Description: Led by exceptional faculty, the intermedia program in the School of Art offers an interdisciplinary environment for professional training in the visual arts. The program covers a wide range of conceptual and media orientations.
reflecting the professional practices of a growing team of faculty members. Currently, emphases offered are:

- Animation.
- Digital sculpture.
- Digital video.
- Installation.
- Mixed media.
- Performance.
- Web art.

The ideal student not only is well-grounded in traditional studio practice, but is interested in exploring experimental processes in:

- Animation.
- Installation.
- Performance.
- Sound design.
- 3-D modeling.
- Video.
- Web art.

In addition to a wide range of courses in intermedia, students are encouraged to take advantage of the academic excellence ASU provides as a leading research university by taking classes for full credit in other programs and disciplines. Through regular visiting artist talks, seminars and one-on-one faculty mentorship, the intermedia program offers an engaging environment for critical thinking and creative development.

**Program Requirement:** A minimum of 60 hours of graduate credit subject to committee approval is required, including:

1. Twenty-seven to 32 graduate studio credit hours in the major area(s) of concentration (with the exception of digital technology where 18 credit hours are studio classes and 18 credit hours are independent research).
2. Six credit hours of graduate-level art history and three credit hours of other interdisciplinary graduate credit to supplement M.F.A. work (nonstudio courses), except for digital technology, which requires six credit hours of art history.
3. Nine credit hours of graduate-level course work outside of the major area of concentration, of which three credit hours must begin with the ART prefix and the remaining six credit hours may be outside the School of Art (except for digital technology, which requires nine credit hours of electives in the School of Art and Arts, Media and Engineering).
4. Ten to 15 hours of ART 680 Practicum, resulting in an M.F.A. exhibition (except for digital technology, where six hours will be ART 680 and six hours will be AME 593).
Admission Requirements: A bachelor’s degree from a regionally accredited college or university recognized by ASU is required. All applicants must submit an online application to the Graduate College.

All students applying for the M.F.A. program must submit to the graduate coordinator:

1. A portfolio of images of their work on a CD-ROM disk containing 20 JPEG files (1000 pixels in the long dimension) or 20 images assembled as a PowerPoint presentation.
2. Three letters of recommendation.
3. A current curriculum vitae.
4. A statement of intent pertaining to the student’s educational objectives.

Contact:
School of Art
http://art.asu.edu
ART 102
480/965-6303

Landscape Architecture (MLA) ARLDEMLA
Herberger Institute for Design and the Arts

Official Degree Awarded: MLA Landscape Architecture

Program Description: The M.L.A. at ASU prepares individuals for the independent professional practice of landscape architecture and research in various aspects of the field including geology and hydrology; project and site planning; landscape design, history and theory; environmental design; application law and regulations; and professional responsibilities and standards.

The program leverages the arid urban context and rapidly urbanizing landscape of the Phoenix metropolitan region. In response to global depletion of natural resources, global warming and other population-impacted ecological conditions, the curriculum is focused on issues of sustainable landscape urbanism. Students are encouraged to pursue a joint degree with the school’s M.S. in building design and/or the Master of Urban Design degree program.

Applicants who already hold a bachelor’s degree in another field should apply to the three-plus-year M.L.A. degree program.

Program Requirement: Master of Landscape Architecture Program Two-Year Degree Requirements

First Year (Fifth Year)

Fall (14)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDE 521</td>
<td>Advanced Architectural Studio I</td>
<td>5</td>
</tr>
<tr>
<td>LTC 563</td>
<td>Planting Design</td>
<td>3</td>
</tr>
<tr>
<td>LPH 513</td>
<td>Research in Landscape Architecture Seminar</td>
<td>3</td>
</tr>
<tr>
<td>ATE 598</td>
<td>Sustainability of the Built Environment</td>
<td>3</td>
</tr>
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</table>

**Spring (14)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDE 522</td>
<td>Advanced Landscape Architectural Studio</td>
<td>5</td>
</tr>
<tr>
<td>LTC 546</td>
<td>LA Alternative technologies and Materials</td>
<td>3</td>
</tr>
<tr>
<td>LPH 612</td>
<td>Landscape Architecture Research Methods</td>
<td>3</td>
</tr>
<tr>
<td>L/APH 505</td>
<td>Foundation Theory Seminar</td>
<td>3</td>
</tr>
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</table>

**Summer**

ARP 584 Clinical Internship 1 (3)

**Second Year (Sixth Year)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>LDE 621</td>
<td>Advanced Landscape Architectural Studio</td>
<td>5</td>
</tr>
<tr>
<td>LTC 598</td>
<td>ST: Urban Ecological Design</td>
<td>3</td>
</tr>
<tr>
<td>LPH 613</td>
<td>Landscape Architecture Seminar</td>
<td>3</td>
</tr>
<tr>
<td>Herberger Institute for Design and the Arts professional graduate design elective*</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Spring (14)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDE 622</td>
<td>Advanced Landscape Architectural Studio</td>
<td>5</td>
</tr>
<tr>
<td>L/AAD 652</td>
<td>Professional Practice</td>
<td>3</td>
</tr>
<tr>
<td>LTC 598</td>
<td>ST Urban Landscape Water Systems and Management</td>
<td>3</td>
</tr>
<tr>
<td>Graduate elective</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Total Graduate Hours in Program: 56**

* The list of Herberger Institute for Design and the Arts design electives can be found on the institute’s Web site: http://www.design.asu.edu.

**Master of Landscape Architecture Program Three-Plus-Year Requirement**

**Note:** Bolded courses are considered deficiencies and do not count toward official program of study.

**First Year**

**Summer**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDE 590</td>
<td>Foundation Architectural Studio</td>
<td>6</td>
</tr>
<tr>
<td>ALA 102</td>
<td>Architecture, Landscape Architecture and Society (first five-week session)</td>
<td>3</td>
</tr>
</tbody>
</table>
ALA 236 Computers in Landscape Architecture (first five-week session) (3)
APH 509 Foundation Seminar (second five-week session) (3)

Fall
LDE 511 Core Architectural Studio I (6)
LPH 310 History of Landscape Architecture (3)
LTC 342 Landscape Implementation-Grading (3)
LTC 598 ST: Natural Factors (3)

Spring
ADE 512 Core Landscape Architectural Studio (6)
LPH 311 Contemporary Landscape Architecture (3)
LTC 344 Landscape Implementation-Construction (3)
LTC 494 Plant Materials (3)

After the first summer and academic year, the three-plus-year curriculum merges with the two-year curriculum and they are the same.

Admission Requirements: Admissions Requirements to the Two-Year Program:

Applicants must:

1. Hold an undergraduate or graduate degree from a college or university recognized by ASU.
2. Have completed a four-year B.S. in landscape architectural studies or similar preprofessional degree in architecture. The bachelor's degree must be granted by an institution that offers the Landscape Architectural Accreditation Board (LAAB) accredited degree program in architecture.
3. Meet the minimum GPA requirements as established by the Graduate College. Provide an official copy of GRE scores (unofficial copies will not be accepted). For more information on the GRE see (http://www.gre.org). The School of Architecture and Landscape Architecture does not have a minimum score for admission, however, the average scores of admitted students are between 500-600 for each section.

In addition to the above requirements, international students are required to submit an official Test of English as a Foreign Language (TOEFL) score (http://www.toefl.org). The minimum score for admission to the program is 100 (Internet-based), 250 (computer-based) or 600 (paper-based). Other information for international applicants can be found on the Graduate College Web site at http://graduate.asu.edu/admissions/international.html.

Additional Admission Requirements

Applicants should write their name in a clear and consistent manner on all materials submitted, preferably in the “family name, first name” format (e.g. Smith, John).
Statement of Intent. A personal narrative (maximum 600 words or two pages typed) indicating the applicant's interest, previous academic and practical background, as well as personal and professional educational objectives.

Letters of Recommendation. A minimum of three letters of recommendation in support of the applicant must be mailed directly to the graduate admissions committee, School of Architecture and Landscape Architecture. The references should be from professionals or educators familiar with the applicant's experience and capability for graduate work.

Portfolio. Candidates applying for the two-year Master of Landscape Architecture program must also provide a portfolio of creative works. See the portfolio requirements outlined on the Herberger Institute for Design and the Arts Web site for more information.

Submit the statement of intent, recommendation letters, creative works portfolio and the contact information sheet to the following address:

Master of Architecture and Landscape Architecture Admissions Committee
School of Architecture and Landscape Architecture
Arizona State University
P.O. Box 871605
Design North, room 162
Tempe, AZ 85287-1605

Please submit your online application and fees, test scores (GRE or TOEFL) and official transcripts from all post-secondary institutions directly to the Graduate College.

Admissions Requirements to the Three-Plus-Year Program:

Applicants must:

Apply and then begin the program in the summer.

Hold an undergraduate or graduate degree from a college or university recognized by ASU.

Have earned a bachelor's degree in a field other than architectural studies leading to the NAAB-accredited program.

Meet the minimum GPA requirements as established by the Graduate College. Provide an official copy of GRE scores (unofficial copies will not be accepted). For more information on the GRE see http://www.gre.org. The School of Architecture and Landscape Architecture does not have a minimum score for admission; however, the average scores of admitted students are between 500-600 for each section.
In addition to the above requirements, international students are required to submit an official Test of English as a Foreign Language (TOEFL) score (http://www.toefl.org). The minimum score for admission to the program is 100 (Internet-based), 250 (computer-based) or 600 (paper-based).

Contact:
School of Architecture and Landscape Architecture
http://design.asu.edu/sala/index.shtml
sala.grad@asu.edu
CDN 162
480/965-3536

Media Arts and Sciences (PhD) FAMASPHD
Herberger Institute for Design and the Arts & Ira A. Fulton School of Engineering

Official Degree Awarded: PHD Media Arts and Sciences

Program Description: Media, art and sciences Ph.D. students train in translating, transporting and combining knowledge across disciplines for the development of innovative experiential media systems and accompanying theoretical models. The degree structure includes transdisciplinary media courses through the Arts, Media and Engineering Program (AME), elective-course credits relating to the student’s research interests, and substantial research and dissertation hours devoted to collaborative research within the AME network. Active participation in AME interdisciplinary research teams allows media, art and sciences Ph.D. students to gain and contribute expertise in knowledge fusion for digital media.

Program Requirement: The program requires a total of 84 credit hours. Thirty of the 39 required course credits will be from the transdisciplinary media courses offered by Arts, Media and Engineering Program (AME). All students will be required to take a minimum of two courses under each of the five constituting areas of experiential media (30 hours). The selection of the two courses under the introductory category will depend on the student.

Admission Requirements: Applicants will be required to submit:

1. A graduate admissions application.
2. Official transcripts of all undergraduate and graduate course work (if applicable).
3. Official GRE scores.
5. Statement of purpose.
6. Three letters of recommendation and a portfolio of supporting material.

Additionally, the statement of purpose should explain in a concise and persuasive manner how the student’s educational, professional and personal experiences inform their research and creative interests, writing on any aspect of their background that supports candidacy to the AME program.
Each applicant must demonstrate entry-level competencies. This can be demonstrated primarily through a portfolio. The portfolio may include previously developed media products or projects and/or publications demonstrating an understanding of and involvement with digital media and computation. Entry-level competency can also be partially demonstrated through course work and may include such courses as:

- Advanced computer programming.
- Computer graphics and animation.
- Computer music.
- Digital design.
- Film theory.
- Interactive technologies.
- Media authoring tools.
- Media theory.
- Multimedia systems.
- Signal processing.

Contact:
Arts, Media and Engineering
http://ame.asu.edu
ameed@asu.edu
BYENG 395
480/965-9168

**Metals (MFA) FAMETALSMF**
Herberger Institute for Design and the Arts

**Official Degree Awarded:** MFA Art (Metals)

**Program Description:** The metals and jewelry program boasts an extraordinarily well-equipped studio, with a huge variety of metal-smithing tools. Students are required to take more class hours and learn more skills than at many other schools. Many students take advantage of the close relationship with the faculty.

**Program Requirement:** A minimum of 60 hours of graduate credit subject to committee approval is required, including:

1. Twenty-seven to 32 graduate studio credit hours in the major area(s) of concentration.
2. Six credit hours of graduate-level art history and three credit hours of other interdisciplinary graduate credit to supplement M.F.A. work (nonstudio courses).

Nine credit hours of graduate-level course work outside of the major area of concentration, of which three credit hours must begin with the ART prefix and the remaining six credit hours may be outside the School of Art.
3. Ten to 15 hours of ART 680 Practicum, resulting in an M.F.A. exhibition.

Admission Requirements: A bachelor’s degree from a regionally accredited college or university recognized by ASU is required. All applicants must submit an online application to the Graduate College. All students applying for the M.F.A. must submit to the graduate coordinator:

1. A portfolio of images of their work on a CD-ROM disk containing 20 JPEG files (1000 pixels in the long dimension) or 20 images assembled as a PowerPoint presentation.
2. Three letters of recommendation.
3. A current curriculum vitae.
4. A statement of intent pertaining to the student’s educational objectives.

Contact:
School of Art
http://art.asu.edu
ART 102
480/965-6303

Music - Interdisciplinary Dig. Media & Perf. (DMA) FAINTDDMA
Herberger Institute for Design and the Arts

Official Degree Awarded: DMA Music (Interdisciplinary Digital Media and Performance)

Program Description: The D.M.A. with a concentration in interdisciplinary digital media and performance trains students who have interests and skills in unique cross sections of the arts and sciences. The degree expands the School of Music offerings to include areas, which hold great promise for individual student’s professional aspirations. It also keeps the School of Music and its students actively involved in current developments in the ever-changing field of media. The state-of-the-art media facilities of the Arts, Media and Engineering Program (AME) and its hybrid arts-engineering faculty and courses will be an invaluable asset to music students, with resources that complement existing or future courses in electronic music.

Program Requirement: This degree program requires:

1. Ninety credit hours.
3. Written examination.
4. Oral examination. The program requires 36 hours in arts, media and engineering, 30 hours in music studies and 24 hours in research and dissertation.

Admission Requirements: Applicants must submit the Graduate College online application. Either a portfolio of works or a performance audition is required, as
suits your area of expertise. Application materials should address the hybrid nature of the Arts, Media and Engineering Program.

Send the following items directly to AME, even if duplicates have been sent to the department:

1. Statement of purpose.
2. Curriculum vitae.
3. The statement of purpose must fulfill any requirements of the department and also address the transdisciplinary nature of the Arts, Media and Engineering Program. Applicants should explain in a concise and persuasive manner how their educational, professional and personal experiences inform their research and creative interests, writing on any aspect of their background that supports candidacy to the program.

Contact:
School of Music
http://ame.asu.edu
SOMAdmissions@asu.edu
Music E167
480/965-5069

Music - Interdisciplinary Dig. Media & Perf. (MM) FADIGITMM
Herberger Institute for Design and the Arts

Official Degree Awarded: MM Composition (Interdisciplinary Digital Media and Performance)

Program Description: The M.M. with a concentration in interdisciplinary digital media and performance trains students who have interests and skills in unique cross sections of the arts and sciences. The degree expands the School of Music's offerings to include areas which hold great promise for individual student's professional aspirations. The program provides School of Music students active involvement in current developments in the ever-changing field of media. The state of the art media facilities of Arts, Media and Engineering Program (AME) and its hybrid arts-engineering faculty and courses will be an invaluable asset to music students, with resources that complement existing or future courses in electronic music.

Program Requirement: The program requires:

1. Thirty-two credit hours.
3. A written comprehensive examination.

Admission Requirements: In addition to the ASU Graduate College requirements and School of Music application form, applicants must submit:
1. Three original works showing technical facility in composition.
2. Letters of recommendation from two qualified persons in the field.
3. A one-page personal statement outlining the applicant's educational and career goals.
4. A statement of purpose that addresses the transdisciplinary nature of the Arts, Media and Engineering Program.

Contact:
School of Music
http://ame.asu.edu
SOMadmissions@asu.edu
MUSIC E167
480/965-5069

Music Composition (DMA) FACOMPDM
Herberger Institute for Design and the Arts

Official Degree Awarded: DMA Music (Music Composition)

Program Description: The D.M.A. is a professional program designed for students desiring high-levels of performance, academic proficiency and preparation for teaching positions at the university level. The major is music with four concentrations:

1. Conducting.
4. Performance (instrumental, keyboard, collaborative piano, piano pedagogy, voice).

Program Requirement: A total of 90 credit hours beyond the bachelor's degree is required. Only 30 hours from a previously awarded master's degree will be counted toward the 90 hour requirement.

Once admitted to a D.M.A. program, the student is expected to be enrolled continuously, excluding summer sessions, until all requirements for the degree have been fulfilled. In general, the D.M.A. student should expect to spend at least the equivalent of three academic years beyond the bachelor's degree in the program. A minimum of two semesters must be spent in continuous full-time residence at ASU. At least 54 hours must be completed in residence at ASU.

The music composition concentration requires the creation of a significant original work of music (considered to be a dissertation) and either two article-length research papers or another substantial paper.

Admission Requirements: Students seeking admission normally hold the M.M. Applicants with other degrees are considered if they have received graduate training similar to that normally expected in a M.M. program. All applicants must
submit the Graduate College online application. The application for admission must be accompanied by:

1. An applicant's statement relating to goals, preparation and educational background.
2. A portfolio presenting evidence of accomplishment as a composer, at least three works should be submitted. Materials may include scores, recordings of performances, electronic tapes and/or videotapes. Recent works are preferred.
3. Scores for the GRE (quantitative, verbal and analytical) or the MAT.
4. Three letters of recommendation.

The deadline is Feb. 15 for teaching assistantship applications.

Contact:
School of Music
http://music.asu.edu
SOMadmissions@asu.edu
MUSIC E167
480/965-5069

Music Composition (MM) FAMCOMPMM
Herberger Institute for Design and the Arts

Official Degree Awarded: MM Composition

Program Description: The M.M. with a concentration in composition focuses on helping students develop the skills necessary to pursue and advance a career in music composition. The faculty are recognized, active composers whose music represents a wide variety of genres—ranging from chamber to orchestral, acoustic to electronic.

Program Requirement: Degree requirements include:

1. Nine hours of composition.
2. Nine hours of music theory and history.
3. Eight hours of electives.
4. Six hours of thesis.

The thesis is an original composition that demonstrates mastery of composing for the selected performance medium and the coherent organization of musical material. Written and oral examinations are required. An oral defense of the thesis is also required.

Admission Requirements: In addition to the ASU Graduate College requirements and School of Music application form, you must submit:

1. Three original works showing technical facility in composition.
2. Letters of recommendation from two qualified persons in the field.
3. A one-page personal statement outlining your educational and career goals.

Contact:
School of Music
http://music.asu.edu
SOMadmissions@asu.edu
MUSIC E167
480/965-5069

Music Education (DMA) FAMUSEDDMA
Herberger Institute for Design and the Arts

Official Degree Awarded: DMA Music (Music Education)

Program Description: The D.M.A. is a professional program designed for students desiring high-levels of performance, academic proficiency and preparation for teaching positions at the university level. The major is music with four concentrations:

1. Conducting.
4. Performance (instrumental, keyboard, collaborative piano, piano pedagogy, voice).

Program Requirement: A total of 90 credit hours beyond the bachelor’s degree is required. Only 30 hours from a master’s degree will be counted toward the 90 hour requirement.

Once admitted to a D.M.A. program, the student is expected to be enrolled continuously, excluding summer sessions, until all requirements for the degree have been fulfilled. In general, the D.M.A. degree student should expect to spend at least the equivalent of three academic years beyond the bachelor’s degree in the program. At least two semesters must be spent in continuous full-time residence at ASU. At least 54 hours must be completed in residence at ASU.

The music education concentrations require a dissertation of an original and creative nature.

Admission Requirements: Applicants with other degrees are considered if they have received graduate training similar to that normally expected in a M.M. education program. All applicants must submit a Graduate College online application. The application for admission must be accompanied by:

1. An applicant's statement relating to goals, preparation and educational background.
   Scores for the GRE (quantitative, verbal and analytical) or the MAT.
2. Three letters of recommendation.
3. A clear videotape of a rehearsal or class.
4. An example of scholarly work or publication (e.g., term paper).

Once the materials have been reviewed, an applicant may be asked to a live interview. The deadline is Feb. 15 for teaching assistantship applications.

Contact:
School of Music
http://music.asu.edu
SOMadmissions@asu.edu
MUSIC E167
480/965-5069

Music Education (MM) FAMUSEDMM
Herberger Institute for Design and the Arts

Official Degree Awarded: MM Music Education

Program Description: The faculty in the School of Music offer a graduate program leading to the professional M.M.

Three majors are available:

- Composition.
- Music Education.
- Performance.

For the music education major, concentrations are available in:

- Choral music.
- General music.
- Instrumental music.
- Jazz studies.

Program Requirement: A total of 32 credit hours in the following areas is required:

Choral Music

MUE 548, 549, 550 (or 579), 568, 570
- Two credit hours of ensemble
- Six credit hours of music history (including MHL 675)
- Five or six hours of music theory

General Music

MUE 548, 549, 550 (or 579), 551, 552
- Six credit hours of music history
Five or six hours of music theory
One MHL course or one ensemble must be in ethnomusicology

Instrumental Music

MUE 548, 549, 550 (or 579), 564, 566
Six credit hours of music history
Five or six hours of music theory

Jazz Studies

MUE 548, 549, 550 (or 579), 560, 562 (two semesters)
MUP 509, 510, 517, 518
Three credit hours of jazz ensemble
Six credit hours of music history
Five or six hours of music theory (including MTC 598 Jazz Theory and Ear Training)

Admission Requirements: A B.M. or its equivalent from a regionally accredited institution is required for admission to the M.M. program. A post-baccalaureate certificate is available and may be completed concurrently with master's degree work. All applicants must submit a Graduate College online application. For admission to the M.M. in music education, the applicant must:

1. Have completed all requirements for music teacher certification.
2. Submit letters of recommendation from three qualified persons in the field are also required.
3. For the jazz studies concentration, a video or audio tape of a recent jazz performance (solo or ensemble) by the applicant must be submitted, and a video or audio tape of a jazz ensemble directed by the applicant should also be submitted, if available.

Contact:
School of Music
http://music.asu.edu
SOMadmissions@asu.edu
MUSIC E177
480/965-5069

Music History and Literature (MA) FAMHISTMA
Herberger Institute for Design and the Arts

Official Degree Awarded: MA Music (Music History and Literature)

Program Description: The M.A. with a concentration in music history and literature focuses on the systematic scholarly study of a broad range of musicological styles and eras. The faculty comprises leading scholars in a broad range of areas including
American music, musical cultures of the American Southwest, music in popular cultures and Western European art music.

*Program Requirement:* A minimum of 30 credit hours of graduate credit is required, of which at least two-thirds must be in the field of music history and literature and five or six credit hours in music theory.

- MHL 532, 591 (two semesters)
- 599 Thesis
- Five or six hours of music theory
- Two credit hours of course work approved by the school

A passing grade on the foreign language examination in French or German is required for graduation.

*Admission Requirements:* In addition to the ASU Graduate College requirements and a School of Music application form, interested students must submit:

1. Evidence of scholarly achievement or potential (e.g., a term paper).
2. Letters of recommendation from two qualified persons in the field.
3. A one- to two-page personal statement explaining the relationship between the student’s professional and/or personal goals and admission into the M.A. program.

*Contact:*
School of Music  
http://music.asu.edu  
SOMadmissions@asu.edu  
MUSIC E167  
480/965-5069

**Music Performance (DMA) FAPERFDMA**  
Herberger Institute for Design and the Arts

*Official Degree Awarded:* DMA Music (Performance)

*Program Description:* The D.M.A. is a professional degree program designed for students desiring high levels of performance, academic proficiency and preparation for teaching positions at the university level. The major is music with four concentrations:

- Conducting.
- Music composition.
- Music education.
- Performance (instrumental, keyboard, collaborative piano, piano pedagogy, voice).

*Program Requirement:* A total of 90 credit hours beyond the bachelor’s degree is required. Only 30 hours from a master’s degree will be counted toward the 90 hour requirement.
requirement.

Once admitted to a D.M.A. program, the student is expected to be enrolled continuously, excluding summer sessions, until all requirements for the degree have been fulfilled. In general, the D.M.A. student should expect to spend at least the equivalent of three academic years beyond the bachelor's degree in the program. At least two semesters must be spent in continuous full-time residence at ASU. At least 54 hours must be completed in residence at ASU.

The performance concentration requires at least three recitals after admission to the program and a research paper/project. All candidates must enroll for a total of 24 credit hours in research (MUP 792), and solo performance (MUP 796).

**Admission Requirements:** Students seeking admission normally hold the M.M. degree. Applicants with other degrees are considered if they have received graduate training similar to that normally expected in a M.M. degree program. All applicants must submit the Graduate College online application. The application for admission must include:

1. An applicant’s statement relating to goals, preparation and educational background.
2. Submit scores for the GRE (quantitative, verbal and analytical) or the MAT.
3. Three letters of recommendation.
4. A live audition is required. This must include materials from a variety of stylistic periods; a repertoire list must included.

A required repertoire list should include works studied and performed following high school. The list should be divided into two sections:

1. Work publicly performed.
2. Works studied.

In the event a live audition is not possible, tapes may be submitted. If a recorded audition is approved for admission, applicants will be granted “regular admission with deficiencies” or “provisional admission” status until an on-campus audition can be arranged during the first month following the beginning of instruction.

The deadline is Feb. 15 for teaching assistantship applications.

**Contact:**
http://music.asu.edu
SOMadmissions@asu.edu
MUSIC E167
480/965-5069

**Music Performance (MM) FAPERF3MM**
Herberger Institute for Design and the Arts
Official Degree Awarded: MM Performance (Performance)

Program Description: The M.M. with a concentration in performance stresses the pedagogical and performance practices of major western art music. Students work on specific skills for their instrument while developing the knowledge and abilities to be leaders in the music community. The faculty comprises nationally and internationally-recognized teachers, performers and pedagogues in their performance area.

Program Requirement: A total of 32 credit hours are required for the degree including six hours of study in the concentration area, including eight hours of studio instruction and 16 hours in music history, music theory and electives. Written and oral examinations are required.

Admission Requirements: A B.Mus. degree or its equivalent (from an accredited institution) is required for admission to the M.M. program. In addition to the ASU Graduate College requirements and School of Music application form, admission to all concentrations in performance are dependent on a successful audition, either in person or by taped performance. Applicants should also submit a repertoire list as evidence of previous study.

Contact:
School of Music
http://music.asu.edu
SOMadmissions@asu.edu
MUSIC E167
480/965-5069

Music Theatre/Opera Musical Direction (MM) FAMUSTHMM
Herberger Institute for Design and the Arts

Official Degree Awarded: MM Performance (Music Theatre/Opera Musical Direction)

Program Description: The M.M. with a concentration in music theatre and opera direction stresses study, individual practice, class work and rehearsals that come together in the productions of the Lyric Opera Theatre, our performance ensemble. Students have the opportunity to work with our faculty and also with world-class guest directors. Every production is fully produced with sets, costumes, lighting and full orchestration.

Program Requirement: A total of 32 credit hours are required for the degree. Degree requirements include:

1. Fifteen hours of study in the concentration area.
2. Six hours of studio instruction (piano).
3. Eleven hours in music history, music theory and electives.
4. Part of the concentration hours must include the musical direction of two Broadway musical productions, which may be either fully staged or workshop productions (MUP 596 and 597).

5. Written and oral examinations are required.

Admission Requirements: A B.Mus., or its equivalent, from a regionally accredited institution is required for admission to the M.M. program. In addition to the ASU Graduate College requirements and School of Music application form, admission to all concentrations in performance are dependent on a successful audition, either in person or by taped performance. Applicants should also submit a repertoire list as evidence of previous study.

Contact:
School of Music
http://music.asu.edu
SOMadmissions@asu.edu
MUSIC E167
480/965-5069

Music Therapy (MM) FAMTHERMM
Herberger Institute for Design and the Arts

Official Degree Awarded: MM Music Therapy

Program Description: The faculty in the School of Music offer a graduate program leading to the professional M.M. degree. The graduate degree in music therapy provides music therapists graduate-level study in the theory and practice of music therapy.

Program Requirement: Students are required to complete a minimum of 32 credit hours of graduate course work, of which a least one-third must be in the area of concentration. The music therapy core is comprised of 12 credit hours and eight or nine music history and literature and music theory and composition courses. Electives are also taken, as determined by the music therapy advisor.

Admission Requirements: In addition to the ASU Graduate College requirements and School of Music application form, applicants must submit:

1. Music Therapy Application. Applicants with a bachelor’s degree in music therapy may apply for the master’s degree in music therapy. Applicants with any other bachelor’s degree must apply for the music therapy equivalency program. International students must apply for the master’s degree in music therapy.

2. Audition in functional music skills, involving the demonstration of advanced guitar accompaniment skills, piano accompaniment in several styles, improvisation skills and vocal abilities. An audition tape can be submitted.
3. An in-depth interview is required emphasizing the applicant's music therapy philosophy, research activities and clinical interests. A phone interview can be arranged.

Contact:
School of Music
http://music.asu.edu
SOMadmissions@asu.edu
MUSIC E167
480/965-5069

Painting (MFA) FAPaintMFA
Herberger Institute for Design and the Arts

Official Degree Awarded: MFA Art (Painting)

Program Description: Faculty assist students in both artistic and professional development, teaching about portfolio development, photographing artwork, acquiring a gallery affiliation, different types of exhibition venues available.

Program Requirement: A minimum of 60 hours of graduate credit subject to committee approval is required, including:

1. Twenty-seven to 32 graduate studio credit hours in the major area(s) of concentration.
2. Six credit hours of graduate-level art history and three credit hours of other interdisciplinary graduate credit to supplement M.F.A. work (nonstudio courses).
3. Nine credit hours of graduate-level course work outside of the major area of concentration, of which three credit hours must begin with the ART prefix and the remaining six credit hours may be outside the School of Art.
4. Ten to 15 hours of ART 680 Practicum, resulting in an M.F.A. exhibition.

Admission Requirements: A bachelor's degree from a college or university recognized by ASU is required. All applicants must submit the Graduate College online application. All students applying for the M.F.A. degree must submit to the graduate coordinator:

1. A portfolio of images of their work on a CD-ROM disk containing 20 JPEG files (1000 pixels in the long dimension) or 20 images assembled as a PowerPoint presentation.
2. Three letters of recommendation.
3. A current curriculum vitae.
4. A statement of intent pertaining to the student’s educational objectives are also required.

Contact:
School of Art
Performance Pedagogy (MM) FAPPEDMM
Herberger Institute for Design and the Arts

Official Degree Awarded: MM Performance (Performance Pedagogy)

Program Description: The M.M. with a concentration in performance pedagogy stresses both the performance and teaching of major Western art music. Students work on specific performance skills while developing the knowledge and abilities to be music pedagogues in their area. The faculty comprises nationally and internationally-recognized teachers, performers and pedagogues in their performance area.

Program Requirement:

Total: 32 credit hours

Foreign Language Requirement

- None for instrumental or piano.
- For voice, 16 hours of college-level credit in more than one foreign language, chosen from French, German and Italian.

Examinations

Written and oral examinations are required for graduation.

Admission Requirements:

All applicants must:

1. Submit the Graduate College online application. A B.Mus. or its equivalent from an accredited institution.
2. Successfully audition, either in person or by taped performance.
3. Submit a repertoire list demonstrating previous study.
4. Demonstrate evidence of teaching ability, either in person or by videotape.

Students majoring in performance with a concentration in performance pedagogy (voice) are required to take a diction examination in French, German and Italian during registration week of their first semester. Students who do not pass this examination are required to take the appropriate semester(s) of MUP 250.

For admission to the concentration in performance pedagogy (piano), a minimum of one semester of prior piano pedagogy study that includes significant intern teaching experience is required.
Photography (MFA) FAPHOTOMFA
Herberger Institute for Design and the Arts

Official Degree Awarded: MFA Art (Photography)

Program Description: The photography program includes critical and cultural analysis of photography. Students can explore interdisciplinary options in their art through close links among the photography program and a number of other disciplines, including printmaking, intermedia and sculpture. The Northlight Gallery is part of the School of Art’s photography program and students have the opportunity to exhibit, view and study the work of outstanding photographic artists from across the country. Students who take the photographic exhibitions class learn how to run a gallery and get practical experience and theoretical training.

Program Requirement: A minimum of 60 hours of graduate credit subject to committee approval is required, including:

1. Twenty-seven to 32 graduate studio credit hours in the major area(s) of concentration.
2. Six credit hours of graduate-level art history and three credit hours of other interdisciplinary graduate credit to supplement M.F.A. work (nonstudio courses).
3. Nine credit hours of graduate-level course work outside of the major area of concentration, of which three credit hours must begin with the ART prefix and the remaining six credit hours may be outside the School of Art.
4. Ten to 15 hours of ART 680 Practicum, resulting in an M.F.A. exhibition.

Admission Requirements: All applicants must submit the Graduate College online application. A bachelor’s degree from a regionally accredited college or university recognized by ASU is required. All students applying for the M.F.A. must submit to the graduate coordinator:

1. A portfolio of images of their work on a CD-ROM disk containing 20 JPEG files (1000 pixels in the long dimension) or 20 images assembled as a PowerPoint presentation.
2. Three letters of recommendation.
3. A current curriculum vitae.
4. A statement of intent pertaining to the student’s educational objectives.

Contact:
School of Art
Piano, Collaborative (MM) FACPIANOMM
Herberger Institute for Design and the Arts

Official Degree Awarded: MM Performance (Collaborative Piano)

Program Description: Students majoring in collaborative piano work with all instrumental and vocal areas, concentrating on collaborative endeavors such as duo recitals and chamber music. Students also work on specific skills for their instrument while developing the knowledge and abilities to be skilled and sensitive musical collaborators.

Program Requirement: A minimum of 32 credit hours are required for the degree. Degree requirements include:

Eighteen credit hours in collaborative piano and performance.

Fourteen credit hours of music history, theory and electives.

At least one year of college-level instruction in either French, German, or Italian and at least one of the following are required:

1. One semester of diction in each of the two other languages.
2. One semester of language instruction in each of the two other languages.

Written and oral examinations are also required for the completion of the degree.

Admission Requirements: In addition to the ASU Graduate College requirements and the School of Music application form, students must:

1. Submit repertoire lists as evidence of previous study.
2. Complete an acceptable, in-person audition in collaborative piano.

Contact:
School of Music
http://music.asu.edu
SOMadmissions@asu.edu
MUSIC E167
480/965-5069

Printmaking (MFA) FAPRINTMFA
Herberger Institute for Design and the Arts

Official Degree Awarded: MFA Art (Printmaking)
Program Description: Unusual study options include photogravure, collotype and bookmaking. Combined with the major printmaking forms of intaglio, lithography, screen printing and relief, they create a rare combination of study options not available anywhere else in the country. Photo-processing for printmaking and papermaking are also available.

Book arts (one of fewer than a dozen bookmaking programs in the country) and the renowned Pyracantha Press are premier aspects of the program. There also are classes in papermaking.

Interdisciplinary collaboration is encouraged and students often work with other departments in the School of Art, particularly photography and intermedia.

Graduates of the printmaking program go on to careers that include teaching and studio jobs in some of the country’s best fine art print publishing studios. Many former students continue to be productive artists, exhibiting nationally.

Program Requirement: A minimum of 60 hours of graduate credit subject to committee approval is required, including:

1. Twenty-seven to 32 graduate studio credit hours in the major area(s) of concentration.
2. Six credit hours of graduate-level art history and three credit hours of other interdisciplinary graduate credit to supplement MFA work (nonstudio courses).
3. Nine credit hours of graduate-level course work outside of the major area of concentration, of which three credit hours must begin with the ART prefix and the remaining six credit hours may be outside the School of Art.
4. Ten to 15 hours of ART 680 Practicum, resulting in an MFA exhibition.

Admission Requirements: All applicants must submit the Graduate College online application. A bachelor's degree from a regionally accredited college or university recognized by ASU is required. All students applying for the M.F.A. must submit to the graduate coordinator:

1. A portfolio of images of their work on a CD-ROM disk containing 20 JPEG files (1000 pixels in the long dimension) or 20 images assembled as a PowerPoint presentation.
2. Three letters of recommendation.
3. A current curriculum vitae.
4. A statement of intent pertaining to the student's educational objectives.

Contact:
School of Art
http://art.asu.edu
ART 102
480/965-6303
Real Estate Development (MRED) ARREMREDEV
Herberger Institute for Design and the Arts

Official Degree Awarded: MREDv Real Estate Development

Program Description: The M.R.E.D. program is unlike any other in the nation; it is built upon an innovative transdisciplinary curriculum offered by departments in design, law, business and construction. The curriculum is presented in a fast-paced sequence of topics and issues reflective of the real estate development process.

The curriculum covers specific core knowledge centers and strategic decision-making tools during each of the eight program segments: valuation, segmentation, location, conceptualization, regulations, capitalization, construction, value realization and community.

The M.R.E.D. is as an accelerated, 30-credit-hour, 30-week, full-immersion program focused on educating students and mid-career professionals in real estate development. The curriculum includes three synthesis projects that serve as core knowledge demonstration events along with relevant industry case studies, interactive classroom exercises, collaborative group engagements, integration of topical research, site visits, professional mentor presentations and meetings, distinguished visitor lectures and social events. An applied project (third synthesis project) is required as a culminating experience.

For more information, see http://www.mred.asu.edu.

Program Requirement: Thirty credit hours and an applied project are required.

Admission Requirements: Apply online through the ASU Graduate College.

To be eligible for admission to graduate studies, students must have the following:

1. A bachelor's degree or the equivalent from a regionally accredited institution.
2. A 3.00 GPA.

Other required application materials include a GMAT, LSAT, GRE test score or a petition to waive (if the applicant has five or more years of industry relevant experience), three letters of recommendation and a personal statement.

Contact:
School of Architecture and Landscape Architecture
http://www.mred.asu.edu
mred@asu.edu
CAM
480/965-8517
Sculpture (MFA) FASCULPMFA
Herberger Institute for Design and the Arts

Official Degree Awarded: MFA Art (Sculpture)

Program Description: Hard-to-find opportunities to work in neon, study electronics and kinetics in sculpture, or cast in iron, bronze and aluminum all are offered here. A couple of filmmaking courses and one in clay animation are also offered. Combine these with woodworking, metal fabrication, installation and public art, and you have a program with something for everyone. While classes run the gamut of the contemporary sculpture environment, there also is an emphasis on helping students put today’s creations in the context of the history of sculpture. Other opportunities include personal studio space for advanced undergraduate students and visiting artists who provide lectures and one-on-one critiques of student’s work.

Program Requirement: A minimum of 60 hours of graduate credit subject to committee approval is required, including:

1. Twenty-seven to 32 graduate studio credit hours in the major area(s) of concentration.
2. Six credit hours of graduate-level art history and three credit hours of other interdisciplinary graduate credit to supplement MFA work (nonstudio courses).
3. Nine credit hours of graduate-level course work outside of the major area of concentration, of which three credit hours must begin with the ART prefix and the remaining six credit hours may be outside the School of Art.
4. Ten to 15 hours of ART 680 Practicum, resulting in an MFA exhibition.

Admission Requirements: All applicants must submit the Graduate College online application. A bachelor’s degree from a college or university recognized by ASU is required. All students applying for the M.F.A. must submit to the graduate coordinator:

1. A portfolio of images of their work on a CD-ROM disk containing 20 JPEG files (1000 pixels in the long dimension) or 20 images assembled as a PowerPoint presentation.
2. Three letters of recommendation.
3. A current curriculum vitae.
4. A statement of intent pertaining to the student’s educational objectives.

Contact:
School of Art
http://art.asu.edu
ART 102
480/965-6303

Theatre (MA) FATHEAMA
Herberger Institute for Design and the Arts
Official Degree Awarded: MA Theatre

Program Description: The M.A. in theatre introduces students to graduate-level study in the history, theory and practice of theatre. It is designed for individuals who wish to prepare to enter a Ph.D. program, for K-12 teachers seeking to expand their knowledge of theatre, and for returning students interested in learning more about theatre scholarship and performance.

Program Requirement: The program requires 30 credit hours:

1. Twenty-four credit hours of graduate course work (nine credits of required courses and 15 credits of electives).
2. Six credit hours devoted to a final project chosen by the student and approved by the student’s faculty committee.
3. Students may choose to complete an additional six credit hours of courses in lieu of the final project.

Admission Requirements: Students must fulfill both the requirements of the Graduate College and those of the School of Theatre and Film. The deadline for application to the School of Theatre and Film is Feb. 15.

Students should provide:

A statement of purpose—this should address the student’s background and experiences as they relate to their reasons for pursuing the master’s degree, describe their research interests and indicate future career goals.

1. A current curriculum vitae.
2. A sample of scholarly writing.
3. Three letters of recommendation from professionals familiar with their work.

Contact:
http://theatrefilm.asu.edu/
theatre@asu.edu
GHALL 232
480/965-5337

Theatre (Dramatic Writing) MFA FADRWRTMFA
Herberger Institute for Design and the Arts

Official Degree Awarded: MFA Theatre (Dramatic Writing)

Program Description: The concentration in dramatic writing within the theatre M.F.A. will include course work in playwriting, historical studies in theatre, dramatic theory, directing new work, teaching, literary management, electives and related topics such as writing for solo performance, screenwriting, devising and collaborative writing.
The School of Theatre and Film's support for the production of new plays and performance works written by its M.F.A. students, is an aspirational model for other institutions.

Program Requirement: The M.F.A. in theatre with a concentration in dramatic writing is a 60-credit-hour program composed of the following:

1. Required core courses: 27 credit hours.
2. Required concentration courses: nine credit hours.
3. Elective courses: 18 credit hours
4. Applied project: six credit hours

The student will write a thesis play as their applied project, which will be developed as one of the following:

- A full production on the school’s main stage.
- A workshop production.
- A staged reading.

Admission Requirements: Applicants must meet all admission requirements of the Graduate College. In addition, applicants should have an undergraduate major in English or theatre, with a GPA of 3.00 or above (4.00 scale). If an applicant does not have an undergraduate major in English or theatre, the student may be admitted on the basis of excellent creative and academic work. Potential students must submit an online application to the Graduate College.

Applicants must also submit the following:

1. Three letters of recommendation.
2. Current resume.
3. Statement of career goals.
4. Manuscript sample of 30 or more pages of drama.

Contact:
School of Theatre and Film
http://theatrefilm.asu.edu
theatre@asu.edu
GHALL 232
480/965-5337

Theatre - Interdisciplinary Digital Media (MFA) FATHEADMFA
Herberger Institute for Design and the Arts

Official Degree Awarded: MFA Theatre (Interdisciplinary Digital Media)

Program Description: This graduate degree concentration is offered through the School of Theatre and Film in collaboration with the Arts, Media and Engineering Program (AME). It focuses on the growing importance of digital media as a way of both making art and thinking about art. AME program courses and research
activities prepare students to become sophisticated developers, makers, evaluators and entrepreneurs of digital media, while at the same time completing a sequence of core courses in theatre.

**Program Requirement:** The 60 credit hour program includes:

1. Twenty-four hours of core courses in theatre theory, history and practice.
2. A minimum of 18 hours in core AME courses, to be selected in consultation with each student’s AME graduate advisor.
3. Fifteen hours in research and applied project credits. The overall course of study is developed with the advisor to ensure a breadth of transdisciplinary knowledge.

**Admission Requirements:** Students must fulfill the requirements of the Graduate College and those of both the School of Theatre and Film and the Arts, Media and Engineering program. The deadline for application to the School of Theatre and Film is February 15, but please note that for financial aid purposes, the AME deadline is Feb. 1.

The School of Theatre and Film requires the following additional application materials for the M.F.A. in integrated digital media:

1. A statement of purpose detailing the applicant’s background in theatre, as well as the applicant’s interest in and suitability for work in the inter-discipline of theatre and digital media.
2. A portfolio of materials that support the statement of purpose (writing samples, electronic performance materials, etc.).
3. A current resume.
4. Three letters of recommendation from professionals familiar with the applicant’s work.

**Contact:**
School of Theatre and Film
http://theatrefilm.asu.edu/
theatre@asu.edu
GHALL 232
480/965-5337

**Theatre Performance (MFA) FAPERFMFA**
Herberger Institute for Design and the Arts

**Official Degree Awarded:** MFA Theatre (Performance)

**Program Description:** The M.F.A. in theatre with a concentration in performance program readies students for the changing roles of theatre and the performing artist. The School of Theatre and Film offers an approach to training that includes, but goes beyond, traditional actor training. Skills are emphasized for approaching and creating new work, developing artistic entrepreneurship and performance
applications in multimedia, interdisciplinary collaboration, artistic integrity and social responsibility.

Admission to the directing, performance and performance design concentrations is cohort-based. We will accept applications for these concentrations for the 2011 academic year beginning in Fall 2010.

Program Requirement: The M.F.A. in theatre with a concentration in performance is a three-year, 60 credit-hour program.

- The first year is dedicated to individual skill and ensemble building.
- Second-year training further develops the artist’s skills in exploring texts and the worlds they emerge from and help to create; understanding the complexity and dramatic potential inherent in language; encouraging bold and courageous choices; and developing new work that will culminate in a tour.
- The third year serves as a bridge between the educational and professional worlds and the communities they serve.

Students conclude their graduate studies with an applied performance project, specifically suited to their needs and interests. Academic and artistic progress is evaluated at the end of each semester by a faculty committee. Program continuation is contingent upon a successful review.

Admission Requirements: Students are admitted to this program every three years, forming a cohort with their colleagues in the other M.F.A. programs in theatre practice. The next class will begin course work in 2011. Students must fulfill both the requirements of the Graduate College and those of the School of Theatre and Film. The deadline for application to the School of Theatre and Film is Feb. 15.

The School of Theatre and Film requires additional application components for the M.F.A. in theatre (performance):

1. An audition.
2. An interview, either on campus or at one of the University/Resident Theatre Association sites.
3. A statement of purpose.
4. A current resume.
5. Three letters of recommendation from professionals familiar with the student’s work.

Contact:
School of Theatre and Film
http://theatrefilm.asu.edu
theatre@asu.edu
GHALL 232
480/965-4495
Theatre for Youth (MFA) FAYOUTHMFA
Herberger Institute for Design and the Arts

Official Degree Awarded: MFA Theatre (Theatre For Youth)

Program Description: This M.F.A. program offers comprehensive course work in all areas of theatre for youth, renowned faculty, superb facilities, practical experience working in drama and theatre with and for young people and a challenging and supportive atmosphere ideal for educating future leaders in the field.

Program Requirement: The M.F.A. in theatre (theatre for youth) is a three-year, 60 credit hour program. Required core courses are supplemented by elective courses in an emphasis area. The emphasis areas prepare students for careers in professional theatre, as artists or education directors, specialists in arts organizations, or as teachers in elementary or secondary education. An internship with a professional theatre company, school or arts organization, and a final applied project, complete the program.

Admission Requirements: Students must fulfill both the requirements of the Graduate College and those of the School of Theatre and Film. The deadline for application to the School of Theatre and Film is Feb. 15.

The School of Theatre and Film requires the following additional application components for the M.F.A. in theatre (theatre for youth):

1. An interview.
2. A statement of purpose, including a cover letter indicating the preferred area of study, summarizing the applicant's qualifications, artistic vision and how the applicant feels the M.F.A. theatre for youth program can help meet his or her goals.
3. A current resume.
4. Three letters of recommendation from professionals familiar with the applicant's work.

Contact:
School of Theatre and Film
http://theatrefilm.asu.edu
theatre@asu.edu
GHALL 232
480/965-5337

Theatre for Youth (PhD) FAYOUTHPHD
Herberger Institute for Design and the Arts

Official Degree Awarded: PHD Theatre (Theatre For Youth)

Program Description: This Ph.D. degree program is designed to give students a broad knowledge of theatre, special research, production and teaching skills in
theatre for youth. Studies include theatre history, theory and literature, theatre education and the theories and principles governing how young people learn to create and respond to theatre.

Each theatre for youth Ph.D. student follows a course of study including required and elective classes to demonstrate general literacy in theatre history, criticism and literature as well as in-depth understandings and research perspectives in theatre and drama with and for young people.

Students may take courses in directing, acting, design, playwriting, theatre history and theatre theory and criticism. Tutorial courses with major professors are encouraged, as is graduate study in other departments offering courses in research methods, educational theory, critical theory and arts education.

**Program Requirement:** A total of 90 credit hours, of which 30 may be fulfilled with a completed master’s degree, are required. The concentration in theatre for youth requires:

1. A core of 30 credit hours.
2. Twenty-four credit hours in research and dissertation preparation.
3. Six credit hours of research methodology, approved by the supervisory committee.
4. Or successful examination in a foreign language approved by the committee.

In meeting these requirements, students, with the advice of the supervisory committee, may select theatre courses in areas such as:

- Community-based theatre.
- Theatre education.
- Theatre for social change.
- Theatre history.
- Theatre theory/criticism.
- Tutorial courses.

Students may also take courses outside the School of Theatre and Film in areas such as:

- Area studies.
- Aesthetic theory.
- Children's literature.
- Critical and cultural studies.
- Educational theory and methodology.
- Languages and literatures.
- The arts and arts education.

All activities are selected to help students meet the goals of the program and develop the capability of becoming leaders in the field.
Preliminary Reviews
Reviews of a student's performance in courses and development of research skills, artistic skills and teaching competencies are conducted by the supervisory committee at the end of each semester.

Comprehensive Examinations
These examinations are composed of written and oral components centering on theatre history, literature and criticism, theatre for youth and theatre education and the research area.

Dissertation Requirements
A dissertation based on original research work of high quality, demonstrating proficiency in the student’s special field, is required.

Admission Requirements: Students must fulfill both the requirements of the Graduate College and those of the School of Theatre and Film. The deadline for application to the School of Theatre and Film is Jan. 15. The School of Theatre and Film requires additional application components for the Ph.D. in theatre (theatre for youth):

1. An interview is strongly recommended.
2. A statement of purpose, which should explain the applicant’s research, artistic and educational philosophies and goals, as appropriate to the applicant’s desired focus in the Ph.D. program; explain also how study in the ASU Theatre for Youth program might particularly suit these goals/philosophies).
3. A current curriculum vitae.
4. A sample of scholarly writing.
5. Three letters of recommendation from professionals familiar with the applicant’s work; these letters should address specifically the applicant’s potential for success in a Ph.D. program.

Contact:
School of Theatre and Film
http://theatrefilm.asu.edu/
theatre@asu.edu
GHALL 232
480/965-5337

Theatre: Directing (MFA) FADIRMFA
Herberger Institute for Design and the Arts

Official Degree Awarded: MFA Theatre (Directing)

Program Description: Admission to the directing, performance and performance design concentrations is cohort-based. We will accept applications for these concentrations for the 2011 academic year beginning in fall 2010.
The M.F.A. in theatre with a concentration in directing program seeks students who demonstrate directing talent, scholastic achievement, and preferably, practical experience in the professional theatre. The program focuses on the collaborative process necessary for new work development. Students are introduced to varied critical viewpoints from select artists and scholars. A hands-on, mentor-student approach is emphasized with the intent of developing the skill, craft and attitude, including interpersonal communication skills, required to be an excellent professional director.

Program Requirement: The M.F.A. in theatre with a concentration in directing is a three-year, 60 credit hour program. Practical directing and directing classes are approximately 50 percent of the course work. Classes include:

- Acting.
- Adaptation.
- Assistant directing for professional directors working on the main stage and a Theatre for Young America tour practicum.
- Community-based ensemble.
- Design collaboration.
- Dramatic theory and criticism.
- Dramaturgy.
- Movement.
- Performance technology.
- Theatre for social change.
- Theatre history.
- Theatre organization and management.
- Voice.

M.F.A. directors will direct new work every year. Major assignments may include: directing a new full-length play by an M.F.A. playwright, creating and directing an adaptation of an existing work in the Prism Theatre and directing one applied project in the main-stage season. Directing faculty mentor all projects. Academic and artistic progress is evaluated at the end of each semester by a faculty committee. Program continuation is contingent upon a successful review.

Admission Requirements: Students are admitted to this program every three years, forming a cohort with their colleagues in the other M.F.A. programs in theatre practice; the next class will begin course work in 2011. Students must fulfill both the requirements of the Graduate College and those of the School of Theatre and Film. The deadline for application to the School of Theatre and Film is Feb. 15.

In addition to the requirements outlined on the Graduate College Web site, the School of Theatre and Film requires additional application components for the M.F.A. in directing, including:
1. A personal interview.
2. A statement of purpose.
3. A current resume.
4. Three letters of references from professionals familiar with the student’s work.
5. A written approach to a play selected by the reviewing committee.

Contact:
School of Theatre and Film
http://theatrefilm.asu.edu
theatre@asu.edu
GHALL 232
480/965-5337

Theatre: Performance America (PhD) FAPERAMPHD
Herberger Institute for Design and the Arts

Official Degree Awarded: PHD Theatre (Theatre/Performance Americas)

Program Description: The Ph.D. in theatre, with a concentration in theatre and performance of the Americas, trains scholars to examine the histories, theories and practices associated with cultural performance, from a hemispheric point of view. Through course work, seminars and research and study opportunities, doctoral students work from diverse critical perspectives that mobilize thought across geographical and disciplinary borders. They thereby develop skills to re-examine and interrogate the canon of theatre as text and as performance, expanding the traditional boundaries of theatre studies in two ways:

1. Via a perspective that considers the shared histories and practices of theatre and performance in the Americas as central to an intervention in traditionally narrated histories and theories of theatre.
2. Via the methodologies of cultural and performance studies that accommodate other forms of embodied expression related to but distinct from formal theatrical expression.

The course of study is designed to provide substantive historical and theoretical grounding in the field, while allowing flexibility in the choice of specialized seminar and practical experiences. The first year of study immerses students in the theoretical and practical groundwork of performance research in general, and modalities of performance in the Americas in particular. In the second year, students build on research interests identified in the first year through specialized course work and practical experience.

Program Requirement: A total of 90 credit hours are required; 30 of the 90 hours may be satisfied through a completed master’s degree.

The concentration in theatre and performance of the Americas consists of:
1. A core of 24 hours.
2. Twelve hours of electives, two of which must come from outside the school
   (as approved by the supervisory committee).
3. Twenty-four hours of research and dissertation preparation.

In meeting these requirements, students, with the advice of the supervisory
committee, may select theatre courses in areas such as:

- Dramaturgy
- Community-based theatre
- Theatre for social change
- Theatre history
- Theatre theory/criticism
- Tutorial courses

Students may also take courses outside the School of Theatre and Film in areas such
as critical and cultural studies, area studies, languages and literatures and aesthetic
theory. All activities are selected to help students meet the goals of the program and
develop the capability of becoming leaders in the field.

**Preliminary Reviews**
Reviews of the student's performance in courses and development of research skills,
artistic skills and teaching competencies are conducted by the supervisory
committee at the end of each semester.

**Comprehensive Examinations**
These examinations are composed of written and oral components centering on
theatre history, literature and criticism, theatre and performance of the Americas
and the research area.

**Dissertation Requirements**
A dissertation based on original high-quality research work, demonstrating
proficiency in the student’s special field, is required.

*Admission Requirements:* Students must fulfill both the requirements of the Graduate
College and those of the School of Theatre and Film. The deadline for application to
the School of Theatre and Film is Jan. 15.

The School of Theatre and Film requires additional application components for the
Ph.D. in theatre (theatre and performance of the Americas):

1. An interview is strongly recommended.
2. A statement of purpose, which should address the student’s background and
   experiences as they relate to the student’s reasons for pursuing the Ph.D.;
   describe the student’s research interests; and indicate future career goals.
3. A current curriculum vitae.
4. A sample of scholarly writing.
5. Three letters of recommendation from professionals familiar with the student's work.

Please note that we only accept students who have already earned a master's degree in a relevant area.

Contact:
School of Theatre and Film
http://theatrefilm.asu.edu
theatre@asu.edu
GHALL 232
480/965-5337

Theatre: Performance Design (MFA) FAPERDMFA
Herberger Institute for Design and the Arts

Official Degree Awarded: MFA Theatre (Performance Design)

Program Description: Admission to the directing, performance and performance design concentrations is cohort-based. We will accept applications for these concentrations for the 2011 academic year beginning in fall 2010.

ASU offers a strenuous and innovative M.F.A. in theatre with a concentration in performance design program that focuses on a non-traditional approach to design training in preparation for the theatrical design challenges of the future. The design student is not asked to choose one sub-discipline of performance design, but rather will work with an ensemble of designers, directors and performers to create new projects that redefine the role of the traditional designer.

Skills for approaching and creating new work include:

- Design applications in multimedia.
- Development of artistic entrepreneurship and integrity.
- Drafting and computer imaging.
- New work development.

Performance design students work in multiple venues, including the 481-seat Galvin Playhouse, 164-seat Lyceum Theatre, two studios and one experimental space. In addition, students work in the shops, a design studio and a computer-imaging lab.

Program Requirement: The M.F.A. in design is a three-year, 60 credit hour program.

- The first year is dedicated to creating an ensemble, as well as honing the skills needed to visually communicate ideas to a director and audience.
- The second year concentrates on new work development that will culminate in a tour. This year also concentrates on strengthening design abilities.
- The third year serves as a bridge between the educational and professional theatre and the communities they serve.
• Students conclude with an applied ensemble design project suited to their needs and interests.
• A professional internship is required and can be fulfilled anytime after the first year of study.

Academic and artistic progress is evaluated at the end of each semester by a faculty committee. Program continuation is contingent upon a successful review.

Admission Requirements: Students are admitted to this program every three years, forming a cohort with their colleagues in the other M.F.A. programs in theatre practice; the next class will begin course work in 2011. Students must fulfill both the requirements of the Graduate College and those of the School of Theatre and Film. The deadline for application to the School of Theatre and Film is Feb. 15.

The School of Theatre and Film requires additional application components for the M.F.A. in performance design:

1. A personal interview.
2. A portfolio of ten samples of visual work to be presented at interview.
3. A written statement of purpose.
4. A current resume.
5. Three letters of recommendation from professionals familiar with the student’s work.

Contact:
School of Theatre and Film
http://theatrefilm.asu.edu
theatre@asu.edu
GHALL 232
480/965-5337

Urban Design (MUD) ARMUDMUD
Herberger Institute for Design and the Arts

Official Degree Awarded: MUD Urban Design

Program Description: The M.U.D. is a multidisciplinary program within the Herberger Institute for Design and the Arts. The curriculum draws from the disciplines of architecture, landscape architecture, law, civil engineering, planning, public programs, real estate development and the first School of Sustainability in the United States. The program leverages its local conditions (rapidly urbanizing metropolis, arid climate, New American University) toward the development of responsible global initiatives and innovative design strategies for urban environments. The curriculum is built around the analysis and understanding of contemporary urban conditions specific to rapidly urbanizing and arid regions of the world. Students are encouraged to pursue a joint degree with the school’s Master of Science in Building Design.
Applicants who hold a professional design degree (B.S.L.A., M.L.A., B.Arch. or M.Arch.) will be considered for the two-year M.U.D. program. Applicants who do not have a background in design will be considered for admission to a three-year M.U.D. program that includes an initial year of design studies. The M.U.D. is a post-professional, nonaccredited program.

Program Requirement:

Master of Urban Design (MUD) Degree Requirements:

First Year

Fall

MUD 521 Advanced Urban Design Studio I (5)
MUD 598 Urban Issues (3)
ATE 598 Sustainability of the Built Environment (3)

Spring

MUD 522 Advanced Urban Design Studio II (5)
MUD 524 Urban Elements (3)
Herberger Institute professional design elective (3)

Summer

MUD 610 Applied Urban Design Research Project (1)
or MUD 611 Professional Honors

Second Year

Fall

MUD 621 Advanced Urban Design Studio III (5)
MUD 623 Thesis Research (3)
Herberger Institute professional design elective (3)

Spring

MUD 622 Advanced Urban Design Studio IV (5)
Herberger Institute professional design elective (3)
Urban design professional elective (3)

Total Hours in Program: 45

Admission Requirements:
Master of Urban Design Admission Requirements

Applicants who hold a professional design degree (B.S.L.A., M.L.A., B.Arch. or M.Arch.) will be considered for the two-year M.U.D. program. Applicants who do not have a background in design will be considered for admission to a three-year M.U.D. program that includes an initial year of design studies. The M.U.D. is a post-professional, nonaccredited program.

Two-Year Program Admission Requirements

Applicants must:

1. Hold an undergraduate or graduate degree from a college or university recognized by ASU.
2. Be a licensed landscape architect or architect, or have completed a Landscape Architectural Accreditation Board (LAAB) accredited four-year B.S. in landscape architectural studies or an LAAB-accredited M.L.A.; or a National Architectural Accrediting Board (NAAB) accredited four-year B.S. in architectural studies or an NAAB-accredited M.Arch.
3. Meet the minimum GPA requirements as established by the Graduate College.
4. Provide an official copy of GRE scores (unofficial copies will not be accepted). For more information regarding the GRE, visit http://www.gre.org. The School of Architecture and Landscape Architecture does not have a minimum score for admissions, however, the average scores of admitted students are between 500-600 for each section.

In addition to the above requirements, international students are required to submit an official TOEFL score (http://www.TOEFL.org). The minimum score for admission to the program is 100 (Internet), 250 (computer-based), or 600 (paper-based). Other information for International applicants can be found on the Graduate College Web site http://graduate.asu.edu/admissions/international.html.

Admission Documents

1. Applicants should write their name in a clear and consistent manner on all materials submitted, preferably in the “family name, first name” format (e.g. Smith, John).
2. Statement of Intent. A personal narrative (maximum 600 words or two pages typed) indicating the applicant’s interest, previous academic and practical background, as well as personal and professional educational objectives.
3. Letters of Recommendation. A minimum of three letters of recommendation in support of the applicant must be mailed directly to the graduate admissions committee, School of Architecture and Landscape Architecture. The references should be from professionals or educators familiar with the applicant’s experience and capability for graduate work.
4. Portfolio. Candidates applying for the two-year Master of Urban Design program are required to submit a portfolio. See the portfolio requirements for more information.

5. Please complete and submit the contact information sheet.

Submit the statement of intent, recommendation letters, portfolio and the contact information sheet to the following address:

Master of Urban Design Admissions Committee
School of Architecture and Landscape Architecture
Arizona State University
P.O. Box 871605
Design North, room 162
Tempe, AZ 85287-1605

Submit your online application and fees, test scores (GRE or TOEFL) and official transcripts from all post-secondary institutions directly to the Graduate College.

**Three-Plus-Year Program Admission Requirements**

**Applicants must:**

1. Submit an online Graduate College application.
2. Hold an undergraduate or graduate degree from a college or university recognized by ASU. Applicants who do not hold a professional degree in design (B.S.L.A., M.L.A., B.Arch. or M.Arch.) must have extensive professional work experience in an urban design-related area.
3. Meet the minimum GPA requirements as established by the Graduate College.

**Contact:**
School of Architecture and Landscape Architecture
http://design.asu.edu/sala/index.shtml
sala.grad@asu.edu
CDN 162
480/965-3536

**Wood (MFA) FAWOODMFA**
Herberger Institute for Design and the Arts

**Official Degree Awarded:** MFA Art (Wood)

**Program Description:** The graduate years are seen as a time for searching, experimenting and for developing a high degree of professionalism in creative work. The Herberger College of the Arts offers one of the best equipped fine woodworking shops in the Southwest. It includes equipment for laminating, carving, turning and fabricating.
Program Requirement: A minimum of 60 hours of graduate credit subject to committee approval is required, including:

1. Twenty-seven to 32 graduate studio credit hours in the major area(s) of concentration.
2. Six credit hours of graduate-level art history and three credit hours of other interdisciplinary graduate credit to supplement M.F.A. work (nonstudio courses).
3. Nine credit hours of graduate-level course work outside of the major area of concentration, of which three credit hours must begin with the ART prefix and the remaining six credit hours may be outside the School of Art.
4. Ten to 15 hours of ART 680 Practicum, resulting in an M.F.A. exhibition.

Admission Requirements: All applicants must submit the Graduate College online application. A bachelor's degree from a regionally accredited college or university recognized by ASU is required. All students applying for the M.F.A. degree must submit to the graduate coordinator:

1. A portfolio of images of their work on a CD-ROM disk containing 20 JPEG files (1000 pixels in the long dimension) or 20 images assembled as a PowerPoint presentation.
2. Three letters of recommendation.
3. A current curriculum vitae.
4. A statement of intent pertaining to the student's educational objectives.

Contact:
School of Art
http://art.asu.edu
ART 102
480/965-6303

Education, Mary Lou Fulton Institute and Graduate School of

An Overview of Autism Spectrum Disorders (Grad Certificate) EDSPEGRCA

Official Degree Awarded: CERT An Overview of Autism Spectrum Disorders (certificate)

Program Description: The program prepares participants with the latest information and practical techniques to understand and serve those with Autism Spectrum Disorders (ASD). This 15-credit hour program uses both in-class and online sessions to prepare students for the challenges of working with individuals with ASD. The ASD certificate consists of four classes and a practicum. The practicum provides an opportunity to use new knowledge and skills in a real world setting consistent with the student's interests and abilities.

The ASD graduate certificate is designed for individuals who:
• Are committed to providing services to children, youth and adults who fall under the ASD umbrella.
• Hold a bachelor’s degree or higher.
• Meet ASU graduate admissions criteria.
• Are interested in a graduate certificate in ASD, but not in pursuing a formal graduate program.
• Are interested in a graduate certificate in ASD, and are also pursuing a formal graduate program.

Program Requirement: The ASD certificate consists of four classes and a practicum for a total of 15 hours. The practicum provides an opportunity to use new knowledge and skills in a real world setting consistent with the student’s interests and abilities.

SPE 521 Introduction to Autism Spectrum Disorders (3), offered spring and summer
SPE 531 Behavior Management Approaches (3), offered fall
SPE 577 Inclusive Teaching and Learning (3), offered spring
SPE 580 Practicum (3), offered summer and fall
SPE 598 Reading and Communication Strategies for Individuals with Autism and Related Disorders (3), offered fall

Admission Requirements: All applicants must submit the Graduate College online application and meet all Graduate College admission requirements.

Contact:
Adv Stud Learning, Technology & Psychology in Ed T
http://education.asu.edu/
cnigrad@asu.edu
ED 434
480/965-4602

Applied Linguistics (PHD) EDAPLPHD
Mary Lou Fulton Institute and Graduate School of Education

Official Degree Awarded: PHD Applied Linguistics

Program Description: Applied linguistics combines research topics in the linguistic sciences and education to pursue principled approaches to language-related concerns. Applied Linguistics at ASU is focused on simultaneous and developmental bilingualism in children and adolescents. The program is a partnership between the Mary Lou Fulton Institute and Graduate School of Education and the College of Liberal Arts and Sciences.

Program Requirement: The program requires a total of 84 credit hours. There must be a minimum of 54 credit hours beyond the master’s level, including a minimum of 12 units of dissertation credit. All students in the program must satisfy 21 units of foundations course work.
Because applied linguistics is interdisciplinary in nature, applicants may differ from one another with regard to their prior experience and preparation. For instance, while some applicants may have substantial prior training in core theoretical linguistics (foundations), others may have considerable preparation in an area related to a supported concentration. A student’s academic advisor, in consultation with the program director and program oversight committee, may address potential redundancies in a student’s program requirements with prior academic preparation by: (1) allocating a maximum of 30 credit hours from an awarded and approved graduate degree toward the applied linguistics program requirements, and/or (2) permitting the student to take additional elective courses in lieu of introductory courses covered in an undergraduate program.

A. Foundations, 21 credit hours
   1. Overview of the field: a three-credit course providing a survey of the field of applied linguistics.
   2. Linguistics: 15 credits of required coursework in theoretical linguistics and one approved linguistics elective.

B. Teaching Internship, 2 credit hours

C. Colloquia, 4 credit hours
   A four-semester sequence of 1-credit colloquium meetings for students in the first two years. All students and program faculty are encouraged to attend.

D. Research Methods, 6 credit hours
   Six credits of approved research methods courses selected in consultation with the advisor.

E. Concentration/Research, 33 credit hours
   Students select three to nine credits of required coursework, depending upon the concentration area, plus additional approved electives for a total of 48 credits of concentration/research course work. Five concentration areas are supported:
   - Bilingualism.
   - Educational Linguistics.
   - English as an International Language (EIL).
   - Indigenous Language Education.
   - Language Planning and Policy (LPP).

F. Breadth, 6 credit hours
   Six credits of course work in a secondary concentration area.

G. Dissertation, 12 credit hours
   Students in the applied linguistics doctoral program are additionally required to demonstrate proficiency in a second language equivalent to two years of study. A language appropriate to the student’s area of interest is selected in consultation with the advisor. The language requirement must be satisfied, by examination or course work, prior to advancement to candidacy. Computer or other nonhuman
languages may not be used to satisfy this requirement. Students for whom English is a second language may use their first language to satisfy the requirement by examination. Course credit used to satisfy the language requirement can not be used to satisfy other program requirements, and cannot be counted toward the total required 84 credits.

**Admission Requirements**: Students must have completed a bachelor’s degree from a regionally accredited institution or university of recognized standing prior to admission into the program. Because applied linguistics is an interdisciplinary field, applicants with prior academic preparation in any field are welcome.

Applicants must submit an official ASU graduate application, official GRE scores and transcripts of all undergraduate and graduate coursework, a statement of interest outlining career and research goals, three letters of recommendation addressing their academic promise for the program, and other materials requested as part of the application portfolio.

Applications are due Jan. 15 for fall admission.

Please see the program Web site for additional information.

**Contact:**
Dean, Mary Lou Fulton Inst Grad School Education
http://appliedlinguistics.asu.edu/
cnigrad@asu.edu
ED 434
480/965-4602

**Art Education (PhD) EDARTEDPHD**
Mary Lou Fulton Institute and Graduate School of Education

**Official Degree Awarded**: PHD Curriculum and Instruction (Art Education)

**Program Description**: The concentration in art education in the interdisciplinary Ph.D. program in curriculum and instruction provides opportunities for research and study in one or more of the following areas:

- Transfer in thematic inquiry-based instruction in art education.
- Qualitative research.
- Multiple methodologies in research.
- The understanding of art.
- Online-based instruction.
- Visual culture studies.
- International issues in art education.
- Multicultural issues.
- Developmental graphic stages of children.
Program Requirement: The Ph.D. requires 84 credit hours, a dissertation and written and oral comprehensive examinations.

Core Requirements: six credit hours

- DCI 701 Curriculum Theory and Practice
- DCI 702 Interdisciplinary Research Seminar in Curriculum and Instruction
- Professional

Inquiry and Analysis: 15 credit hours in approaches to education research

Examples of courses that meet this requirement are:

- COE 502 Introduction to Quantitative Methods
- COE 503 Introduction to Qualitative Methods
- DCI 691 Narrative Research in Education
- DCI 791 Discourse Analysis

Major Area of Concentration: 30 credit hours

Internships: six credit hours

Three two-credit-hour doctoral internships are required in the areas of research and college teaching. One area must be chosen twice. During the course of the internship, the student works closely with selected art education program faculty members from the interdisciplinary committee on curriculum and instruction, or other faculty members designated by the interdisciplinary Ph.D. program in curriculum and instruction.

Cognate Study: 12 credit hours

Twelve credit hours are required of students to broaden their understanding of the conceptual base and issues underlying the field of art. Students will take course work outside of art education. Cognate studies can be drawn from a broad range of offerings, both from within and outside the College of Education.

Independent Research and Dissertation: a minimum of three credit hours of research and 12 credit hours of dissertation leading to completion of an approved dissertation are required.

These credit hours demonstrate that the student is capable of conducting original research of high quality. The research is to be conceived and carried out such that it advances scholarship in art education.

Doctoral students are also encouraged to participate in the Preparing Future Faculty Program offered by the Graduate College of Arizona State University. This program consists of two credit hours in which students learn faculty roles and responsibilities and participate in an ongoing series of integrative and collaborative seminars coordinated with the Graduate College. Students have the opportunity to
develop and participate in interdisciplinary teaching, research and service activities.

The broad goals of the interdisciplinary Ph.D. program in curriculum and instruction are to:

1. Produce research scholars who can enhance the knowledge base underlying curriculum and instruction in a variety of concentrations.
2. Provide experts, for all levels of instruction, in the design, implementation and evaluation of educational personnel preparation programs.
3. Prepare individuals who can provide leadership to the evolving field of curriculum and instruction.
4. Produce research scholars who are well equipped for empirical and systematic examination of educational theories, strategies, principles and practices related to the content and organization of curriculum and to the process and outcome of instruction.

The program also seeks to produce scholars who have the knowledge base to engage in such studies within the broad historical, social, political, economic, linguistic, intellectual and physical contexts in the country and abroad.

Admission Requirements: The following are required:

1. Application to the Graduate College.
2. Transcripts.
4. Curriculum vitae (resume).
5. Statement of research interests.
6. A writing sample (approximately 10 pages long).
7. GRE scores.
8. Three letters of recommendation from individuals who can speak to the applicant’s potential for success in a graduate programs.

Additional materials may be required to gain admission into certain programs or cohorts.

Contact:
http://education.asu.edu/prospective_students/graduate_studies
cnigrad@asu.edu
ED 434
480/965-4602

Bilingual Education (MA) EDBILINMA
Mary Lou Fulton Institute and Graduate School of Education

Official Degree Awarded: MA Curriculum and Instruction (Bilingual Education)

Program Description: The M.A. in curriculum and instruction is intended for students wishing to conduct original research and continue on for the Ph.D. The M.A.
concentration in bilingual education is designed to provide course work related to bilingual education in U.S. settings (second language acquisition theory, bilingual programs and methods and bilingual assessment) along with course work in research methods to be used in the design and implementation of the thesis. The bilingual education concentration offers advanced course work in research methodology, theory and practice in the area of bilingual education. Candidates for the M.A. in bilingual education must be able to demonstrate proficiency in a language other than English.

Program Requirement: The M.A. in curriculum and instruction is intended for students wishing to conduct original research and continue on for the Ph.D. The M.A. concentration in bilingual education requires 30 credit hours is designed to provide course work related to bilingual education in U.S. settings (second language acquisition theory, bilingual programs and methods and bilingual assessment) along with course work in research methods to be used in the design and implementation of the thesis. The bilingual education concentration offers advanced course work in research methodology, theory and practice in the area of bilingual education. Candidates for the M.A. in bilingual education must be able to demonstrate proficiency in a language other than English.

Admission Requirements: The following are required:

1. Application to the Graduate College.
2. Transcripts.
4. Three letters of recommendation from individuals who can speak to the applicants potential for success in a graduate program.

Additional materials may be required to gain admission into certain programs or cohorts. For specific information regarding admission requirements, see http://education.asu.edu/prospective_students/graduate_studies.

Contact:
Dean, Mary Lou Fulton Inst Grad School Education
http://education.asu.edu/
cnigrad@asu.edu
ED 434
480/965-4602

Bilingual Education (MEd) EDBILINMED
Mary Lou Fulton Institute and Graduate School of Education

Official Degree Awarded: MEd Curriculum and Instruction (Bilingual Education)

Program Description: The M.Ed. in curriculum and instruction with a concentration in bilingual education is designed for practitioners to facilitate the development of advanced professional knowledge of research, theory and practice in the area of bilingual education. The M.Ed. in curriculum and instruction is intended for students
who are currently teaching in a bilingual program, typically at the K-8 level of education. The M.Ed. in curriculum and instruction with a concentration in bilingual education is designed to provide course work related to bilingual education in U.S. settings (second language acquisition theory, bilingual programs and methods and bilingual assessment). Candidates for the M.Ed. in curriculum and instruction with a concentration in bilingual education must be able to demonstrate proficiency in a language other than English.

**Program Requirement:** A minimum of 30 hours of graduate credit is required for the M.Ed. in curriculum and instruction. Each student is assigned a graduate advisor to design the program of study. Students in this program will complete either a comprehensive examination, a research project or an applied project as a culminating activity after completing at least 24 of the 30 credit hours listed on the program of study. Students must choose their culminating activity (written examination, research project or applied project) in consultation with their faculty advisor before completing their program of study. Students who choose to complete an applied project, must enroll in teacher as researcher the semester prior to completing the applied project, and they must meet with their graduate advisor for approval of the applied project. For more information, refer to the curriculum and instruction M.Ed. student handbook.

**Admission Requirements:** The following are required:

1. Application to the Graduate College.
2. Transcripts.
4. Three letters of recommendation from individuals who can speak to the applicants potential for success in a graduate program.

Additional materials may be required to gain admission into certain programs or cohorts. For specific information regarding admission requirements, see http://education.asu.edu/prospective_students/graduate_studies.

**Contact:**
Dean, Mary Lou Fulton Inst Grad School Education
http://education.asu.edu/
cnigrad@asu.edu
ED 434
480/965-4602

**Counseling (MC) EDCOUNMC**
Mary Lou Fulton Institute and Graduate School of Education

**Official Degree Awarded:** MC Counseling

**Program Description:** The mission of the M.C. program is to prepare students to become professional counselors, culturally competent to work with diverse clientele in a variety of community settings in Arizona and other states. Counselors seek to
prevent or treat psychological problems and to promote the health of individuals, families, groups and organizations in a multicultural and diverse society. The M.C. program was designed according to the standards for community counseling by the Council for the Accreditation of Counseling and Related Educational Programs.

The faculty has endorsed the multicultural counseling competencies of the American Counseling Association, the guidelines on multicultural education, training, research, practices and organizational change for psychologists, and the guidelines for psychotherapy with lesbian, gay and bisexual clients of the American Psychological Association.

**Program Requirement:** The M.C. is a 60-credit-hour professional program. The program can be completed in no less than two years. Most students can complete the program in two to three years. The program is not designed to be a part-time program.

The practitioner option places considerable emphasis on supervised field experiences. A comprehensive exam is required to complete this option.

The research option places considerable emphasis on developing research competencies. Successful completion of a master’s thesis is required in this option. The school counseling option provides added training in issues related to counseling in the schools (K-12 education). Considerable emphasis is placed on supervised experience in the schools.

**Admission Requirements:** Applicants to this program must first meet the Graduate College requirements for admissions (e.g., minimum 3.00 junior/senior GPA and English language proficiency). Psychology in education further requires that all applicants score at least 5.5 on the Frick index. Applicants are required to take the verbal and quantitative sections of the GRE. The test must be retaken if scores are more than five years old. All students must be graduates of accredited higher education institutions.

**Nonacademic/Professional/Life Experiences**
Applicants are required to submit a three- to five-page personal statement which will include information on significant life experiences, professional experiences, personal attributes, personal and professional goals and other information which will assist the faculty in evaluating the applicant.

**Recommendations**
Three recommendation forms are to be submitted. These should be completed by persons able to evaluate the applicant’s academic potential, professional experience and personal attributes.

For more information see http://education.asu.edu/mc.
Contact:
Adv Stud Learning, Technology & Psychology in Ed T
http://education.asu.edu
dpe@asu.edu
EDB 302
480/965-3384

Counseling Psychology (PhD) EDCPSYPHD
Mary Lou Fulton Institute and Graduate School of Education

Official Degree Awarded: PHD Counseling Psychology

Program Description: The doctoral program in counseling psychology closely adheres to the scientist-practitioner training model in preparing graduates for employment in academic and service delivery settings. Although faculty interests are diverse, there is a common emphasis on empirical data as the basis for professional practice. The faculty has endorsed the multicultural counseling competencies of the American Counseling Association, the guidelines on multicultural education, training, research, practices and organizational change for psychologists, and the guidelines for psychotherapy with lesbian, gay and bisexual clients of the American Psychological Association (APA).

The program is committed to the scientist practitioner model. One manifestation of that commitment, is the three complementary functions of the program’s counselor training center, namely service delivery, clinical training and research. Research foci include: multiculturalism, at-risk populations, positive psychology, process/outcome in therapy, supervision, training and career development.

Program Requirement: Our doctoral curriculum typically requires three to five years of full-time graduate study, plus a year-long internship in an APA-approved setting. Each of these years involves course work pertaining to theory, research and practices in counseling psychology. Students are expected to maintain full-time status. Full-time status involves being registered for at least nine credits per semester in the course work years. This requirement applies only to the academic year and not summer sessions. At a minimum, students are required to complete two years of course work in residence at ASU. Students will complete 113 credit hours, a comprehensive portfolio and a successful dissertation defense prior to graduation.

Admission Requirements: Applicants to doctoral study in counseling psychology must first submit a Graduate College application and then meet the Division of Psychology in Education admissibility standard. A minimum Fricke index of 5.5 is required for admission to graduate study in the division. The following supplemental materials are required by the counseling psychology program:

1. Three letters of recommendation. We prefer that two of these letters be from persons familiar with your academic work.
2. A brief personal statement (600 words or less) describing your history, your academic and professional goals and your reasons for selecting the counseling psychology program at ASU.
3. A completed biographical information form.
4. A seven-page sample of your expository writing (e.g., taken from a paper you have prepared for a course or a report on a project you have completed in our field).

All application materials must be submitted by Dec. 1 in order to ensure consideration for admission the following fall semester.

Contact:
Adv Stud Learning, Technology & Psychology in Ed T
http://education.asu.edu/cpy
dpe@asu.edu
EDB 302
480/965-3384

Curriculum Studies (PhD) EDCURSTPHD
Mary Lou Fulton Institute and Graduate School of Education

Official Degree Awarded: PHD Curriculum and Instruction (Curriculum Studies)

Program Description: The curriculum studies concentration is designed to be highly experiential in endeavors that address distinct and important educational issues. These issues transcend the various areas of educational inquiry as they impact upon the design, implementation and evaluation of education programs. These issues tend to be holistic and transdisciplinary, concerned with interrelationships of various concentration areas. Questions considered include:

- What should be taught in schools?
- Why should it be taught?
- To whom should it be taught?
- What does it mean to be an educated person?

Curriculum inquirers also investigate the relationship between curriculum theory and educational practice and the relationship between school programs and the contours of the society and cultures in which schools are located.

Program Requirement:

Core Course Requirements: six credit hours

DCI 701 Curriculum Theory and Practice
DCI 702 Interdisciplinary Research Seminar in Curriculum and Instruction

Professional Inquiry and Analysis: 15 credit hours in approaches to education research
Examples of courses that meet this requirement are:
Major Area of Concentration: 30 credit hours required

DCI 691 Perspectives on Curriculum
DCI 691 Critical Theory and Curriculum
DCI 691 Contemporary Educational Theory
DCI 691 Cultural Studies in Education
One course in Comparative Curriculum or Curriculum Policy
One course in Social and/or Historical Foundations of American Education

The remaining 12 hours of course work in this area are determined according to the student’s area of sub-specialization and anticipated focus of the dissertation.

The Ph.D. program requires 84 credit hours, a dissertation, and written and oral comprehensive examinations.

Cognate Study: 12 credit hours

Cognate studies can be drawn from a broad range of offering, both from within and outside the Mary Lou Fulton Institute and Graduate School of Education.

Internship: 6 credit hours

Research and university teaching internships are required to broaden the training and experience of students.

Research and Dissertation: 15 credit hours

Independent Research and Dissertation: a minimum of three credit hours of research and 12 credit hours of dissertation leading to completion of an approved dissertation are required.

These credit hours demonstrate that the student is capable of conduction original research of high quality.

Admission Requirements: The following are required:

1. Application to the Graduate College.
2. Transcripts.
4. Curriculum vitae (resume).
5. Statement of research interests.
6. A writing sample (approximately 10 pages long).
7. GRE scores.
8. Three letters of recommendation from individuals who can speak to the applicant’s potential for success in a graduate program.

Additional materials may be required to gain admission into certain programs or cohorts.

Admission to the program is contingent upon the commitment from an approved mentor in the concentration to advise the applicant.

Contact:
Dean, Mary Lou Fulton Inst Grad School Education
http://education.asu.edu/prospective_students/graduate_studies
cnigrad@asu.edu
Farmer Building 434
480/965-4602

Early Childhood Education (MA) EDCHILDMMA
Mary Lou Fulton Institute and Graduate School of Education

Official Degree Awarded: MA Curriculum and Instruction (Early Childhood Education)

Program Description: The M.A. in curriculum and instruction with a concentration in early childhood education is a research degree program designed to facilitate the development of advanced level professional knowledge, skills and understanding. M.A. students complete a hybrid program with a mix of off-campus cohort course work and on-campus master’s and doctoral course work. Early childhood education encompasses education and care of children from birth through the primary grades. The discipline of early childhood education includes the ability to communicate and work with parents and other adults and agencies that serve young children. The program prepares professionals who can 1) educate and conduct research to provide programs and services that are appropriate for young children from diverse backgrounds and 2) conduct research on the range of issues influencing young children’s education and well-being.

Program Requirement: A minimum of 30 credit hours and a thesis is required for the M.A. in curriculum and instruction. Curriculum and instruction M.A. students are assigned an advisor at the time of their admission. The advisor assists in selecting the graduate committee and serves as chair of the student’s graduate committee. Each M.A. candidate must form a graduate committee in consultation with their advisor and complete a thesis, under the direction of the thesis advisor. The graduate program committee must be formed prior to completing 12 hours of credit in the program. Each M.A. candidate will complete a thesis after completing a minimum of 24 hours in the program. Six credit hours of thesis are required along with a minimum of 24 credit hours of approved course work.
Admission Requirements: The following are required:

1. Application to the Graduate College.
2. Transcripts.
4. Curriculum vitae (resume).
5. Statement of research interests.
6. A writing sample (approximately 10 pages long).
7. GRE scores.
8. Three letters of recommendation from individuals who can speak to the applicant’s potential for success in a graduate program.

Additional materials may be required to gain admission into certain programs or cohorts.

Contact:
Dean, Mary Lou Fulton Inst Grad School Education
http://education.asu.edu/prospective_students/graduate_studies
cnigrad@asu.edu
ED 434
480/965-4602

Early Childhood Education (PhD) EDCHILDPHD
Mary Lou Fulton Institute and Graduate School of Education

Official Degree Awarded: PHD Curriculum and Instruction (Early Childhood Education)

Program Description: Early childhood education encompasses education of children from birth through the primary grades. The age levels involved necessitate work with parents and other adults and agencies that serve young children. The field requires skilled professionals who can prepare educators and researchers to provide programs and services that are developmentally appropriate for young children and to conduct research regarding those issues.

The Ph.D. concentration in early childhood education is an integral part of the interdisciplinary Ph.D. in curriculum and instruction, and is a major area of concentration (30 credit hours minimum) within the professional focus component of the program of study.

The goals of the doctoral program in early childhood education are to mentor scholars who:

1. Generate research that will influence policy and practice regarding the care and education of young children in multiple contexts.
2. Plan and implement teacher education and professional development programs and related research.
3. Serve as leaders in the field of early childhood education.
4. Exhibit critical thinking grounded in a range of theoretical frameworks and research methodologies related to and influencing childhood studies and early education.

*Program Requirement:* The curriculum and instruction Ph.D. program requires at least 84 credit hours beyond the bachelor’s degree.

**Early Childhood Education Concentration:** 30 credit hours from a range of foundational and emerging courses in the field. Several new courses have been developed recently, emphasizing a range of theoretical and methodological approaches to childhood studies and emphasizing social policy and advocacy. A professional development seminar is also offered each semester, which provides practical experiences related to higher education in early childhood education.

*Curriculum and Instruction Core Requirements:* six credit hours of interdisciplinary research seminar in curriculum and instruction, and curriculum theory and practice.

**Inquiry and Analysis:** 15 credit hours, including ontologies and epistemologies of research, overviews of quantitative and qualitative research methods and in-depth study of particular research philosophies and methods (dependent on student goals and committee advice).

**Internships:** six credit hours, concentrating on college teaching, research and public policy/advocacy.

**Cognate Study:** 12 credit hours that provide an interdisciplinary element to the program. With the advice and approval of the program chair and the student's committee, the student chooses a cognate area of study suitable to individual goals.

**Independent Research and Dissertation:** a minimum of three credit hours of research and 12 credit hours of dissertation leading to completion of an approved dissertation are required.

*Admission Requirements:* The following are required:

1. Application to the Graduate College.
2. Transcripts.
4. Curriculum vitae (resume).
5. Statement of research interests.
6. A writing sample (approximately 10 pages long).
7. GRE scores.
8. Three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate program.
Additional materials may be required to gain admission into certain programs or cohorts.

Admission to the program is contingent upon the commitment from an approved mentor in the concentration to advise the applicant.

Contact:
Dean, Mary Lou Fulton Inst Grad School Education
http://education.asu.edu/prospective_students/graduate_studies
cnigrad@asu.edu
ED 434
480/965-4602

Educational Administration & Supervision (EdD) EDSUPVEDD
Mary Lou Fulton Institute and Graduate School of Education

Official Degree Awarded: EdD Educational Administration and Supervision

Program Description: The Dynamic Educational Leadership for Teachers and Administrators (DELTA) doctorate program is a professional leadership educational program designed for practicing professionals seeking an alternative to traditional graduate programs. The program seeks applicants who are practicing teacher leaders, school or district administrators and government educational personnel. After careful screening, cohorts of approximately 25 students are admitted and remain together for the entire program. Courses are taught by a dynamic faculty composed of full-time ASU professors along with clinical courses taught by successful practicing administrators. A component of this unique program is international travel designed to prepare leaders who are ready to address education issues within global contexts and better serve the needs of students with diverse languages and cultures. Program goals are geared to develop leaders with knowledge and deep understandings of:

- Leadership for innovation and change.
- The needs of schools in urban settings.
- Educational equity and social justice.
- Curricular and instructional leadership.
- Indigenous and immigrant communities.
- Binational, international and global issues in education.
- Research in applied settings.
- Spanish or another language relevant to the Southwest.

Program Requirement: The curriculum focuses on five areas:

1. Research/evaluation/assessment.
2. Diversity/international/binational and global studies.
3. Leadership core.
4. Internships/fieldwork/action research.
5. Research proposal development/research.

The degree requirements include:

1. Successful completion of a minimum of 90 graduate credits (30 credits may be from an accepted previously awarded master’s degree).
2. Successful completion of six credits of Spanish or a language relevant to the Southwest or demonstrated competence in that language.
3. Successful completion of a preproposal/research prospectus including a review of literature at the end of the second year (this requirement satisfies the written comprehensive examination).
4. Successful completion of a dissertation research proposal with committee approval at the end of the second year/beginning of the third year.
5. Successful completion of a doctoral dissertation with oral defense.

All classes are taken with the cohort and no other course work can be substituted.

_Admisson Requirements:_

1. Master’s degree in education or related field.
2. Three years teaching experience preferred.
3. GRE Scores.
4. Demonstrated potential for educational leadership.

_Application Procedures:_

Applicants must apply to the Graduate College and complete an application to the DELTA program. Applicants applying for this graduate degree program must apply for admission to the Graduate College using the electronic application form.

Admission to the Ed.D program requires:

1. Undergraduate and graduate transcripts.
2. GRE test scores.

Your application to the DELTA program requires the following materials:

1. The application form.
2. A two- or three-page letter of application, which should address the personal strengths that you bring to the program and your prior leadership experiences. You should also describe the highlights of your educational career, along with interests and experiences. Explain how these experiences have influenced your perspectives on schooling and educational leadership. Explain how your goals match the program goals.
3. Three letters of recommendation. One letter should be from your principal or another person in a supervisory position.
4. Vitae or resume including work and academic experiences.
5. A short writing sample or paper. It is preferred that your writing sample be a single-authored paper that includes references.

Your completed DELTA application material may be submitted in one of the following processes:

- Applicants may complete the supplemental application requirements when applying online to the Graduate College.
- Application materials may be submitted including application form, letter of application, vitae or resume, writing sample, and any additional documents via e-mail to deltadocs@asu.edu. E-mail attachments must be in Word (.doc) or rich text format (.rtf).
- Application materials may be mailed to:

  Arizona State University
  Mary Lou Fulton Institute and Graduate School of Education
  Division of Education Leadership and Policy Studies
  DELTA Doctoral Program
  P.O. Box 872411
  Tempe, AZ 85287-2411

Contact:
Adv Stud Educntl Policy, Leadership & Curriculum T
http://education.asu.edu
deltadocs@asu.edu
ED 120H
480/965-7224

Educational Administration & Supervision (MEd) EDSUPVMED
Mary Lou Fulton Institute and Graduate School of Education

Official Degree Awarded: MEd Educational Administration and Supervision

Program Description: The M.Ed. in educational administration and supervision is designed to develop instructional leaders for the 21st century. Students in this program will learn how to create and sustain collaborative environments in pre-K-12 schools that support learning for all children. Central to the purpose of the program is the identification, development and articulation of organizational goals that enhance learning, curriculum, instruction, assessment and leadership. An emphasis on practical application will assure the identification and collection of those tools and techniques deemed essential for effective management.

The program is offered in a cohort format, allowing a class of students to proceed through the program of study as a unit. Cohorts are offered throughout the metropolitan area served by Arizona State University and start at various times throughout the academic year as demand dictates. Successful completion of the
program of study provides the student with the academic requirements needed for certification as a principal in the state of Arizona.

Program Requirement: The program of study consists of 36 credit hours of course work. Of these hours, 30 hours must be in the area of educational administration. The remaining six hours are foundational core requirements. A capstone course, EDA 691, is required.

Admission Requirements: Application deadlines are:

- Feb. 1 for cohort groups starting during the summer sessions.
- April 1 for cohort groups starting during the fall semester.
- Oct. 1 for cohort groups starting during the spring semester.

To apply students must submit and meet the following criteria:

1. Graduate College online application.
2. Application fee.
3. Official transcripts to the Graduate College Admissions Office.
4. Letter of intent.
5. Resume.
7. No test scores are required; however, applicants must have completed three years of successful teaching and the state required SEI hours before applying.

Contact:
Adv Stud Eductnl Policy, Leadership & Curriculum T
http://education.asu.edu
delps@asu.edu
ED 120
480/965-6357

Educ Administration & Supervision - Supervision (MEd) TESPRVIMED
Mary Lou Fulton Institute and Graduate School of Education

Official Degree Awarded: MEd Educational Administration and Supervision (Supervision)

Program Description: This degree is intended for teacher leaders desiring Arizona State certification for supervisory positions. For teachers who want to learn leadership skills and work with other teachers on improving instruction, but do not necessarily want to become a principal. This concentration leads to Arizona Supervisor Certification.

Program Requirement: This program requires 36 credit hours. Students in the M.Ed. in educational administration and supervision program complete:

1. Core requirements (nine credit hours).
2. Program requirements (six credit hours).
3. Concentration requirements (21 to 30 credit hours).
4. An applied project (electronic portfolio) is required.

Admission Requirements:

1. All requirements of the ASU Graduate College
2. Three letters from professional references.
3. Resume.
4. Two-page personal statement describing professional goals.

In most classes, students work with a school principal (or in the superintendency program, a superintendent) in order to provide for the application of knowledge in real world settings. It is wise to obtain one of your recommendations from the principal you plan to work with to demonstrate your supervisor’s judgment as to your potential as an administrator. GRE scores are not required for admission.

Contact:
Educational Leadership & Innovation, Division W
http://ctel.asu.edu/programs/
ctelgrad@asu.edu
FAB S236
602/543-5595

Educational Leadership/Policy Studies (PhD) EDLDRSHPHD
Mary Lou Fulton Institute and Graduate School of Education

Official Degree Awarded: PHD Educational Leadership and Policy Studies

Program Description: The Ph.D. in educational leadership and policy studies emphasizes methods of policy analysis and provides for specializations in particular disciplines and topics. Education policy studies analyze the process by which society formulate, implement, evaluate and modify their educational systems. Doctoral students receive coursework and practical experiences in a variety of contexts, including higher education, elementary and secondary schools, and education governing bodies.

Areas of specialization include:

- American Indian education policy.
- Anthropology and education.
- Higher education.
- International and comparative education.
- Language policy.
- Policy analysis.
- Social and philosophical foundations.
The faculty seeks to train persons who will teach or conduct scholarly research on education policy in school districts, government agencies and universities. For more information on our current students and their research interests, please see our newsletter, Policy Briefs.

Program Requirement: Requirements for the Ph.D. degree consist of:

1. A minimum of 84 hours of course work specified in a student's program of study.
2. Comprehensive exams.

There is a 10-year time limit for Ph.D. students, starting at the time of admission. Students entering the Ph.D. program with a master's degree in a related discipline and with credit for between 24 and 30 credit hours of graduate course work will be expected to earn a total of 84 hours past the bachelor's including the transferred master's hours; of these 84 credit hours, 54 must be earned at ASU. Students can use a block of 30 credit hours from a previously awarded master's degree plus 12 credit hours not used in any previous degree program as part of the Ph.D. required credits, only if they can prove by a master's program of study that these credits were not required for their master's. Students who withdraw from a master’s in order to start a Ph.D., lose all credits except the 12 credit hours allowed to be brought forward.

Admission Requirements: Admission to the Ph.D. program is based on:

1. Undergraduate and graduate GPAs.
2. Scores on the GRE or GMAT.
3. Letters of recommendation.
4. A personal statement describing the candidate's research and career goals, work and academic experiences.
5. Availability of faculty to supervise the academic area of interest.

Deadlines for application to the Ph.D. program are Jan. 1 and March 1 of each year.

Application to all programs begins through the Graduate College, using their online application. Students must also submit to the Division of Educational Leadership and Policy Studies:

1. A personal statement.
2. Curriculum vitae.
3. Three letters of recommendation.

These supplemental application materials can be downloaded at the Ph.D. Web page.

Contact:
Adv Stud Eductnl Policy, Leadership & Curriculum T
http://education.asu.edu
Educational Psychology (MA) EDPSYCHMA
Mary Lou Fulton Institute and Graduate School of Education

Official Degree Awarded: MA Educational Psychology

Program Description: Each student’s program is prepared in consultation with the supervisory committee, consisting of a chair and two or more faculty members. Applicants to the M.A. in educational psychology must indicate which specialization they wish to study. Areas of specialization are:

- Learning.
- Lifespan developmental psychology.
- Measurement, statistics and methodological studies.

Program Requirement:

1. Thirty credit hours.
2. Written comprehensive examination.

Admission Requirements: Applicants must complete a Graduate College application. See additional requirements for area of specialization on the Web site at http://education.asu.edu/prospective_students/graduate_studies.

Contact:
Adv Stud Eductnl Policy, Leadership & Curriculum T
http://education.asu.edu/
dpe@asu.edu
EDB 302
480/965-3384

Educational Psychology (MEd) EDPSYCHMED
Mary Lou Fulton Institute and Graduate School of Education

Official Degree Awarded: MEd Educational Psychology

Program Description: Educational psychology offers a M.Ed. for persons who wish to further prepare themselves for instructional or educational positions in a variety of settings. Students completing this program are not expected to continue into the Ph.D. in educational psychology.

Program Requirement: A minimum of 36 credit hours and a comprehensive examination are required.

- Educational psychology core
• Introduction to research and evaluation.
• Learning and instruction.
• Child development.
• Psychology of the adolescent.

Focus studies

Three or four courses related to a topic chosen by the student.

Admission Requirements:

1. Graduate College application with transcripts from a previously attended institution.
2. Individual Resume. This document should include your higher education background, classroom teaching, other employment experiences, public service affiliation with professional organizations, awards, presentations, publications and descriptions of nonacademic interests.
3. Statement of Goals. This one- or two-page narrative should identify the career path the applicant wishes to pursue, indicate how preparation to date contributes to the plan and tell how a degree in educational psychology can attain one's goals.
4. GRE Scores.
5. In addition to the GRE score requirement, a Test of English as a Foreign Language (TOEFL) score is required of students whose native language is not English.

Contact:
Adv Stud Eductnl Policy, Leadership & Curriculum T
http://education.asu.edu
dpe@asu.edu
EDB 302
480/965-3384

Educational Technology (Grad Certificate) EDEDTGRCT
Official Degree Awarded: CERT Educational Technology (certificate)

Program Description: The graduate certificate in educational technology is designed for individuals interested in gaining proficiency in the design, development and evaluation of instructional systems as well as learning how to utilize various educational technology applications to support learning and performance.

Program Requirement: The certificate consists of 15 credit hours of course work. Students must successfully complete three core courses, one elective course and one capstone course to complete the certificate. In terms of core courses, students are required to complete the courses listed below.

Core Courses (three required)
EDT 501 Foundations and Issues in Educational Technology
EDT 502 Design and Development of Instruction
EDT 503 Instructional Media Design

Students must complete one elective course, chosen with their advisor, and a three-credit-hour capstone course: EDT 504 Development of Computer-Based Instruction.

Admission Requirements: The graduate certificate in educational technology is available to all ASU graduate students and to nondegree graduate students provided they meet eligibility criteria. To be eligible for this program, the applicant must:

1. Hold a bachelor's degree or equivalent from a regionally accredited institution.
2. Have a cumulative junior/senior undergraduate GPA of 3.00 or higher.

All applicants must submit the Graduate College online application. All materials listed below must be submitted to graduate admissions:

1. Graduate certificate in educational technology program application for admission.
2. One official copy of all college or university transcripts.
3. Curriculum vitae or resume.

Contact:
Adv Stud Eductnl Policy, Leadership & Curriculum T
http://education.asu.edu/edt
dpe@asu.edu
EDB 302
480/965-3384

Educational Technology (Art, Media & Engr)(PhD) EDAMEPHD
Mary Lou Fulton Institute and Graduate School of Education

Official Degree Awarded: PHD Educational Technology (Arts, Media and Engineering)

Program Description: The educational technology Ph.D. program focuses on the design, development and evaluation of instructional systems and on educational technology applications to support learning. The doctoral program emphasizes research using educational technology in applied settings and prepares students for a variety of professional positions. Graduates are typically employed as university faculty, educational technologists in universities, community colleges and schools, or as training managers in corporate settings.

Arts, media and engineering (AME) is a concentration in the educational technology Ph.D. The AME concentration provides graduate students with:

- The opportunity for training that combines solid knowledge in their discipline with interdisciplinary knowledge in digital media.
• Hands-on investigation of current issues in digital media research and development.
• Participation in high-end interdisciplinary media research.
• Lead roles in collaborative, interdisciplinary development of novel experiential media systems for education.

For more information on AME, please visit the program Web site, http://ame.asu.edu/.

**Program Requirement:** A minimum of 84 credit hours beyond the bachelor's degree is required. At least 54 of these hours must be taken at Arizona State University after admission to the Ph.D. program. The following course work is required for all students in the educational technology doctoral program:

• Foundations and issues in educational technology.
• Design and development of instruction.
• Educational evaluation.
• Introduction to date analysis.
• Multiple regression/correlation.
• Research in educational technology.
• Advanced Instructional Development.

One year full-time in residency, a research publication and a written comprehensive examination are required.

The concentration assumes the student enters with a master's degree in educational technology or a related field; if the student's master's degree is not in educational technology, the advisor will work with the student to identify course deficiencies. The AME concentration requires that about one third of the course credit be taken from AME. Furthermore the AME concentration requires that about half of the research/dissertation credit hours are also taken from AME. Research and dissertation credits for all AME concentration students will be related to work on interdisciplinary experiential media projects from a common research agenda.

**Admission Requirements:** All applicants must submit the Graduate College online application. Applicants to the concentration must complete the educational technology program application and provide the additional materials required for the application to an AME concentration. The complete package is submitted to educational technology. A student must first be admitted to the educational technology doctoral degree program, and then his or her application will be considered by the AME admissions committee.

Educational technology admissions criteria apply for admittance into the Ph.D. program.

After an AME concentration applicant is admitted into the educational technology
Ph.D. program, the AME faculty will then decide if the person also meets the digital media related requirements for admission into the concentration.

Contact:
Adv Stud Eductnl Policy, Leadership & Curriculum T
http://education.asu.edu
dpe@asu.edu
EDB 302
480/965-3384

Educational Technology (MEd) EDTECHMED
Mary Lou Fulton Institute and Graduate School of Education

Official Degree Awarded: MEd Educational Technology

Program Description: The educational technology master's program has a strong focus on design, development and evaluation of instructional systems, as well as current and emerging trends and technologies, including:

- Human performance technology.
- Training.
- Web-based learning.
- Distance learning.
- Online learning.
- Technology integration.
- Multimedia learning.
- Interactive learning environments.

Graduates of the program typically are employed in schools, community colleges and universities or as training specialists in corporate settings.

Program Requirement: A minimum of 30 credit hours beyond a bachelor's degree is required. Each student develops a program of study in consultation with a faculty advisor.

Required Courses (18 credit hours):

- Foundations and issues in educational technology.
- Design and development of instruction.
- Instructional media design.
- Development of computer-based instruction.
- Theoretical views of learning.
- Internship (or practicum).

Elective Courses: 12 credit hours of elective courses from a variety of specialty areas such as instructional design, various technologies, media development, technology
integration, distance education, performance improvement and training. A comprehensive examination is also required.

**Admission Requirements:** All applicants must submit the Graduate College online application. Academic requirements for admission to the EDT master’s program include:

1. A four-year undergraduate GPA of 3.00 or above.
2. A score of either 500 or above on the GRE verbal section or a scaled score of 400 or above on the Miller Analogies Test (MAT).
3. A score of 550 (paper-based) or 213 (computer-based) or 80 (Internet-based) or above on the Test of English as a Foreign Language (TOEFL) for students who do not speak English as their first language.
4. Statement of professional goals. Find this form at [http://education.asu.edu/about/academic_units/psyched/psyched_forms.do](http://education.asu.edu/about/academic_units/psyched/psyched_forms.do).
5. Two references. Complete and sign the top portion of each form before giving to the persons who will provide your recommendations. Recommenders may, if they wish, attach original letters on letterhead stationery. Reference forms can be found at [http://education.asu.edu/about/academic_units/psyched/psyched_forms.do](http://education.asu.edu/about/academic_units/psyched/psyched_forms.do).

**Contact:**
Adv Stud Educntl Policy, Leadership & Curriculum T
[http://education.asu.edu](http://education.asu.edu)
dpe@asu.edu
EDB 302
480/965-3384

**Educational Technology (PhD) EDTECHPHD**
Mary Lou Fulton Institute and Graduate School of Education

**Official Degree Awarded:** PHD Educational Technology

**Program Description:** The focus of the Ph.D. program in educational technology is on the design, development and evaluation of instructional systems and on educational technology applications to support learning. The doctoral program emphasizes research using educational technology in applied settings.

The Ph.D. in educational technology prepares students for a variety of professional positions. Graduates are typically employed as university faculty, educational technologists in universities, community colleges and schools or as training managers in corporate settings.

**Program Requirement:** A minimum of 84 credit hours beyond the bachelor’s degree is required. At least 54 of these hours must be taken at Arizona State University.
after admission to the Ph.D. program. The following 48 credit hours of course work is required for all students in the educational technology doctoral program:

- Foundations and Issues in Educational Technology.
- Design and Development of Instruction.
- Instructional Media Design.
- Development of Computer-based Instruction.
- Educational Evaluation.
- Theoretical Views of Learning.
- Introduction to Data Analysis.
- Multiple Regression/Correlation.
- Research in Educational Technology.
- Advanced Instructional Development.
- Advanced Educational Technology Research.
- Dissertation.

One year full-time in residency, a research publication and a written comprehensive examination and successful defense of the dissertation are required.

Electives: 36 credit hours minimum.

Admission Requirements: Applicants must submit a Graduate College application, transcripts and GRE results.

Academic requirements for admission to the educational technology doctoral program include:

1. A four-year undergraduate GPA of 3.20 or above.
2. Scores of 500 or above on both the verbal reasoning and quantitative reasoning sections of the GRE.
3. A score of 4 or above on the analytical writing section of the GRE.
4. A score of 600 (paper-based) or above on the Test of English as a Foreign Language (TOEFL) or 100 (Internet-based) is also required for students who do not speak English as their first language.

In addition, a statement of professional goals, two professional references and a resume are needed.

Contact:
Adv Stud Eductnl Policy, Leadership & Curriculum T
http://education.asu.edu
dpe@asu.edu
EDB 302
480/965-3384

Elementary Education (MA) EDELEMMMA
Mary Lou Fulton Institute and Graduate School of Education
Official Degree Awarded: MA Curriculum and Instruction (Elementary Education)

Program Description: Designed as a research degree, the M.A. prepares students wishing to continue on to a doctorate. The concentration in elementary education offers advanced course work in research methodology, theory and practice in the area of elementary education. This concentration encompasses the study of education and care of children through the primary grades. The program integrates professional knowledge and understanding with research skills, demonstrated in the completion of the required thesis.

Program Requirement: A minimum of 30 credit hours of credit and a thesis is required for the M.A. in curriculum and instruction. Curriculum and instruction M.A. students are assigned an advisor at the time of their admission. The advisor assists in selecting the graduate committee and serves as chair of the student’s graduate committee. Each M.A. candidate must form a graduate committee in consultation with the advisor and complete a thesis, under the direction of the thesis advisor. The graduate program committee must be formed prior to completing 12 credit hours in the program. Each M.A. candidate will complete a thesis after completing at least 24 hours in the program. Six credit hours of thesis are required along with a minimum of 24 credit hours of approved course work.

Admission Requirements: The following are required:

1. Application to the Graduate College.
2. Transcripts.
4. Three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate program.

Additional materials may be required to gain admission into certain programs or cohorts.

Contact:
Dean, Mary Lou Fulton Inst Grad School Education
http://education.asu.edu/prospective_students/graduate_studies
cnigrad@asu.edu
ED 434
480/965/4602

Elementary Education (MEd) EDELEMMED
Mary Lou Fulton Institute and Graduate School of Education

Official Degree Awarded: MEd Curriculum and Instruction (Elementary Education)

Program Description: The M.Ed. in curriculum and instruction with a concentration in elementary education is a degree program designed to facilitate development of practitioner knowledge, skills and understanding for teachers in elementary classrooms. Practitioners are usually classroom teachers or individuals preparing to
teach, who will focus on developing classroom practices based on current research, the integration of subject matter content in elementary classrooms, and a thoughtful examination of their own teaching practices in relation to student learning.

The concentration in elementary education encompasses the study of education and care of children through the primary grades. The program requires students to develop a deeper understanding of the research, theories and methods required of a successful practitioner in the elementary schools of today, including a more advanced understanding of diverse learners in culturally diverse settings. For more information, see http://education.asu.edu/prospective_students/graduate_studies/ci_med.dot.

An M.Ed. with elementary teacher certification is also offered. The TEACH+ME program provides candidates with an M.Ed. in curriculum and instruction with a concentration in elementary education and an institutional recommendation for teacher certification in elementary education.

Program Requirement: A minimum of 30 credit hours of graduate credit is required for the M.Ed. in curriculum and instruction; the TEACH+ME program requires 45 credit hours. Each student is assigned a graduate advisor to design the program of study. Students in this program will complete either a comprehensive examination, a research project or an applied project as a culminating activity after completing at least 24 of the 30 credit hours listed on the program of study. Students must choose their culminating activity in consultation with their faculty advisor before completing their program of study. Students who choose to complete an applied project must enroll in teacher as researcher the semester prior to completing the applied project, and they must meet with their graduate advisor for approval of the applied project. For more information, refer to the curriculum and instruction M.Ed. student handbook.

Admission Requirements: The following are required:

1. Application to the Graduate College.
2. Transcripts.
4. Three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate program.

Additional materials may be required to gain admission into certain programs or cohorts. For specific information regarding admission requirements, see http://education.asu.edu.

Contact:
Dean, Mary Lou Fulton Inst Grad School Education
http://education.asu.edu/prospective_students/graduate_studies
cnigrad@asu.edu
ED 434
480/965-4602

English as a Second Language - Tempe Campus (MA) EDESLMA
Mary Lou Fulton Institute and Graduate School of Education

Official Degree Awarded: MA Curriculum and Instruction (English as a Second Language)

Program Description: The M.A. in curriculum and instruction is intended for students wishing to conduct original research in U.S. school settings and continue on for the Ph.D. The M.A. concentration in English as a second language is designed to provide course work related to teaching school-aged English learners in U.S. settings (second language acquisition theory, English learner programs and methods and language assessment) along with course work in research methods to be used in the design and implementation of the thesis.

Note: This degree is not the same as the Master of Teaching English to Speakers of Other Languages (MTESOL) offered through the English department.

Program Requirement: A minimum of 30 credit hours of course work and a thesis is required for the M.A. in curriculum and instruction. Curriculum and instruction M.A. students are assigned an advisor at the time of their admission. The advisor assists in selecting the graduate committee and serves as chair of the student’s graduate committee. Each M.A. degree candidate must form a graduate committee in consultation with the advisor and complete a thesis, under the direction of the thesis advisor. The graduate program committee must be formed prior to completing 12 credit hours in the program. Because of the research component, students enrolling in the M.A. typically need more than 30 hours to complete the degree. Each M.A. candidate will complete a thesis after completing at least 24 hours in the program. Six credits of thesis are required along with a minimum of 24 credit hours of approved course work.

Admission Requirements: The following are required:

1. Application to the Graduate College.
2. Transcripts.
4. Three letters of recommendation from individuals who can speak to the applicant’s potential for success in a graduate program.

Additional materials may be required to gain admission into certain programs or cohorts.

Contact:
Dean, Mary Lou Fulton Inst Grad School Education
http://education.asu.edu/prospective_students/graduate_studies
cnigrad@asu.edu
Official Degree Awarded: MEd Curriculum and Instruction (English as a Second Language)

Program Description: The M.Ed. in curriculum and instruction with a concentration in English as a second language is intended for students who are currently teaching English learners, at the K-12 levels of education. This degree is designed for practitioners to facilitate development of advanced level professional knowledge of research, theory and practice in the area of teaching English learners in school settings. The M.Ed. in English as a second language is designed to provide coursework related to teaching English learners in U.S. settings (second language acquisition theory, English learner programs and methods and language assessment).

Note: This degree is not the same as the Master of Teaching English to Speakers of Other Languages (MTESOL) offered through the English department.

Program Requirement: A minimum of 30 credit hours of graduate credit is required for the M.Ed. in curriculum and instruction. Each student is assigned a graduate advisor to design the program of study. Students in this program will complete either a comprehensive examination, a research project or an applied project as a culminating activity after completing at least 24 of the 30 credit hours listed on the program of study. Students must choose their culminating activity (written examination, research project or applied project) in consultation with their faculty advisor before completing their program of study. Students who choose to complete an applied project must enroll in the teacher as researcher course the semester prior to completing the applied project, and they must meet with their graduate advisor for approval of the applied project. For more information, refer to the curriculum and instruction M.Ed. student handbook.

Admission Requirements: The following are required:

1. Application to the Graduate College.
2. Transcripts.
4. Three letters of recommendation from individuals who can speak to the applicant’s potential for success in a graduate program.

Additional materials may be required to gain admission into certain programs or cohorts.

Contact:
Dean, Mary Lou Fulton Inst Grad School Education
English Education (PhD) EDENGLPHD
Mary Lou Fulton Institute and Graduate School of Education

Official Degree Awarded: PHD Curriculum and Instruction (English Education)

Program Description: The interdisciplinary Ph.D. in curriculum and instruction with a concentration in English education offers classes in both the Mary Lou Fulton Institute and Graduate School of Education and the College of Liberal Arts and Sciences at ASU. Students receive training and mentoring in six related disciplines:

- Literature.
- Linguistics.
- Second language teaching.
- Rhetoric and composition.
- Research techniques.
- The nature of learning.

In addition to core requirements, students are involved in seminars and internships.

We believe that doctoral students should receive a graduate experience of classes, seminars, internships and research experience that make them aware of the basic precepts and controversies in both historic and current fields of English education, for example:

- The philosophy and sociology behind such current issues as national and state standards and high stakes testing.
- Issues concerning usage and the teaching of grammar, especially in relation to multiculturalism and second-language learning.
- Development of critical skills in relation to the Internet and other mass media.
- Subject matter of special interest to secondary level teachers including the appreciation of literature and development of writing skills.
- Skills and techniques needed to conduct and report on research and to understand other people’s research.

Program Requirement: The Ph.D. requires 84 credit hours, a dissertation and written and oral comprehensive examinations.

Students with a master’s degree awarded by an accredited university and directly related to the anticipated course of study may request that 30 hours of the master’s degree be applied directly to the required 84 hours. In addition to this master’s
degree, the program of study must contain at least 54 credit hours taken at Arizona State University since being admitted to the Ph.D. program. Twelve of these hours must be 799 (dissertation credit) while the other hours (minimum of 42) will be selected by the student and his or her dissertation chairperson and listed on the program of study, which must be approved by the dissertation committee. These hours should be chosen to build on hours already taken at the master’s level; however, some classes identified below are mandatory, while others are suggestions.

Mandatory: Curriculum and Instruction Core Requirements (six credit hours)

DCI 701 Curriculum Theory and Development
DCI 702 Curriculum Theory and Practice

Mandatory: Three Internships (two credit hours hours each of ENG 784, for a total of six)

Typically, one internship will be in research, one in the supervising of student teachers and one in the teaching of a college class in the field of English education. Students should work with at least two different faculty members and should not take more than one internship in the same semester.

English Education Concentration (18 credit hours)

• Mandatory: Two ENG 598 Special Topics courses offered by English education faculty members.
• Mandatory: ENG 606 Advanced Studies in English education.
• Choose two other graduate English classes from ENG 504, 506, 507 and 540.
• A graduate class in linguistics, English as a second language or teaching composition.

Inquiry and Analysis (12 credit hours)

• Mandatory: ENG 500 Research in the Teaching of English.
• One class in quantitative and one class in qualitative research methods. If such classes were taken as part of the master’s degree, other research classes should be chosen to help the student prepare for writing the dissertation. We suggest Eng 556 Theories of Literacy and ENG 654 Advanced Studies: Literature/Technology/Power.
• Mandatory: ENG 792 (independent study with your committee chair): Preparing for comprehensive exam and writing the dissertation proposal.

Mandatory: Independent Research and Dissertation: a minimum of three credit hours of research and 12 credit hours of dissertation leading to completion of an approved dissertation are required.

Note: This is only a basic list of requirements.
Students should be prepared to take additional classes as suggested by their advisory committee in relation to their dissertation topic.

Admission Requirements: Admission to the program is open only to those with a minimum of two years experience teaching English in grades 6-14. Students are expected to come into the program holding a valid teaching certificate and a relevant master’s degree.

The following are required:

1. Application to the Graduate College.
2. Transcripts.
4. Curriculum vitae (resume).
5. Statement of research interests.
6. A writing sample (approximately ten pages long).
7. GRE scores.
8. Three letters of recommendation from individuals who can speak to the applicant’s potential for success in a graduate program.

Additional materials may be required to gain admission into certain programs or cohorts.

Admission to the program is contingent upon the commitment from an approved mentor in the concentration to advise and mentor the applicant.

Contact:
Dean, Mary Lou Fulton Inst Grad School Education
http://education.asu.edu/prospective_students/graduate_studies
cnigrad@asu.edu
ED 434
480/965-4602

Higher and Postsecondary Education (EdD) EDPOSTEDD
Mary Lou Fulton Institute and Graduate School of Education

Official Degree Awarded: EdD Higher and Postsecondary Education

Program Description: The Ed.D. program in higher and postsecondary education is based on a researcher/practitioner model that focuses on the application of concepts, techniques and skills necessary to prepare professionals for leadership roles in the higher education community, with an emphasis on serving diverse communities at two- and four-year colleges and universities. It is a 36-month, cohort, fee-based program. Course work is delivered on-campus, off-site and online.

Program hallmarks include:
• The program allows higher education professionals, including mid to senior-level administrators and faculty, to earn an Ed.D. without major disruption from their employment status.
• Program design permits students to complete all coursework and their dissertation in three years (36 months).
• The curriculum is a blend of on-campus, off-site and online learning that will utilize the benefits of these learning models (face-to-face interaction and flexibility).
• The program offers a unique opportunity for students to participate in site visits to a variety of models of higher education institutions.
• Students will learn from accomplished practitioners and distinguished scholars throughout the ASU campus and innovative leaders and practitioners locally and throughout the country.
• The program is a cohort-based model with a cohesive, integrated curricular structure, yet one which provides a degree of flexibility.
• Students are exposed to a variety of research focused on organizational change, diverse student learning models and student transitions between educational levels and institutions.
• Students engage in research/inquiry methods to be knowledgeable about and for addressing emerging changes or developing paradigm shifts in the field.

Program Requirement: The program requires:

1. Ninety credit hours.
2. An internship.
3. Written comprehensive examination.

Admission Requirements: All applicants must submit the Graduate College online application. Program applicants are evaluated on the following:

1. Master’s degree in a field related to higher and postsecondary education, candidates with degrees in outside areas may be considered.
2. At least three years of experience in higher/postsecondary education leadership positions or similar roles in other types of organizations.
3. A minimum GPA of 3.00 in both undergraduate and graduate coursework.
4. Statement of purpose, which outlines career interest and understanding of trends in higher education.
5. Current resume or vitae.
7. GRE scores.
8. Phone or on-campus interview with the admissions committee.

Contact:
Adv Stud Educ Policy, Leadership & Curriculum T
http://education.asu.edu

Academic Catalog Archive 2009-10  306
Higher and Postsecondary Education (MEd) EDPOSTMED
Mary Lou Fulton Institute and Graduate School of Education

Official Degree Awarded: MEd Higher and Postsecondary Education

Program Description: The M.Ed. in higher and postsecondary education is a relevant and applied program designed to shape scholars and leaders with knowledge and skills paralleling the trajectory of the New American University. The program’s graduates are prepared to advance student and institutional success across every area of the undergraduate learning experience.

Highlights of the program include that it:

1. Includes a variety of course delivery formats for students, which expedites degree attainment.
2. Offers the graduate student success seminar at the beginning of the program and features M.Ed. peer instructors to help build relationships, create a professional e-portfolio and to develop skills for student success.
3. Offers courses that integrate theory to practice through relevant research, models and applied skills.
4. Offers creative practicum experience to advance skills and professional development.
5. Collaborates with university learning partners to fund graduate students through management internship opportunities.
6. Culminates with an applied project (nonthesis) that demonstrates the student’s learning and development for in job applications, professional growth and lifelong learning.

Program Requirement: The M.Ed. program requires 30 credit hours of graduate work beyond the bachelor’s degree. Students will meet with the M.Ed. coordinator during their first semester of enrollment and the beginning of their third semester, to develop their program of study, review their student portfolio, outline their practicum and prepare for the applied project and graduation. All of the program of study requirements for the M.Ed. in the higher and postsecondary education program must be completed within a period of six years.

Admission Requirements: For admission to the M.Ed. program, the Education Institute offers rolling admissions and requires the following criteria from applicants:

1. Online application, application fee and official undergraduate transcripts to the Graduate College.
2. Letter of intent and resume to the Division of Educational Leadership and Policy Studies.
3. A GPA of at least 3.00.
4. GRE scores not required.
5. The M.Ed. coordinator reserves the right to interview any applicant.

Please visit the higher and postsecondary education Web page for detailed information on the program.

Contact:
Adv Stud Eductnl Policy, Leadership & Curriculum T
http://education.asu.edu
delps@asu.edu
ED 120
480/965-6357

Indian Education (MA) EDINDMA
Mary Lou Fulton Institute and Graduate School of Education

Official Degree Awarded: MA Curriculum and Instruction (Indian Education)

Program Description: The M.A. in curriculum and instruction with a concentration in Indian education is a research degree program that requires a research core, an Indian education concentration core, electives and a thesis. This program emphasizes innovative research and sound inquiry that is sensitive and responsive to native peoples, the communities and worldviews. The program addresses the role of working collaboratively to enhance knowledge and acknowledge the richness and uniqueness of indigenous education. The M.A. requires the completion of a master’s thesis, which is the culminating activity.

Program Requirement: A minimum of 30 credit hours and a thesis is required for the M.A. in curriculum and instruction. Curriculum and instruction M.A. students are assigned an advisor at the time of their admission. The advisor assists in selecting the graduate committee and serves as chair of the student’s graduate committee. Each M.A. degree candidate must form a graduate committee in consultation with the advisor and complete a thesis, under the direction of the thesis advisor. The graduate program committee must be formed prior to completing 12 credit hours in the program. Each M.A. candidate will complete a thesis after completing at least 24 hours in the program. Six credits of thesis are required along with a minimum of 24 credit hours of approved course work.

Required courses in the research core are:

- Introduction to Research and Evaluation in Education.
- Conducting Educational Research in Indigenous Communities.

Admission Requirements: The following are required:

1. Application to the Graduate College.
2. Transcripts.
4. Three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate program.

Additional materials may be required to gain admission into certain programs or cohorts.

Contact:
Dean, Mary Lou Fulton Inst Grad School Education
http://education.asu.edu/prospective_students/graduate_studies
cnigrad@asu.edu
ED 434
480/965-4602

**Indian Education (MEd) EDINDMED**
Mary Lou Fulton Institute and Graduate School of Education

**Official Degree Awarded:** MEd Curriculum and Instruction (Indian Education)

**Program Description:** The M.Ed. in curriculum and instruction with a concentration in Indian education is designed for practitioners to facilitate development of advanced level professional knowledge of research, theory and practice in the area of indigenous education. The degree includes advanced courses in Indian education, including history of American Indian education and foundations of instruction for indigenous classrooms. This program emphasizes innovative and sound inquiry that is sensitive and responsive to Native peoples, the communities and worldviews. The program addresses the role of working collaboratively to enhance knowledge and acknowledge the richness and uniqueness of indigenous education.

**Program Requirement:** A minimum of 30 credit hours of graduate credit is required for the M.Ed. in curriculum and instruction. Each student is assigned a graduate advisor to design the program of study. Students in this program will complete either a comprehensive examination, a research project or an applied project as a culminating activity after completing at least 24 of the 30 credit hours listed on the program of study. Students must choose their culminating activity (written examination, research project or applied project) in consultation with their faculty advisor before completing their program of study. Students who choose to complete an applied project must enroll in teacher as researcher the semester prior to completing the applied project, and they must meet with their graduate advisor for approval of the applied project. For more information, refer to the curriculum and instruction M.Ed. student handbook.

**Admission Requirements:** The following are required:

1. Application to the Graduate College.
2. Transcripts.
4. Three letters of recommendation from individuals who can speak to the applicant’s potential for success in a graduate program.

Additional materials may be required to gain admission into certain programs or cohorts.

Contact:
Dean, Mary Lou Fulton Inst Grad School Education
http://education.asu.edu/prospective_students/graduate_studies
cnigrad@asu.edu
ED 434
480/965-4602

Language and Literacy (MA) EDLANGMA
Mary Lou Fulton Institute and Graduate School of Education

Official Degree Awarded: MA Curriculum and Instruction (Language and Literacy)

Program Description: This M.A. program offers students opportunities to develop expertise in contemporary issues and pedagogical methods related to language and literacy, teaching and research, such as:

- Children's literature.
- Content literacy.
- Critical literacy.
- Culture and literacy.
- Gender.

M.A. students also investigate both applied and theoretical issues in language and literacy. Students may use this program as preparation for doctoral work in language and literacy.

Program Requirement: A minimum of 30 credit hours and a thesis is required for the M.A. in curriculum and instruction. Curriculum and instruction M.A. students are assigned an advisor at the time of their admission. The advisor assists in selecting the graduate committee and serves as chair of the student's graduate committee. Each M.A. degree candidate must form a graduate committee in consultation with the advisor and complete a thesis, under the direction of the thesis advisor. The graduate program committee must be formed prior to completing 12 credit hours of credit in the program. Each M.A. candidate will complete a thesis after completing at least 24 hours in the program. Six credits of thesis are required along with a minimum of 24 credit hours of approved course work.

Admission Requirements: The following are required:

1. Application to the Graduate College.
2. Transcripts.
4. Three letters of recommendation from individuals who can speak to the applicant’s potential for success in a graduate program.

Additional materials may be required to gain admission into certain programs or cohorts.

Contact:
Dean, Mary Lou Fulton Inst Grad School Education
http://education.asu.edu/prospective_students/graduate_studies
cnigrad@asu.edu
ED 434
480/965-4602

**Language and Literacy (MEd) EDLANGMED**
Mary Lou Fulton Institute and Graduate School of Education

**Official Degree Awarded:** MEd Curriculum and Instruction (Language and Literacy)

**Program Description:** The M.Ed. in curriculum and instruction with a concentration in language and literacy offers students opportunities to develop expertise in contemporary issues and pedagogical methods related to language, literacy, teaching and learning, such as:

- Children’s literature.
- Content literacy.
- Critical literacy.
- Culture and literacy.
- Gender.
- Language and literacy processes.
- Multilingual/multicultural literacy.
- Assessment.

**Program Requirement:** A minimum of 30 hours of graduate credit is required for the M.Ed. in curriculum and instruction. Each student is assigned a graduate advisor to design the program of study. Students in this program will complete either a comprehensive examination, a research project or an applied project as a culminating activity after completing at least 24 of the 30 credit hours listed on the program of study. Students must choose their culminating activity (written examination, research project or applied project) in consultation with their faculty advisor before completing their program of study. Students who choose to complete an applied project must enroll in teacher as researcher the semester prior to completing the applied project, and they must meet with their graduate advisor for approval of the applied project. For more information, refer to the curriculum and instruction M.Ed. student handbook.

**Admission Requirements:** The following are required:

1. Application to the Graduate College.
2. Transcripts.
4. Three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate program.

Additional materials may be required to gain admission into certain programs or cohorts.

Contact:
Dean, Mary Lou Fulton Inst Grad School Education
http://education.asu.edu/prospective_students/graduate_studies
cnigrad@asu.edu
ED 434
480/965-4602

Language and Literacy (PhD) EDLANGPHD
Mary Lou Fulton Institute and Graduate School of Education

Official Degree Awarded: PHD Curriculum and Instruction (Language and Literacy)

Program Description: The concentration in language and literacy in the interdisciplinary Ph.D. program in curriculum and instruction at ASU provides opportunities for research and study in language and literacy education:

- Adolescent literacy.
- Bilingualism.
- Biliteracy.
- Children's literature.
- Classroom discourse.
- Educational linguistics.
- Emergent literacy.
- Gender and literacy.
- Heritage language studies.
- Language and literacy education.
- Language policy.
- New literacies.
- Reading.
- Second language acquisition.
- Technoliteracies.
- Writing.

The language and literacy Ph.D. concentration is designed to develop scholars in language and literacy education.

Program Requirement: The Ph.D. requires 84 credit hours, a dissertation, and written and oral examinations.
The following domains comprise the interdisciplinary language and literacy Ph.D. program:

**Area of concentration**: 30 credit hours are required pertaining to language and literacy education.

Cognate study: 12 credit hours are taken outside the students declared concentration to broaden their understanding of the conceptual base and issues underlying the study of curriculum and instruction.

**Inquiry and analysis**: 15 credit hours of empirical analysis and inquiry foundations are required in advanced design and data analysis in quantitative and/or qualitative research methods.

**Language and literacy doctoral seminars**: Each semester for the first four semesters in the program, students are required to take the one-hour language and literacy seminar on linguistics, early literacy, adolescent/adult literacy and language policy/politics.

**Core coursework**: Six credit hours of courses (interdisciplinary research seminar in curriculum and instruction and curriculum theory and practice) are required as the curriculum and instruction core.

**Internships**: Six credit hours of research and university teaching internships are required to broaden the training and experience of students.

**Independent research and dissertation**: A minimum of three credit hours of research and 12 credit hours of dissertation leading to completion of an approved dissertation are required.

**Admission Requirements**: The following are required:

1. Application to the Graduate College.
2. Transcripts.
4. Curriculum vitae (resume).
5. Statement of research interests.
6. Writing sample (approximately 10 pages in length).
7. GRE scores.
8. Three letters of recommendation from individuals who can speak to the applicant’s potential for success in a graduate program.

Additional materials may be required to gain admission into certain programs or cohorts.
Admission to the program is contingent upon the commitment from an approved mentor in the concentration to advise and mentor the applicant.

Contact:
Dean, Mary Lou Fulton Inst Grad School Education
http://education.asu.edu/prospective_students/graduate_studies
cnigrad@asu.edu
ED 434
480/965-4602

Learning (PhD) EDPSYLEPHD
Mary Lou Fulton Institute and Graduate School of Education

Official Degree Awarded: PHD Educational Psychology (Learning)

Program Description: The learning concentration of the Ph.D. in educational psychology focuses on theoretical and empirical issues in the cognitive and learning sciences, and their educational applications and implications. Faculty interests include parent and teacher education, cognition, motivation and self-regulation and literacy. The concentration prepares students for professional positions in the academy, school districts, departments of education and industry. Learning stresses student involvement in professional activities. Students work with faculty on research of mutual interest, present their work at national conferences and submit papers to peer-reviewed journals.

Program Requirement: The program requires a minimum of 84 credit hours beyond the bachelor's degree. At least 54 of these hours must be taken at Arizona State University.

Learning core: psychology of reading, higher-order cognition, motivation, learning science lab, internship in undergraduate teaching.

Interdisciplinary core: introduction to data analysis, multiple regression/correlation methods.

Specialization: reading and conference, research practicum, self regulation.

Electives are determined by student and advisor.

Prior to admission to candidacy, the student must satisfy a publication requirement; this can be fulfilled with either:

- Publication in a refereed journal of the quality of the journals published by the American Psychological Association (APA) or the American Educational Research Association (AERA).
- Presentation at an annual conference of a national organization of the quality of APA or AERA.
A written comprehensive examination and successful completion of the dissertation is required.

**Admission Requirements:** All applicants must submit the Graduate College online application. The learning doctoral program is a limited-admission program. In making their decision, faculty members consider several items, including:

- Undergraduate GPA.
- Scores on the verbal and quantitative sections of the GRE.
- References from two university faculty or other individuals who can judge an applicant’s academic potential.
- The statement of professional goals and interests.

A score of 600 or above on the Test of English as a Foreign Language (TOEFL) is also required for students who do not speak English as their first language. For more information please contact the program staff: http://education.asu.edu/learning.

**Contact:**
Adv Stud Eductnl Policy, Leadership & Curriculum T
http://education.asu.edu/
dpe@asu.edu
EDB 302
480/965-3384

**Mathematics Education (MA) EDMATHMA**
Mary Lou Fulton Institute and Graduate School of Education

**Official Degree Awarded:** MA Curriculum and Instruction (Mathematics Education)

**Program Description:** The M.A. in curriculum and instruction with a concentration in mathematics education is a research degree program designed to facilitate development of advanced-level professional knowledge, skills and understanding. This program is designed to cultivate an understanding of mathematics education. Students in this program participate in core mathematics education courses, and then have the opportunity to examine one aspect of mathematics education in depth. This program is designed for the mathematics educator who plans to pursue additional graduate work in mathematics education.

**Program Requirement:** A minimum of 30 credit hours and a thesis is required for the M.A. in curriculum and instruction. Curriculum and instruction M.A. students are assigned an advisor at the time of their admission. The advisor assists in selecting the graduate committee and serves as chair of the student’s graduate committee. Each M.A. degree candidate must form a graduate committee in consultation with the advisor and complete a thesis, under the direction of the thesis advisor. The graduate program committee must be formed prior to completing 12 credit hours in the program. Each M.A. candidate will complete a thesis after completing at least 24 hours in the program. Six credits of thesis are required along with a minimum of 24 credit hours of approved course work.
Admission Requirements: The following are required:

1. Application to the Graduate College.
2. Transcripts.
4. Curriculum vitae (resume).
5. Statement of research interests.
6. Writing sample (approximately 10 pages in length).
7. GRE scores.
8. Three letters of recommendation from individuals who can speak to the applicant’s potential for success in a graduate program.

Additional materials may be required to gain admission into certain programs or cohorts.

Contact:
Dean, Mary Lou Fulton Inst Grad School Education
http://education.asu.edu/prospective_students/graduate_studies
cnigrad@asu.edu
ED 434
480/965-4602

Mathematics Education (MEd) EDMATHMED
Mary Lou Fulton Institute and Graduate School of Education

Official Degree Awarded: MEd Curriculum and Instruction (Mathematics Education)

Program Description: The M.Ed. in curriculum and instruction with a concentration in mathematics education is a practitioner's degree program designed to facilitate development of advanced level professional knowledge, skills and understanding. Students in this program explore issues related to teaching and learning in mathematics education and study these issues in the context of their own classroom. This program is designed for the professional classroom math educator.

Program Requirement: A minimum of 30 hours of graduate credit is required for the M.Ed. in curriculum and instruction. Each student is assigned a graduate advisor to design the program of study. Students in this program will complete either a comprehensive examination, a research project or an applied project as a culminating activity after completing at least 24 of the 30 credit hours listed on the program of study. Students must choose their culminating activity (written examination, research project or applied project) in consultation with their faculty advisor before completing their program of study. Students who choose to complete an applied project must enroll in teacher as researcher the semester prior to completing the applied project, and they must meet with their graduate advisor for approval of the applied project. For more information, refer to the curriculum and instruction M.Ed. student handbook.

Admission Requirements: The following are required:
1. Application to the Graduate College.
2. Transcripts.
4. Three letters of recommendation from individuals who can speak to the applicant’s potential for success in a graduate program.

Additional materials may be required to gain admission into certain programs or cohorts.

Contact:
Dean, Mary Lou Fulton Inst Grad School Education
http://education.asu.edu/prospective_students/graduate_studies
cnigrad@asu.edu
ED 434
480/965-4602

Mathematics Education (PhD) (Curriculum and Instruction - Grades K-12) EDMATHPHD
Mary Lou Fulton Institute and Graduate School of Education

Official Degree Awarded: PHD Curriculum and Instruction (Mathematics Education)

Program Description: The Ph.D. in curriculum and instruction with a concentration in mathematics education provides opportunities for research in the teaching and learning of mathematics in K-12. Candidates may concentrate in the study of students' mathematical thinking, the design of learning and teaching environments, and the development and application of technologies for mathematics learning. Program mentors come from the Mary Lou Fulton Institute and Graduate School of Education and from the School of Mathematical and Statistical Sciences in the College of Liberal Arts and Sciences.

Program Requirement: The Ph.D. requires 84 credit hours, a dissertation, and written and oral comprehensive examinations.

The following six domains comprise the mathematics education Ph.D. program:

Mathematics Education Concentration: 30 credit hours

12 credit hours of the mathematics education seminar series
18 credit hours pertaining to mathematics education, mathematics and statistics.

Inquiry and Analysis: 15 credit hours

Advanced design and data analysis in quantitative and/or qualitative research methods.

Core Requirements: 6 credit hours

Interdisciplinary research seminar in curriculum and instruction and curriculum
theory and practice.

**Cognate Study:** 12 credit hours

To broaden the student’s understanding of the conceptual base and issues underlying the study of curriculum and instruction. Cognate courses should thematically cohere, but can be drawn from a broad range of offerings across the university.

**Internships:** 6 credit hours

Research and university teaching internships are required to broaden the training and experience of students.

**Independent Research and Dissertation:** a minimum of three credit hours of research and 12 credit hours of dissertation leading to completion of an approved dissertation are required.

**Admission Requirements:** The following are required:

1. Application to the Graduate College.
2. Transcripts.
4. Curriculum vitae (resume).
5. Statement of research interests.
6. Writing sample (approximately 10 pages in length).
7. GRE scores.
8. Three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate program.

Additional materials may be required to gain admission into certain programs or cohorts.

**Contact:**
Dean, Mary Lou Fulton Inst Grad School Education
http://education.asu.edu/prospective_students/graduate_studies
cnigrad@asu.edu
ED 434
480/965-4602

**Measurement Statistics Methodological Study (PhD) EDPSYMSPHD**
Mary Lou Fulton Institute and Graduate School of Education

**Official Degree Awarded:** PHD Educational Psychology (Measurement, Statistics and Methodological Studies)

**Program Description:** Students in the Ph.D. in measurement, statistics and methodological study focus their study on quantitative research methodologies,
educational statistics and psychometrics. Students specializing in measurement, statistics and methodological study will generally direct their professional efforts toward:

- Development and evaluation of techniques for the assessment of educational or psychological phenomena.
- Measurement of educational outcomes.
- Design and interpretation of research studies.
- Statistical methods for analyzing research data or outcomes of educational programs.

Graduates are employed in a variety of positions, such as professors in colleges or universities, data analysts in the public or private agencies, measurement specialists for government agencies or private companies or researchers and evaluators for schools or other institutions.

**Program Requirement:** The Ph.D. program in measurement, statistics and methodological studies requires a minimum of 84 credit hours beyond the bachelor’s degree. At least 54 of these hours must be taken at Arizona State University after admission to the Ph.D. program. The length of time required to complete the program varies from student to student. Students entering the program with a bachelor’s degree normally take at least four years. Students entering with a master’s degree in a related area typically take at least three years to complete the program. Students develop a program of study in consultation with their faculty advisor and the chair of the student’s doctoral committee. A comprehensive examination and successful defense of the dissertation are required.

**Admission Requirements:** The Graduate degree application is to be submitted online to the Graduate College.

Additional Materials:

1. GRE scores.
2. A statement of academic and career goals.
3. Resume or curriculum vitae.
4. Three letters of recommendation.

Forms for these items are available at [http://education.asu.edu/about/academic_units/psyched/psyched_forms.dot](http://education.asu.edu/about/academic_units/psyched/psyched_forms.dot).

For more information, see [http://research.ed.asu.edu/main.html](http://research.ed.asu.edu/main.html).

**Contact:**
Adv Stud Eductnl Policy, Leadership & Curriculum T
[http://education.asu.edu](http://education.asu.edu)
dpe@asu.edu
EDB 302
480/965-3384
Physical Education (PhD) EDPHYEDPHD

Mary Lou Fulton Institute and Graduate School of Education

Official Degree Awarded: PHD Curriculum and Instruction (Physical Education)

Program Description: The Ph.D. in curriculum and instruction with a concentration in physical education actively involves students in research at all stages of doctoral study. Sport pedagogy (or physical education pedagogy) is the youngest subdiscipline to emerge from the field of physical education over the past four decades. Sports pedagogy is comprised of three areas:

- Research on teaching.
- Research on teacher education.
- Research on curriculum.

It involves the empirical study of teaching and learning processes in various physical activity settings. Physical activity settings can include school based physical education programs and youth sport, interscholastic, collegiate and elite-level (e.g., Olympic) sport programs.

Program Requirement: The Ph.D. requires 84 credit hours, a dissertation, and written and oral comprehensive examinations.

The following domains comprise the physical education Ph.D. program:

Area of concentration: 30 credit hours pertaining to physical education. Although the majority of these hours must be spent in physical education, a sizable proportion may include course work in closely related fields such as education, exercise and wellness and kinesiology.

Cognate study: 12 credit hours are taken to broaden the student’s understanding of the conceptual base and issues underlying the study of curriculum and instruction. Students take related work outside their declared areas of concentration. Students are expected to choose courses that have a clear link to their dissertation efforts. Cognate studies can be drawn from a broad range of offerings across the university.

Inquiry and analysis: 15 credit hours of empirical analysis and inquiry foundations are required in advanced design and data analysis in quantitative and/or qualitative research methods.

Core requirements in curriculum and instruction: six credit hours of courses (interdisciplinary research seminar in curriculum and instruction and curriculum theory and practice) are required as the curriculum and instruction core.

Practicum and integrative/professional development seminars: six credit hours of research and university teaching internships are required to broaden the training and experience of students.
**Independent research and dissertation:** A minimum of three credit hours of research and 12 credit hours of dissertation leading to completion of an approved dissertation are required.

**Admission Requirements:** The following are required:

1. Application to the Graduate College.
2. Transcripts.
4. Curriculum vitae (resume).
5. Statement of research interests.
6. A writing sample (approximately 10 pages long).
7. GRE scores.
8. Three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate program.

Additional materials may be required to gain admission into certain programs or cohorts. Admission to the program is contingent upon the commitment from an approved mentor in the concentration to advise and mentor the applicant.

**Contact:**
Dean, Mary Lou Fulton Inst Grad School Education
http://education.asu.edu/prospective_students/graduate_studies
cnigrad@asu.edu
ED 434
480/965-4602

**School Psychology (PhD) EDPSYSSPHD**
Mary Lou Fulton Institute and Graduate School of Education

**Official Degree Awarded:** PHD Educational Psychology (School Psychology)

**Program Description:** Students earn the Ph.D. in educational psychology with a concentration in school psychology. The goal of the School Psychology Program is the development of doctoral level scientist-practitioners who have strong research and applied skills and who bring an empirical, problem-solving perspective to their work. ASU, the Mary Lou Fulton Institute and Graduate School of Education supports school psychology doctoral training and research at a level that makes apprenticeship and close supervision available to students.

In addition to a broad base of psychological knowledge and specialized preparation in school psychology, the school psychology program includes course work and study in learning and instruction, human development, ethics and law, measurement and research design, and statistics. Course work is integrated with clinical fieldwork. It may also be complemented by courses in other programs and departments (e.g., clinical psychology, counseling psychology and special education). Students are afforded opportunities to become involved in research
projects before they develop their dissertation proposal. The school psychology
program at ASU is a full-time program which is conducted during the typical
workweek.

*Program Requirement:* The program requires the following:

- A minimum of 84 credit hours.
- Written comprehensive examination.
- Successful defense of the dissertation.
- A one-year internship.

*Admission Requirements:* Students must submit:

1. Graduate College application.
2. GRE Scores.
3. A personal statement.
4. A summary of related experiences.
5. Three letters of recommendation.

For more detailed information, see [http://education.asu.edu/spy](http://education.asu.edu/spy).

*Contact:*
Adv Stud Eductnl Policy, Leadership & Curriculum T
http://education.asu.edu
dpe@asu.edu
EDB 302
480/965-3384

*Science Education (MA) EDSCIMA*
Mary Lou Fulton Institute and Graduate School of Education

*Official Degree Awarded:* MA Curriculum and Instruction (Science Education)

*Program Description:* This program is designed to cultivate an understanding of
science education. Students in this program participate in core science education
courses, and then have the opportunity to examine one aspect of science education
in depth. This program is designed for the science educator who plans to pursue
additional graduate work in science education.

*Program Requirement:* A minimum of 30 credit hours and a thesis is required for the
M.A. in curriculum and instruction. Curriculum and instruction M.A. students are
assigned an advisor at the time of their admission. The advisor assists in selecting
the graduate committee and serves as chair of the student's graduate committee.
Each M.A. candidate must form a graduate committee in consultation with the
advisor and complete a thesis, under the direction of the thesis advisor. The
graduate program committee must be formed prior to completing 12 credit hours in
the program. Because of the research component, students enrolling in the M.A.
degree typically need more than 30 hours to complete the degree. Each M.A.
A candidate will complete a thesis after completing at least 24 hours in the program. Six credits of thesis are required along with a minimum of 24 credit hours of approved course work.

**Admission Requirements:** The following are required:

1. Application to the Graduate College.
2. Transcripts.
4. Three letters of recommendation from individuals who can speak to the applicant’s potential for success in a graduate program.

Additional materials may be required to gain admission into certain programs or cohorts.

**Contact:**
Dean, Mary Lou Fulton Inst Grad School Education
http://education.asu.edu/prospective_students/graduate_studies
cnigrad@asu.edu
ED 434
480/965-4602

**Science Education (MEd) EDSCIMED**
Mary Lou Fulton Institute and Graduate School of Education

**Official Degree Awarded:** MEd Curriculum and Instruction (Science Education)

**Program Description:** The M.Ed. in curriculum and instruction with a concentration in science education is a practitioner’s degree program designed to facilitate development of advanced level professional knowledge, skills and understanding. Students in this program explore issues related to teaching and learning in science education, and study these issues in the context of their own classroom. This program is designed for the professional classroom science educator.

**Program Requirement:** A minimum of 30 hours of graduate credit is required for the M.Ed. in curriculum and instruction. Each student is assigned a graduate advisor to design the program of study. Students in this program will complete either a comprehensive examination, a research project or an applied project as a culminating activity after completing at least 24 of the 30 credit hours listed on the program of study. Students must choose their culminating activity (written examination, research project or applied project) in consultation with their faculty advisor before completing their program of study. Students who choose to complete an applied project must enroll in teacher as researcher the semester prior to completing the applied project, and they must meet with their graduate advisor for approval of the applied project. For more information, refer to the curriculum and instruction M.Ed. student handbook.

**Admission Requirements:** The following are required:
1. Application to the Graduate College.
2. Transcripts.
4. Three letters of recommendation from individuals who can speak to the applicant’s potential for success in a graduate program.

Additional materials may be required to gain admission into certain programs or cohorts.

Contact:
Dean, Mary Lou Fulton Inst Grad School Education
http://education.asu.edu/prospective_students/graduate_studies
cniggrad@asu.edu
ED 434
480/965-4602

Science Education (PhD) EDSCIPHD
Mary Lou Fulton Institute and Graduate School of Education

Official Degree Awarded: PHD Curriculum and Instruction (Science Education)

Program Description: The science education concentration in the Ph.D. program provides opportunities for research and study in the teaching and learning of science in the middle school, high school and higher education. Candidates may concentrate in the study of students’ science thinking, the design of learning and teaching environments, and the development and application of technologies for science learning. Program mentors hail from the Mary Lou Fulton Institute and Graduate School of Education and from the departments and schools of chemistry and biochemistry, earth and space exploration, life sciences and physics.

Program Requirement: The Ph.D. in curriculum and instruction with a concentration in science education requires a total of 84 credit hours.

Area of concentration: 30 credit hours pertaining to science education; a sizable proportion may include course work in closely related fields such as science education, human development, educational technology and graduate science.

Cognate study: 12 credit hours to broaden the student’s understanding of the conceptual base and issues underlying the study of curriculum and instruction.

Inquiry and analysis: 15 credit hours of empirical analysis and inquiry foundations are required in advanced design and data analysis in quantitative and/or qualitative research methods.

Core requirements: six credit hours of courses (interdisciplinary research seminar in curriculum and instruction and curriculum theory and practice).
**Practicum and integrative/professional development seminars**: six credit hours of research and university teaching internships to broaden the training and experience of students.

**Internships**: six credit hours.

**Independent research and dissertation**: A minimum of three credit hours of research and 12 credit hours of dissertation leading to completion of an approved dissertation are required.

**Admission Requirements**: The following are required:

1. Application to the Graduate College.
2. Transcripts.
4. Curriculum vitae (resume).
5. Statement of research interests.
6. A writing sample (approximately 10 pages long).
7. GRE scores.
8. Three letters of recommendation from individuals who can speak to the applicant’s potential for success in a graduate program.

Additional materials may be required to gain admission into certain programs or cohorts.

Admission to the program is contingent upon the commitment from an approved mentor in the concentration to advise and mentor the applicant.

**Contact**:
Dean, Mary Lou Fulton Inst Grad School Education
http://education.asu.edu/prospective_students/graduate_studies
cnigrad@asu.edu
ED 434
480/965-4602

**Secondary Education (MA) EDSECONMA**
Mary Lou Fulton Institute and Graduate School of Education

**Official Degree Awarded**: MA Curriculum and Instruction (Secondary Education)

**Program Description**: The M.A. in curriculum and instruction with a concentration in secondary education provides philosophical perspectives common in higher education. Students are exposed to critical thinking on issues including gender, culture, theoretical views of learning and minority education within the scope of secondary education. Students in this program study the U.S. educational system and are introduced to formal research.
Program Requirement: A minimum of 30 credit hours and a thesis is required for the M.A. in curriculum and instruction. Curriculum and instruction M.A. students are assigned an advisor at the time of their admission. The advisor assists in selecting the graduate committee and serves as chair of the student’s graduate committee. Each M.A. candidate must form a graduate committee in consultation with the advisor and complete a thesis, under the direction of the thesis advisor. The graduate program committee must be formed prior to completing 12 credit hours in the program.

Because of the research component, students enrolling in the M.A. degree typically need more than 30 hours to complete the degree. Each M.A. candidate will complete a thesis after completing at least 24 hours in the program. Six credits of thesis are required along with a minimum of 24 credit hours of approved course work.

Admission Requirements: The following are required:

1. Application to the Graduate College.
2. Transcripts.
4. Three letters of recommendation from individuals who can speak to the applicant’s potential for success in a graduate program.

Additional materials may be required to gain admission into certain programs or cohorts.

Contact:
Dean, Mary Lou Fulton Inst Grad School Education
http://education.asu.edu/prospective_students/graduate_studies
cnigrad@asu.edu
ED 434
480/965-4602

Secondary Education (MEd) EDSECONMED
Mary Lou Fulton Institute and Graduate School of Education

Official Degree Awarded: MEd Curriculum and Instruction (Secondary Education)

Program Description: The M.Ed. in curriculum and instruction with a concentration in secondary education program provides students with an in-depth knowledge of methods of teaching and content knowledge application. The program develops professional educators who are reflective practitioners dedicated to the scholarship of teaching in secondary education. This degree is considered a practitioner’s degree that facilitates a higher level of successful teaching practices and content knowledge. For more information, see http://education.asu.edu/prospective_students/graduate_studies/ci_med.dot

For students looking for secondary teacher certification, the Education Institute offers two options:
1. INCITE: The Integrated Certification In Teacher Education (INCITE) candidates who complete the program receive an M.Ed. in curriculum and instruction with a concentration in secondary education and an institutional recommendation for secondary teacher certification in an academic area. Course work may qualify candidates for a middle grade endorsement if student teaching is completed in grades 5-9.

2. TEAMS: Teacher Education for Arizona Math and Science (TEAMS) candidates who complete the program receive an M.Ed. in curriculum and instruction with a concentration in secondary education and an institutional recommendation for secondary teacher certification in science or math. Course work qualifies candidates for a middle grade endorsement if student teaching is completed in grades 5-9. For more information, see http://education.asu.edu/prospective_students/graduate_studies/teams.dot.

Program Requirement: A minimum of 30 hours of graduate credit is required for the M.Ed. in curriculum and instruction. INCITE and TEAMS require 39 credit hours. Each student is assigned a graduate advisor to design the program of study. Students in this program will complete either a comprehensive examination, a research project, or an applied project as a culminating activity after completing at least 24 of the 30 credit hours listed on the program of study. Students must choose their culminating activity in consultation with their faculty advisor before completing their program of study. Students who choose to complete an applied project must enroll in teacher as researcher the semester prior to completing the applied project, and they must meet with their graduate advisor for approval of the applied project. For more information, refer to the curriculum and instruction M.Ed. student handbook.

Admission Requirements: The following are required:

1. Application to the Graduate College.
2. Transcripts.
4. Three letters of recommendation from individuals who can speak to the applicant’s potential for success in a graduate program.

Additional materials may be required to gain admission into certain programs or cohorts.

Contact:
Dean, Mary Lou Fulton Inst Grad School Education
http://education.asu.edu/prospective_students/graduate_studies
cnigrad@asu.edu
ED 434
480/965-4602

Secondary Education (Reading) (MEd) TESERDGMD
Mary Lou Fulton Institute and Graduate School of Education
**Official Degree Awarded:** MEd Secondary Education (Reading)

**Program Description:** This program advances the knowledge and skill of future high school or middle school teachers. The program leads towards an Arizona state endorsement as a reading specialist. It is designed to assist practicing teachers acquire the knowledge base and skills necessary to develop and provide the most current instructional methods and materials for their students.

**Program Requirement:** Students must complete a total of 33 credit hours including 15 credits in their concentration and a comprehensive examination or an applied project, which completes the program.

**Admission Requirements:** Applicants must apply to the ASU Graduate College and to the specific program and concentration to which they seek admission. Admission to a degree program is based on:

- Undergraduate and/or graduate GPAs.
- Letters of recommendation.
- Personal statement.
- Work and academic experience.
- The availability of faculty to supervise academic areas of interest.
- Applicants to the elementary or secondary programs must hold valid Arizona teaching certificates for those grade levels unless they are pursuing an M.Ed. with certification.

**Contact:**
Adv Stud Eductnl Policy, Leadership & Curriculum T
http://www.west.asu.edu/
telgrad@asu.edu
FABS236
602/543-5595

**Social and Philosophical Foundations of Education (MA) EDSPFMA**
Mary Lou Fulton Institute and Graduate School of Education

**Official Degree Awarded:** MA Social and Philosophical Foundations of Education

**Program Description:** Students seeking an M.A. in social and philosophical foundations of education have the opportunity to specialize in one of the following areas:

- Philosophy of education.
- Sociology of education.
- Anthropology of education.
- American Indian education policy.
- History of education and comparative and international education.
Due to the interdisciplinary nature of work in the social and philosophical foundations of education, students may take coursework in related social sciences and the humanities.

The program of graduate studies in social and philosophical foundations of education prepares students for:

- Ph.D. programs in social science or education, philosophy and history,
- K-12 teaching with stronger influence on and understanding of school, district and state education policy. Teachers also gain methodology and theoretical applications that can result in a more successful and critical-thinking pedagogy,
- Leadership roles in district and state level curriculum development and the conceptualization of educational programs and reforms.

*Program Requirement:* A minimum of 30 credit hours of course work, six hours of which are earned for a master's thesis, or its equivalent and a comprehensive examination are required. The Graduate College allows students to substitute other experiences for the thesis. For example, students may prepare publishable research papers and present their findings to their peers and faculty in specially arranged colloquia. The equivalency requirement will be worked out by the student's committee. In addition, courses in social and philosophical foundations, choosing both a concentration and a cognate discipline (e.g. sociology, anthropology, philosophy). Additional course work in education is recommended.

*Admission Requirements:* To be considered students must submit the following information.

To the Graduate College:

1. A Graduate College online application.
2. Application fee.

To the Division of Educational Leadership and Policy Studies:

2. Resume.
3. Three letters of recommendation.
4. GRE scores are not required.

This program is on a rolling admission basis. Applications are reviewed as soon as files are complete.

*Contact:*
Adv Stud Eductnl Policy, Leadership & Curriculum T
http://education.asu.edu/
delps@asu.edu
Social Studies Education (MEd) EDSOCSTMED
Mary Lou Fulton Institute and Graduate School of Education

Official Degree Awarded: MEd Curriculum and Instruction (Social Studies Education)

Program Description: The M.Ed. in curriculum and instruction with a concentration in social studies education is a practitioner's degree program designed to facilitate development of advanced level professional knowledge, skills and understanding. This program provides students with an in-depth knowledge of methods of teaching and content knowledge in social studies. This degree is considered to be a practitioner’s degree that facilitates a higher level of successful teaching practices and content knowledge.

Program Requirement: A minimum of 30 hours of graduate credit is required for the M.Ed. in curriculum and instruction. Each student is assigned a graduate advisor to design the program of study. Students in this program will complete either a comprehensive examination, a research project or an applied project as a culminating activity after completing at least 24 of the 30 credit hours listed on the program of study.

Students must choose their culminating activity (written examination, research project or applied project) in consultation with their faculty advisor before completing their program of study. Students who choose to complete an applied project must enroll in teacher as researcher the semester prior to completing the applied project, and they must meet with their graduate advisor for approval of the applied project. For more information, refer to the curriculum and instruction M.Ed. student handbook.

Admission Requirements: The following are required:

1. A Graduate College online application.
2. Transcripts.
3. Three letters of recommendation from individuals within academic/professional affiliations must be submitted. These letters should address your ability to successfully complete a graduate degree program in curriculum and instruction.

Additional materials may be required to gain admission into certain programs or cohorts.

Contact:
Dean, Mary Lou Fulton Inst Grad School Education
http://education.asu.edu/prospective_students/graduate_studies
cnigrad@asu.edu
Special Education (MA) EDSPEDMA
Mary Lou Fulton Institute and Graduate School of Education

Official Degree Awarded: MA Special Education

Program Description: The M.A. in special education is a research degree program designed to facilitate advanced development of knowledge, skill and understanding of special education. The program is designed for students who are interested in developing and extending research competencies. Students graduating from this program will demonstrate the ability to conduct research related to special education and are prepared to pursue doctoral education in various areas of exceptionalities. The program structure includes coursework in special education, research and statistics.

Program Requirement: A minimum of 36 credit hours and a thesis is required for the M.A. in special education. Special education M.A. students are assigned an advisor at the time of their admission. The advisor assists in selecting the graduate committee and serves as chair of the student's graduate committee. Each M.A. candidate must form a graduate committee in consultation with the advisor and complete a thesis, under the direction of the thesis advisor. The graduate program committee must be formed prior to completing 12 hours of credit in the program. Because of the research component, students enrolling in the M.A. degree typically need more than 36 hours to complete the degree. Each MA candidate will complete a thesis after completing at least 24 hours in the program. Six credits of thesis are required along with a minimum of 30 credit hours of approved course work.

Course work will include a minimum of 15 hours in special education and a minimum of 12 hours in research. The research courses will include one research design course, one or more statistics or qualitative methods courses, and six hours of thesis.

Admission Requirements: The following are required:

1. Application to the Graduate College.
2. Transcripts.
4. Curriculum vitae (resume).
5. Statement of research interests.
6. A writing sample (approximately 10 pages long).
7. GRE scores.
8. Three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate program.

Additional materials may be required to gain admission into certain programs or cohorts.
Contact:
Dean, Mary Lou Fulton Inst Grad School Education
http://education.asu.edu/prospective_students/graduate_studies
cnigrad@asu.edu
ED 434
480/965-4602

Special Education (MEd) EDSPE2MED
Mary Lou Fulton Institute and Graduate School of Education

Official Degree Awarded: MEd Special Education

Program Description: The M.Ed. in special education is a practitioner's degree program designed to facilitate advanced development of knowledge, skill, and understanding of special education. The M.Ed. degree focuses on the development of master teachers in special education. Specific emphasis is offered in the areas of mild disabilities, the education of gifted learners and bilingual/multicultural exceptional learners. The program structure includes course work in methods of instruction, educational evaluation, behavior management, inclusive teaching and practices, and the four content theme areas of:

- Learning and instruction.
- Diversity.
- Foundations and practices.
- Research and technology.

A teacher certification option in learning disabilities, behavioral disorders and mental retardation is available in conjunction with the M.Ed. For more information access http://education.asu.edu/prospective_students/graduate_studies/special_education/.

Program Requirement: A minimum of 36 hours of graduate credit is required for the M.Ed. in special education. Additionally, students completing the teacher certification option will enroll for nine credit hours of student teaching, hence the M.Ed. with teacher certification requires a total of 45 credit hours. Each student is assigned a graduate advisor to design the program of study in consultation with the graduate committee. Students in this program will complete a comprehensive paper as a culminating activity after completing at least 27 of the 36 credit hours listed on the program of study. Students must complete a comprehensive paper proposal to their faculty advisor and graduate committee members before completing their program of study and beginning the final paper. Students should meet with their faculty advisor and graduate committee members regularly after the paper proposal is approved. For more information, refer to the special education student handbook.

Admission Requirements: The following are required:

1. Application to the Graduate College.
2. Transcripts.
4. Curriculum vitae (resume).
5. Statement of research interests.
6. A writing sample (approximately 10 pages long).
7. GRE scores.
8. Three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate program.

Additional materials may be required to gain admission into certain programs or cohorts.

Contact:
Adv Stud Eductnl Policy, Leadership & Curriculum T
http://education.asu.edu/prospective_students/graduate_studies
cnigrad@asu.edu
ED 434
480/965-4602

Special Education (PhD) EDSPECPHD
Mary Lou Fulton Institute and Graduate School of Education

Official Degree Awarded: PHD Curriculum and Instruction (Special Education)

Program Description: The Ph.D. concentration in special education, which is designed to produce teacher educators and researchers in special education, is an integral part of the interdisciplinary Ph.D. in curriculum and instruction program. The corresponding goals of the Ph.D. program in special education are to:

The program:

1. Produces research scholars who can add to the knowledge base underlying special education.
2. Provides experts in the design, implementation, and evaluation of special education personnel preparation programs at the preservice and inservice levels.
3. Provides students with comprehensive training that meets professionally recognized standards for the preparation of leadership personnel in special education and a related discipline.
4. Provides students with the skills necessary to meet their research, teaching, and service activities associated with faculty positions at a full range of institutions of higher education or other professional roles.

Program Requirement: The Ph.D. requires 84 credit hours, a dissertation, and written and oral comprehensive examinations. Our doctoral curriculum typically requires three years of graduate study including at least a year-long residency on campus. Each year of study involves coursework pertaining to theory, research and practice in special education.
The curriculum provides students with a core set of courses, seminars, internships and research experiences to ensure that they meet professionally recognized standards for the preparation of leadership personnel in special education and in related disciplines; however, the curriculum is unique in that it builds upon this core by integrating a set of experiential research, teaching and service activities into students' programs of study.

Our doctoral curriculum program of study is divided into six basic domains:

1. Core requirements in special education.
2. Core requirements in a related discipline.
4. Core requirements in curriculum and instruction.
5. Practicum and integrative/professional development seminars.
6. Dissertation and independent research.

Each student's program of study includes a series of experiences to enhance his/her mastery of their current and future research, teaching and service responsibilities as a professional in special education.

**Core Requirements in Six Domains**

Domain 1: core requirements in special education. Our special education program requirement consists of 30 credit hours focusing on course work pertaining to assessment, intervention, consultation and specific problem areas in the field of special education.

Domain 2: core requirements in a related discipline. These requirements consist of 12 credit hours in which doctoral students are provided crossover training opportunities in related disciplines that meet the professionally recognized standards for doctoral study in those disciplines. The course and field experience requirements in each of the related disciplines are specific to the discipline.

Domain 3: empirical foundations. Our empirical analysis and inquiry foundations requirement consists of 15 credit hours beginning with basic statistical analysis and intermediate statistical analysis.

Three other courses are also required:

1. Introduction to Qualitative Research.
2. Introduction to Quantitative Research.
3. A course from the following list:
   
   Statistical Computing and Consulting Problems
   Advanced Statistical Analysis
   Categorical and Nonparametric Data Analysis
Domain 4: core requirements in curriculum and instruction. The curriculum and instruction core requirement consists of six credit hours:

- DCI 701 Curriculum Theory and Practice
- DCI 702 Interdisciplinary Research Seminar in Curriculum and Instruction

Domain 5: practicum and integrative/professional development seminars. Our practicum requirement consists of at least six credit hours of research and university teaching three two-credit-hour internships. The purpose of the internships is to broaden the training and experiences of students. In addition, doctoral students are encouraged to participate in the Preparing Future Faculty Program offered by the Graduate College. This program consists of two semester hours of faculty roles, responsibilities and participation in an ongoing series of integrative and collaborative seminars coordinated with the Graduate College. Students have the opportunity to develop and participate in interdisciplinary research, teaching and service activities.

Domain 6: Independent research and dissertation: a minimum of three credit hours of research and 12 credit hours of dissertation leading to completion of an approved dissertation are required.

Admission Requirements: The following are required:

1. Application to the Graduate College.
2. Transcripts.
4. Curriculum vitae (resume).
5. Statement of research interests.
6. A writing sample (approximately 10 pages long).
7. GRE scores.
8. Three letters of recommendation from individuals who can speak to the applicant’s potential for success in a graduate program.

Additional materials may be required to gain admission into certain programs or cohorts.

Admission to the program is contingent upon the commitment from an approved mentor in the concentration to advise and mentor the applicant.

Contact:
Dean, Mary Lou Fulton Inst Grad School Education
http://education.asu.edu/prospective_students/graduate_studies
cnigrad@asu.edu
ED 434
480/965-4602
Technology for Teaching and Learning (Grad Certificate) EDEDTTGRCT

Official Degree Awarded: CERT Technology for Teaching and Learning (certificate)

Program Description: The graduate certificate in technology for teaching and learning is geared towards classroom teachers who want to become skilled at integrating technology in the curriculum. Students will acquire the knowledge and skills needed to meet the National Education Technology Standards for Teachers (NETS) developed by the International Society for Technology in Education (ISTE) and being adopted by the National Council for Accreditation for Teacher Education (NCATE). All courses will be offered online and face-to-face. The certificate program can be completed within a two-year period.

Program Requirement: This certificate program is comprised of 15 credit hours of course work. Students must successfully complete four out of a possible six educational technology courses before completing a three-credit required capstone course.

Admission Requirements: The graduate certificate in technology for teaching and learning is available to all ASU graduate students provided they meet eligibility criteria. To be eligible for this program, the applicant must:

1. Hold a bachelor’s degree or equivalent from a regionally accredited institution.
2. Have a cumulative junior/senior undergraduate GPA of 2.50 or higher.
3. Students interested in earning this certificate must apply to the certificate program via the online Graduate College application.

Applicants will also need to supply:

1. A curriculum vitae or resume.
2. One set of official transcripts from every college and university (excluding ASU) that they have attended.

Contact:
Adv Stud Eductnl Policy, Leadership & Curriculum T
http://education.asu.edu/edt
dpe@asu.edu
EDB 302
480/965-3384

Engineering, Ira A. Fulton School of

Aerospace Engineering (MS) ESAEROSPMS
Ira A. Fulton School of Engineering

Official Degree Awarded: MS Aerospace Engineering
Program Description: The faculty in mechanical and aerospace engineering offer a graduate program leading to the M.S. in aerospace engineering. A number of wide and diverse research areas may be pursued. All the graduate programs stress a sound foundation leading to a specialized area of study. Additional information can be found in the Mechanical and Aerospace Engineering guidelines at http://mae.fulton.asu.edu/graduate

Program Requirement: The M.S. is the research master’s degree; majors in aerospace engineering and mechanical engineering are available. Candidates for the M.S. degree must complete a minimum of 30 credit hours.

The student is encouraged to select a program committee chair (faculty advisor) as soon as possible but must select a program committee chair prior to completing 15 credit hours. The name of the student’s program committee chair must be filed with the graduate programs office. A change of program committee chair requires the approval of the Mechanical and Aerospace Engineering (MAE) programs office.

The program committee chair, in consultation with the student, will establish a Master of Science Program Committee (MSPC). The MSPC shall be composed of a minimum of three members from the ASU faculty with at least two being from the mechanical and aerospace engineering faculty. Participation of individuals from institutions external to ASU is encouraged but these shall be non-voting members.

As soon as possible, but prior to completing 15 credit hours, the student, in consultation with the program committee chair, must file a program of study (POS) with the University. The MSPC and the graduate programs office must approve changes to the POS.

The POS must be in accordance with university and program requirements. For students currently enrolled in a master’s degree program at another institution and wishing to transfer to ASU, note that a maximum of six credit hours may be counted toward an M.S. at ASU. A minimum cumulative GPA of 3.00 is required throughout the program. Candidates for the M.S. must complete a minimum of 30 credit hours of course and thesis work distributed as follows:

- At least 12 credit hours of course work directly related to the research area.
- At least six credit hours of mathematics.
- At least six credit hours of graduate courses outside the major research area; these must be in mathematics, engineering and/or science.
- Six credit hours of MAE 599 thesis.

A final defense of the thesis will be administered by the MSPC.

Admission Requirements:

1. Student interested in applying to this program must submit the Graduate College online application. A minimum GPA of 3.00 (on a 4.00 scale) is
required for graduates from accredited U.S. institutions. The Graduate College is responsible for international GPA interpretation.

2. All applicants are required to take the GRE.

3. Students who do not have English as their primary language are required to achieve a minimum score of 80 on the internet-based Test of English as a Foreign Language (TOEFL).

4. Three letters of recommendation are required, using the format specified by Mechanical and Aerospace Engineering.

5. All applicants are required to submit a statement of academic and career objectives and address the desire to pursue graduate studies at ASU in mechanical engineering.

Contact:
Mechanical and Aerospace Engineering Program
http://mae.fulton.asu.edu
mae@asu.edu
ECG 325
480/965-7261

Aerospace Engineering (MSE) ESAERSPMSE
Ira A. Fulton School of Engineering

Official Degree Awarded: MSE Aerospace Engineering

Program Description: The mechanical and aerospace engineering faculty offer a graduate program leading to the M.S.E. in aerospace engineering. A number of wide and diverse research areas may be pursued. All Mechanical and Aerospace graduate programs stress a sound foundation leading to a specialized area of study. Additional information can be found in the Mechanical and Aerospace Engineering guidelines at http://mae.fulton.asu.edu/graduate/.

Program Requirement: The M.S.E. is the professional degree; majors in aerospace engineering and mechanical engineering are offered. Only the non-thesis option is available for mechanical and aerospace engineering. Candidates for the M.S.E. degree must complete a minimum of 30 credit hours.

The student is encouraged to select a program committee chair (faculty advisor) as soon as possible but must select a program committee chair prior to completing 15 credit hours. The name of the student’s program committee chair must be filed with the graduate programs office. A change of program committee chair requires approval of the Mechanical and Aerospace Engineering programs office.

The program committee chair, in consultation with the student, will establish a Master of Science in Engineering Program Committee. The committee shall be composed of a minimum of three members from the ASU faculty with at least two being from mechanical and aerospace engineering faculty.

As soon as possible, but prior to completing 15 credit hours, the student, in
consultation with the program committee chair, must file a program of study (POS) with the university. The committee and the mechanical and aerospace engineering programs office must approve changes to the POS.

The POS must be in accordance with university and program requirements. For students currently enrolled in a master’s degree program at another institution and wishing to transfer to ASU, note that a maximum of six credit hours may be counted toward an M.S.E. at ASU. A minimum cumulative GPA of 3.00 is required throughout the program. Candidates for the M.S.E. must complete a minimum of 30 credit hours of course work distributed as follows:

- At least 15 credit hours of course work directly related to a research area.
- At least six credit hours of mathematics.
- At least nine credit hours of graduate courses outside the major research area; these may be engineering, science, mathematics, or other areas approved by the student’s program committee, the director of graduate studies and the graduate programs office.

A final comprehensive examination or applied project will be administered by the MSEPC. The purpose of this culminating event is to determine the student’s ability to integrate the knowledge gained in his or her course work.

**Admission Requirements:**

1. Student interested in applying to this program must submit the Graduate College online application. A minimum GPA of 3.00 (on a 4.00 scale) is required for graduates from accredited U.S. institutions. The Graduate College is responsible for international GPA interpretation.
2. All applicants are required to take the GRE.
3. Students who do not have English as their primary language are required to achieve a minimum score of 80 on the internet-based Test of English as a Foreign Language (TOEFL).
4. Three letters of recommendation are required, using the format specified by Mechanical and Aerospace Engineering.
5. All applicants are required to submit a statement of academic and career objectives and address the desire to pursue graduate studies at ASU in mechanical engineering.

**Contact:**

Mechanical and Aerospace Engineering Program  
http://mae.fulton.asu.edu/  
mae@asu.edu  
ECG 325  
480/965-7261

**Aerospace Engineering (PhD) ESAERSPHD**  
Ira A. Fulton School of Engineering
Official Degree Awarded: PHD Aerospace Engineering

Program Description: The graduate programs in Mechanical and Aerospace Engineering accommodate individual interests, and encourage independent and innovative study. Students are part of a diverse intellectual community dedicated to advancing the state of the art and practice of aerospace and mechanical engineering. All graduate programs stress a sound foundation in technical fundamentals, communication and professionalism. Additional information can be found in the Mechanical and Aerospace Engineering guidelines at http://mae.fulton.asu.edu/graduate/.

Program Requirement: The Ph.D. is directed toward original research. Candidates for the Ph.D. must complete a minimum of 84 credit hours. The student is required to write and defend a dissertation that describes an original contribution within the chosen discipline. The research results should be suitable for publication in a reputable journal. The Ph.D. is currently offered for majors in aerospace engineering and mechanical engineering.

The student must select a program committee chair (faculty advisor) with the selection being made prior to completing 42 credit hours. The program committee chair’s name must be filed with the graduate programs office. A change of program committee chair requires approval of the mechanical and aerospace engineering programs office.

A graduate student pursuing a Ph.D. program of study in aerospace or mechanical engineering must complete within the first year of his/her graduate studies at ASU: three 500-level (preferably core) courses in the major area and one 500-level mathematics course with an average GPA of 3.25 or above. Specific qualifying course requirements for each major area are identified in the mechanical and aerospace engineering graduate guidelines.

University regulations note the possibility of having two separate supervisory committees, a program committee and a dissertation committee. In Mechanical and Aerospace Engineering, these will normally be one and the same and will be designated as the program committee. The committee chair, in consultation with the student, will establish a program committee, the purposes of which are to:

1. Approve the program of study (POS).
2. Provide guidance for the student’s research.
3. Administer the comprehensive examination.
4. Administer the dissertation defense.

The program committee shall consist of at least five ASU faculty with the majority being from mechanical and aerospace engineering, but at least one being from outside Mechanical and Aerospace Engineering. Participation of individuals from institutions external to ASU is encouraged, but these shall be non-voting members. Furthermore, the program committee should have the following character:
1. Advisor (program committee chair); must be from mechanical and aerospace engineering faculty.
2. Two or three additional faculty in the student’s general area of research.
3. At least one faculty outside the student’s general area of research (e.g., mathematics, physics or other engineering disciplines).

Note: A change in the program committee requires approval of the graduate programs office.

The student, in consultation with his/her program committee chair and the program committee, must file a POS prior to completing 42 credit hours. The POS must meet general university requirements, including residency and the need for rigorous fundamental knowledge of engineering principles. Thirty credit hours of appropriate course work from a previously earned master’s degree may be applied toward the total credit hours; at least 54 hours must be taken at ASU. A minimum cumulative GPA of 3.25 is required. Ph.D. candidates must complete a minimum of 84 credit hours of course and dissertation work, distributed as follows.

- At least 18 credit hours of course work directly related to the research area (major).
- At least nine credit hours of mathematics.
- At least nine credit hours of graduate courses outside the major research area; these must be in mathematics, engineering and/or science.
- 12 hours of mechanical and aerospace engineering 799 dissertation.
- MAE 792 research credit hours may be applied toward the 84 total hours.

All students intending to earn the Ph.D. are required to pass a comprehensive examination. The examination will be administered by the program committee and consists of two parts:

1. Subject matter examination
   - The purpose of this portion of the examination is to determine a student’s grasp of essential concepts relevant to the Ph.D. in general and the student’s ability to project beyond existing knowledge. Written and oral questions covering the student’s graduate course work must be included.

2. Research proposal
   - The purpose of this portion of the examination is to evaluate a student’s research acumen and ability to develop and present an original research proposal; and, equally important, to advise the student in finalizing successful research goals and procedures. The formal written proposal containing the research goals, methodology, expected results and contributions of publishable quality will be defended orally before the entire committee.
The comprehensive examination is taken soon after completing the Ph.D. qualifying requirements and at least one academic year prior to making the dissertation defense. Qualified Ph.D. students should take the examination by their fifth semester as full-time students in the mechanical and aerospace engineering Ph.D. program and must pass the examination by the end of the sixth semester. Part-time students should apprise the Mechanical and Aerospace Engineering programs office of a timely schedule for examination completion. Ph.D. students achieve candidacy status in a letter from the Graduate College dean upon passing the comprehensive examination and successfully defending the dissertation prospectus.

The dissertation defense is an oral examination administered by the program committee in accordance with Graduate College guidelines. The purpose of the examination is to evaluate the student’s research efforts and written presentation (dissertation), and to determine if the candidate is worthy of receiving a Ph.D. The major area of emphasis of this examination is the student’s research dissertation and the general areas of study related thereto. The final dissertation defense must be taken within five years of passing the comprehensive examination.

Admission Requirements:

1. Student interested in applying to this program must submit the Graduate College online application. A minimum GPA of 3.00 (on a 4.00 scale) is required for graduates from accredited U.S. institutions. The Graduate College is responsible for international GPA interpretation.
2. All applicants are required to take the GRE.
3. Students who do not have English as their primary language are required to achieve a minimum score of 80 on the internet-based Test of English as a Foreign Language (TOEFL).
4. Three letters of recommendation are required, using the format specified by Mechanical and Aerospace Engineering.
5. All applicants are required to submit a statement of academic and career objectives and address the desire to pursue graduate studies at ASU in mechanical engineering.

Contact:
Mechanical and Aerospace Engineering Program
http://mae.fulton.asu.edu
mae@asu.edu
ECG 325
480/965-7261

Bioengineering (MS) ESBIOENMS
Ira A. Fulton School of Engineering

Official Degree Awarded: MS Bioengineering
Program Description: The Harrington bioengineering faculty offer a graduate program leading to the M.S. in bioengineering.

Areas of study include neural engineering, molecular, cellular and tissue engineering, biomedical imaging and informatics, rehabilitation engineering and biomaterials. Bioengineering offers both thesis and nonthesis M.S. degrees to those students who meet the criteria for successful graduate study.

Bioengineering offers a joint B.S.E. and nonthesis M.S. in the bioengineering degree program. The program allows up to nine credit hours of graduate-level course work taken as technical electives during the senior year to be applied toward both the undergraduate and graduate degrees.

Program Requirement: All candidates pursuing an M.S. bioengineering are required to complete an approved plan of study consisting of the minimum of 33 (thesis) or 36 (non-thesis) required credit hours, including research and thesis, if applicable. Special course requirements for the different areas of study are established by the faculty.

Candidates whose undergraduate degree is in a field other than bioengineering may be required to complete more than the required credit hours of the program of study.

The following are program requirements for the thesis M.S., for a total of 33 credits:

- Bioengineering course work (9)
- Mathematical electives (6)
- General electives (9)
- Bioengineering seminar (3)
- Thesis (6)

The following are program requirements for the nonthesis M.S., for a total of 36 credits:

- Bioengineering course work (15)
- Mathematical electives (6)
- General electives (9)
- Bioengineering seminar (3)
- Applied project (3)

Admission Requirements: In addition to the general requirements for admission to the Graduate College, applicants must submit the following directly to the Graduate College:

1. Official GRE scores.
2. Official Test of English as a Foreign Language (TOEFL) scores, if applicable.
3. A statement of purpose.
4. Resume or curriculum vitae.
5. Three letters of recommendation.

The application deadline for fall admission is Dec. 31 of the previous year (i.e., a student wishing to enroll for fall 2009 will need to apply by Dec. 31, 2008).

The application deadline for spring admission is Aug. 31 of the previous year (i.e., a student wishing to enroll for spring 2010 will need to apply by Aug. 31, 2009).

Contact:
Harrington Bioengineering Program
http://engineering.asu.edu/bhse
bmerec@asu.edu
ECG 334
480/965-3028

Bioengineering (PhD) ESBOENPHD
Ira A. Fulton School of Engineering

Official Degree Awarded: PHD Bioengineering

Program Description: The Harrington bioengineering faculty offer a graduate program leading to the Ph.D. in bioengineering. Areas of study include neural engineering, molecular, cellular and tissue engineering, biomedical imaging and informatics, rehabilitation engineering and biomaterials. The Ph.D. in bioengineering is conferred upon evidence of excellence in research resulting in a scholarly dissertation that is a contribution to knowledge.

Program Requirement: Ph.D. students must complete the following:

1. A minimum of 84 credit hours of course work.
3. An oral examination.
4. A written examination.

Required Bioengineering Courses

Doctoral students are required to complete the following core curriculum of nine credits:

- BME 598 Engineering Models for Physiological for Engineers (4)
- BME 598 Modeling for Molecular/Cellular Engineering (4)
- BME 598 Scientific Communication (1)

All students must complete the two courses listed below in their chosen track, for a total of eight credits:

Neural Engineering Track
BME 598 Introduction to Neural Engineering (4)
BME 598 Computational Neuroscience (4)

**Molecular Cellular and Tissue Engineering Track**

- BME 598 Advanced Bioengineering Transport (4)
- BME 598 Advanced Biomaterials (4)

**Bioimaging and Bioinformatics Track**

- BME598/BMI591 Introduction to Biomedical Informatics (4)
- BME598/BMI591 Introduction to Biomedical Imaging Informatics (4)

**Technical Electives**

No fewer than 12 credit hours of course work (as determined by the student's committee)

**Research/Dissertation**

- BME 792 Research (40)
- BME 799 Dissertation (12)

**Seminar**

- BME 591 (3)

*Admission Requirements: In addition to the general requirements for admission to the Graduate College, applicants must submit the following directly to the Graduate College:*

1. Official GRE scores.
2. Official Test of English as a Foreign Language (TOEFL) scores, if applicable.
3. A statement of purpose.
4. Resume or curriculum vitae.
5. Three letters of recommendation.

The application deadline for fall admission is Dec. 31 of the previous year (i.e., a student wishing to enroll for fall 2009 will need to apply by Dec. 31, 2008).

The application deadline for spring admission is Aug. 31 of the previous year (i.e., a student wishing to enroll for spring 2010 will need to apply by Aug. 31, 2009.)

*Contact:*
Harrington Bioengineering Program
http://engineering.asu.edu/bhse
bmerec@asu.edu
ECG 334
480/965-3028
Biomedical Informatics (MS) ESBIOINFMS
Ira A. Fulton School of Engineering

Official Degree Awarded: MS Biomedical Informatics

Program Description: The M.S. in biomedical informatics is designed to meet the rapidly growing need for professionals in the field with preparation that integrates technological expertise in informatics, computer sciences, biosciences and mathematical statistics with a knowledge of the clinical environment in the healthcare professions.

The program will feature a sequence of courses specifically designed to bring together clinicians and researchers in teams, applying new developments in informatics theory to clinical practice. This program is supported by our collaborators including Banner Health, Barrow Neurological Institute, Mayo Clinic, Phoenix Program and The University of Arizona College of Medicine. This approach will make the M.S. in biomedical informatics program at ASU distinctive, if not unique, among biomedical informatics programs in the United States. Students will take courses in such areas as public health, clinical environments, bioinformatics and statistics, and cognitive sciences.

Program Requirement: Due to the diverse academic backgrounds of students requesting admission into this program, many will find it necessary to take some course work in preparation. However, all students will take 30 credit hours of graduate-level course work including 12 hours of mandatory course work as outlined below:

- BMI 501 Introduction to Biomedical Informatics (3)
- BMI 502 Foundations of Biomedical Informatics Methods I (3)
- BMI 505 Foundations of Biomedical Informatics Methods II (3)
- BMI 540 Problem Solving in Biomedical Informatics (3)

The other 18 hours will include 12 hours of elective course work and six hours of research credit to be applied to the completion of a scientific paper.

Admission Requirements: Students interested in applying to this program must submit and online application to the Graduate College. An applicant to the M.S. in biomedical informatics program should have earned a bachelor’s degree in biology, computer science, engineering, nursing, physiology, psychology and statistics.

Applicants who have earned degrees in other unrelated fields with appropriate academic backgrounds will also be considered. However, all applicants must have basic competencies in college-level calculus (similar to MAT 170), general biology (similar to BIO 188) or physiology, statistics (similar to STP 226) and basic computer programming (similar to CSE 100 or 110).

The applicant’s undergraduate GPA, statement of purpose and depth of preparation in their field are the primary factors affecting admission. Every applicant must
submit scores for the GRE or any other graduate-level entry examination. An international student must also submit Test of English as a Foreign Language (TOEFL) scores.

Contact:
Department of Biomedical Informatics Program
http://bmi.asu.edu
Kaitlin.Yacob@asu.edu
ABC1
602/827-2547

Biomedical Informatics (PHD) ESBMIPHD
Ira A. Fulton School of Engineering

Official Degree Awarded: PHD Biomedical Informatics

Program Description: The biomedical informatics faculty offers a graduate program leading to the Ph.D. in biomedical informatics. The core program features courses specifically designed to bring together clinicians, biological scientists and informatics researchers to apply new developments in informatics theory to clinical or biological practice.

Additional concentration course work in an area of focus and emphasis on independent research are intended to place these students at the leading edge of the field. Strong collaborative relationships with a variety of health care organizations, the bioscience industry and governmental agencies provide an unparalleled opportunity for doctoral students to explore and contribute to advances in bioinformatics and informatics related to imaging, clinical medicine and public health. Students may explore special foci on cross-cutting areas, such as cognitive science, data mining, predictive modeling, embedded sensors and simulation.

Program Requirement: Due to the diverse academic backgrounds of students requesting admission into this program, many will find it necessary to take some course work in preparation. However, all students will take 84 credit hours of approved graduate-level course work, including 17 credit hours of mandatory courses listed below:

- BMI 501 Introduction to Biomedical Informatics (3)
- BMI 502 Foundations of Biomedical Informatics Methods I (3)
- BMI 505 Foundations of Biomedical Informatics Methods II (3)
- BMI 515 Advanced Biostatistical Methods (3)
- BMI 540 Problem Solving in Biomedical Informatics (3)
- BMI 560 Teaching in Biomedical Informatics (3)

Students must also complete a dissertation and pass oral comprehensive examinations.
Admission Requirements: Students interested in applying to this program must submit an online application to the Graduate College. An applicant to the Ph.D. in biomedical informatics program should have earned a bachelor’s degree in biology, clinical discipline (i.e., medicine), computer science, engineering, physiology, psychology, nursing and statistics.

Student applicants who have earned degrees in other unrelated fields with appropriate academic backgrounds will also be considered. However, all applicants must have basic competencies in anatomy and physiology, college calculus, computer programming, general biology and statistics.

The applicant's undergraduate GPA, statement of purpose and depth of preparation in their field are the primary factors affecting admission. Every applicant must submit:

1. Scores for the GRE. Verbal, quantitative and analytical required; the subject test is optional.
2. Any other graduate-level entry examination.
3. An international student must also submit Test of English as a Foreign Language (TOEFL) scores.

Contact:
Department of Biomedical Informatics Program
http://bmi.asu.edu
Kaitlin.Yacob@asu.edu
ABC1
602/827-2547

Chemical Engineering (MS) ESCHEMEMS
Ira A. Fulton School of Engineering

Official Degree Awarded: MS Chemical Engineering

Program Description: The chemical engineering faculty offer a graduate program leading to the M.S. in chemical engineering. Areas of research emphasis include atmospheric aerosols, biomolecular engineering, biosensors, chemical therapies for neurodegenerative diseases, electrochemistry, electronic materials processing, engineering education, flexible display technology, fuel cells, inorganic membranes, process design and operations, protein synthesis, transport phenomena in living systems and water purification.

A graduate handbook detailing information on graduate studies in chemical engineering, is available online at http://che.fulton.asu.edu/graduate/resources-forms. Students should contact the graduate programs office for additional details.

Program Requirement: All candidates for the M.S. in chemical engineering are required to complete an approved program of study consisting of 33 required credit hours and a thesis. The required course work for this degree is divided into the
following categories:

**Chemical Engineering Core Requirements:** Students are required to take 15 credit hours of graduate-level chemical engineering courses, exclusive of seminar (CHE 591), deficiency courses (CHE 501-505), Research/Thesis (CHE 592/599) and Reading and Conference (CHE 590).

Of these 15 hours, a minimum of three courses (nine hours) must come from the following list:

- CHE 527 Advanced Applied Mathematical Analysis in Chemical Engineering (3)
- CHE 533 Transport Processes I (3)
- CHE 543 Thermodynamics of Chemical Systems (3)
- CHE 544 Chemical Reactor Engineering (3)
- CHE 598 Research Methods (3)

**Technical Electives:** Masters candidates must select a minimum of nine hours of graduate-level elective courses (beyond the required 15 hours of CHE core requirements) if they take only six hours of thesis. Six hours of technical electives are required if the student elects to take nine hours of combined thesis/research (which includes six hours of thesis and three hours of research). At least one technical elective course (three hours) must be taken from outside of chemical engineering.

400-level courses in programs outside of chemical engineering are considered appropriate technical electives unless the course content significantly matches that of 300-level or lower courses in engineering. For instance, STP 420 does not qualify as a valid technical elective because it is similar to ECE 383. Any questions on course validity for the technical elective requirement should be addressed to the student’s committee chair and/or the graduate coordinator.

CHE 590 Reading and Conference may be taken as a technical elective only once, for a maximum of three credits.

**Research/Thesis:** Each student must register for a combined total of either six or nine credit hours of research (CHE 592) and/or thesis (CHE 599). This total must include six credit hours of thesis.

**Seminar:** All full-time chemical engineering graduate students are required to successfully complete the seminar course (CHE 591) during every semester of residence. Part-time students are required to complete CHE 591 at least three times. Only three hours of seminar apply toward the M.S., regardless of how many times it is taken.
Candidates whose undergraduate degree was in a field other than chemical engineering may be required to complete more than 33 credit hours.

Admission Requirements: Applicants to the M.S. program are required to submit the following:

1. Graduate College online admissions application.
2. Application fee.
3. Three letters of recommendation from faculty or professionals who can comment on your research and scholarly capabilities.
4. GRE scores.
5. Official Test of English as a Foreign Language (TOEFL) scores, for international students only.

Contact:
Chemical Engineering Program
http://engineering.asu.edu/graduate/che
che@asu.edu
ECG 202
480/965-3313

Chemical Engineering (MSE) ESCHMEMSE
Ira A. Fulton School of Engineering

Official Degree Awarded: MSE Chemical Engineering

Program Description: The chemical engineering faculty offer a professional program leading to the M.S.E. in chemical engineering. The program is designed to bridge the gap between knowledge of engineering sciences and creative engineering practice while at the same time increasing the depth and breadth of knowledge in selected areas of emphasis. The pattern of course work applicable to the degree is potentially unique for each student, although it must conform to the general guidelines for subject matter for the degree as authorized here.

Two options are available within the M.S.E. program. The first is a general M.S.E., where students follow the same course outline as required by the M.S., except that they will substitute thesis/research hours with additional elective course work. The second is a M.S.E. with a specialization in semiconductor processing and manufacturing. Both options require completion of an applied project, rather than a thesis, at the conclusion of program course work. Note that financial assistance is not available to students who elect an M.S.E. program.

Program Requirement: In general, all candidates for the M.S.E. are required to complete 33 credit hours and an applied project. Additional courses may be assigned by the supervisory committee depending on the background of the candidate. Specific requirements for the two M.S.E. program options are outlined below:
**Option 1:** General M.S.E. in chemical engineering (non-thesis).

Students who choose this option follow the requirements for the M.S. (see M.S. program requirements), but will replace the thesis/research credits with additional credit hours of course work. In addition, M.S.E. students must take three credit hours of seminar. This degree requires a total of 33 credit hours.

After completing the course work, students must complete a report, typically 15-20 double-spaced pages, plus figures, on a topic of their choice (the topic needs to be approved by their committee). At the conclusion of the report, the student will make an oral presentation on the topic to his/her committee.

**Option 2:** M.S.E. in chemical engineering with a specialization in semiconductor processing and manufacturing (non-thesis).

The M.S.E. in chemical engineering and a specialization in semiconductor processing and manufacturing, involves a total of 33 credit hours. After completing the course work, students must complete a report, typically 15-20 double-spaced pages, plus figures, on a topic of their choice (the topic needs to be approved by their committee). At the conclusion of the report, the student will make an oral presentation on the topic to his/her committee. The following courses are required for this degree:

- CHE 458/598 Semiconductor Material Processing (3)
- CHE 598 Deposition and Etching (3)
- EEE 591 Fundamentals of Solid State Devices (3)
- IEE 570 or IEE 572 Advanced Quality Control Design of Engineering Experiments (3)
- MSE 598 Materials Issues in Semiconductor Processing (3)

1. Six credits of chemical engineering electives at the 520 level or higher.
2. Six credits of technical electives at the 500 level or higher.
3. Three credits of a technical elective at the 400 level or higher.

Seminar: In addition to the 30 credits listed above, three credits of the one-unit graduate seminar (CHE 591) are required. Online students can substitute an additional technical elective (500-level or higher) for this requirement.

**Admission Requirements:** Applicants to the M.S.E. program are required to submit the following:

1. Graduate College online admission application.
2. Application fee.
3. Three letters of recommendation from faculty or professionals who can comment on your research and scholarly capabilities.
4. Official Test of English as a Foreign Language (TOEFL) scores, for international students only. Chemical Engineering requires a minimum of
600 for paper-based and 100 for Internet-based for admissions consideration).

5. Current resume.

6. Statement of purpose, describing your research interests and reasons for seeking a degree in chemical engineering.

7. Official transcripts from all prior institutions attended.

Please view the following link for specific admissions procedures:

http://che.fulton.asu.edu/graduate/admissions.

Students applying for the M.S.E in chemical engineering may have an B.S. in a field other than chemical engineering. The qualifications of transition students are reviewed by the chemical engineering graduate admissions committee, and a special program is designed for successful applicants. Deficiencies for admission to the M.S.E. are specified at the time of admission.

Contact:
Chemical Engineering Program
http://engineering.asu.edu/graduate/che
che@asu.edu
ECG 202
480/965-3313

Chemical Engineering (PhD) ESCHEMEPHD
Ira A. Fulton School of Engineering

Official Degree Awarded: PHD Chemical Engineering

Program Description: The chemical engineering faculty offer a graduate program leading to the Ph.D. in chemical engineering. Areas of research emphasis include atmospheric aerosols, biomolecular engineering, biosensors, chemical therapies for neurodegenerative diseases, electrochemistry, electronic materials processing, engineering education, flexible display technology, fuel cells, inorganic membranes, process design and operations, protein synthesis, transport phenomena in living systems and water purification.

A graduate handbook, detailing information on graduate studies in chemical engineering, is available online at http://che.fulton.asu.edu/graduate/resources-forms. Students should contact the graduate programs office for additional details.

Program Requirement: The Ph.D. in chemical engineering requires:

1. Completion of 84 credit hours.
3. A written comprehensive examination.
4. An oral comprehensive examination.
These credit hours include core/elective course work, research/dissertation and seminar credits. Below are the specific requirements:

**Chemical Engineering Core:** The Ph.D. program requires 15 credit hours of graduate-level chemical engineering courses. The following five courses (comprising these 15 hours) are required for all students:

- CHE 527 Advanced Applied Mathematical Analysis in Chemical Engineering (3)
- CHE 533 Transport Processes I (3)
- CHE 543 Thermodynamics of Chemical Systems (3)
- CHE 544 Chemical Reactor Methods (3)
- CHE 598 Research Methods (3)

**Technical Electives:** In addition to the 15 hours of core above, the Ph.D. program requires 12 credit hours of technical electives from within or outside the chemical engineering program. CHE courses meeting this requirement must be at the 520 level or higher; 400-level and 590 courses (from CHE or outside programs) may not be used to fulfill this requirement (although they may be used to satisfy additional research and electives courses). Students should consult with their supervisory committees in selecting appropriate technical elective courses.

**Research/Dissertation:** Students are required to take 12 hours of research (CHE 792) and 12 hours of dissertation (CHE 799), for a combined total of 24 hours. Note that 12 hours (and only 12) of dissertation credit (CHE 799) are required on the program of study. Moreover, students can only take CHE 799 once they have passed the comprehensive exam and been admitted to candidacy.

**Seminar:** Students must register for the one-credit-hour seminar (CHE 591) during every semester in residence. However, only a maximum of five credit hours may apply to the program of study.

**Additional Research/Elective Hours:** The additional 28 hours necessary to meet the 84-hour minimum may be fulfilled with any combination of additional research hours (CHE 792) and technical electives from Chemical Engineering or other programs. CHE 590 Reading and Conference hours may also be used to fulfill this area.

Note that 400-level courses in programs outside chemical engineering may be used to fulfill this area unless the course content significantly matches that of 300-level or lower courses in engineering. For example, STP 420 does not qualify as a valid elective because it is similar to ECE 383. Elective courses used to meet this requirement must be approved as part of the student.

**Admission Requirements:** Applicants to the Ph.D. program are required to submit the following:
1. Graduate College online admissions application.
2. Application fee.
3. Three letters of recommendation from faculty or professionals who can comment on your research and scholarly capabilities.
4. GRE scores.
5. Official Test of English as a Foreign Language (TOEFL) scores, for international students only. Chemical Engineering requires a minimum of 600 paper-based and 100 Internet-based for admissions consideration.
7. Statement of purpose, describing your research interests and reasons for seeking a degree in chemical engineering.
8. Official transcripts from all prior institutions attended.

Please view the department page for specific admissions procedures at http://che.fulton.asu.edu/graduate/admissions.

To be eligible for regular admission, the student must have a bachelor's degree in chemical engineering (or in a closely related field). To be eligible for regular admission, United States citizens normally will have a minimum GPA of 3.20 out of a total possible 4.00, or equivalent. Foreign applicants normally will be in the top 10 percent of their graduating class. Students entering with master's degrees are required to have a minimum GPA in their master's degree course work of a 3.50 out of a possible 4.00.

Contact:
Chemical Engineering Program
http://engineering.asu.edu/graduate/che
che@asu.edu
ECG 202
480/965-3313

Civil/Environmental Engineering (MS) ESCIVILMS
Ira A. Fulton School of Engineering

Official Degree Awarded: MS Civil and Environmental Engineering

Program Description: The faculty in the Ira A. Fulton School of Engineering offer a graduate program leading to an M.S. in civil and environmental engineering. The program is designed to enhance the knowledge gained in the undergraduate program by requiring the students to understand and practice fundamental concepts in engineering, mathematics and the basic sciences.

The pattern of course work applicable to the degree is potentially unique for each student, although it must conform to the general guidelines for subject matter content for the degree as authorized here and in the program’s graduate handbook. Students are admitted to one of the following specialty areas:

- Geotechnical engineering.
- Environmental engineering.
- Structural engineering.
- Transportation engineering.
- Water resources engineering.

**Program Requirement:** This program requires 30 credit hours and a thesis. All candidates for the M.S. are required to complete 24 credit hours of approved graduate course work. Additional courses may be assigned by the graduate supervisory committee, depending on the background of the candidate.

In addition, students are required to register for and complete a minimum of six credit hours of thesis work.

A final oral examination in defense of the thesis work is required for all students.

**Admission Requirements:** Applicants are expected to satisfy all requirements for admission to the Graduate College. Entry into this program normally requires a bachelor’s degree with a major in engineering or in a closely related bachelor’s degree program. The student's credentials for admission are evaluated by the specialty area coordinator or by a committee chaired by the specialty area coordinator. A minimum requirement is an overall undergraduate GPA of 3.00, on a 4.00 scale. Applicants with a lower GPA may be provisionally admitted at the discretion of the admission committee.

A student whose undergraduate degree is not in civil engineering is required to take appropriate undergraduate courses as deficiency courses to establish a base of knowledge in the discipline. Deficiencies for admission to the graduate degree programs are specified at the time of admission and details can be obtained at the graduate studies section of the program's Web site.

Applicants must take the GRE and have their scores sent to the Graduate College.

Applicants whose native language is not English must demonstrate proficiency in the English language by meeting the Graduate College’s English proficiency requirements. For more information, see [http://graduate.asu.edu/admissions/international.html#proficiency](http://graduate.asu.edu/admissions/international.html#proficiency). Applicants required to demonstrate English proficiency and seeking a teaching assistantship must demonstrate proficiency in spoken English; a score of 55 or better on the Speaking Proficiency English Assessment Kit (SPEAK) is required.

**Contact:**
Civil, Environmental and Sustainable Eng Program
[http://cee.fulton.asu.edu/graduate/graduate-studies](http://cee.fulton.asu.edu/graduate/graduate-studies)
cee@asu.edu
EC G251
480/965-0595
Civil/Environmental Engineering (MSE) ESCIVILMSE
Ira A. Fulton School of Engineering

Official Degree Awarded: MSE Civil and Environmental Engineering

Program Description: The faculty in the Ira A. Fulton School of Engineering offer a professional program leading to an M.S.E. in civil and environmental engineering. The program is designed to bridge the gap between knowledge of engineering sciences and creative engineering practice, while at the same time increasing the depth and breadth of knowledge in selected areas of emphasis.

The pattern of course work applicable to the degree is potentially unique for each student, although it must conform to the general guidelines for subject matter content for the degree as authorized here and in the program's graduate handbook. Students are admitted to one of the following specialty areas:

- Construction engineering.
- Geotechnical engineering.
- Environmental engineering.
- Structural engineering.
- Transportation engineering.
- Water resources engineering.

Program Requirement: All candidates for the M.S.E. are required to complete 30 credit hours of approved graduate course work. Additional courses may be assigned by the graduate supervisory committee depending on the background of the candidate.

A final comprehensive examination is required for all students.

Details of this examination for the different specialty areas can be obtained at the graduate studies section of the program's Web site.

Admission Requirements: Applicants are expected to satisfy all requirements for admission to the Graduate College. Entry into this program normally requires a bachelor's degree with a major in engineering or in a closely related bachelor's degree program.

The student's credentials for admission are evaluated by the specialty area coordinator or by a committee chaired by the specialty area coordinator.

A minimum requirement is an overall undergraduate GPA of 3.00, on a 4.00 scale. Applicants with a lower GPA may be provisionally admitted at the discretion of the admission committee.

A student whose undergraduate degree is not in civil engineering is required to take appropriate undergraduate courses as deficiency courses to establish a base of
knowledge in the discipline. Deficiencies for admission to the graduate degree programs are specified at the time of admission and details can be obtained at the Graduate Studies section of the program’s Web site.

Applicants must take the GRE and have their scores sent to the Graduate College. Applicants whose native language is not English must demonstrate proficiency in the English language by meeting the Graduate College’s English proficiency requirements. For more information, see http://graduate.asu.edu/admissions/international.html#proficiency.

Contact:
Civil, Environmental and Sustainable Eng Program
http://cee.fulton.asu.edu/graduate/graduate-studies
cee@asu.edu
ECG 251
480/965-0595

Civil/Environmental Engineering (PhD) ESCIVILPHD
Ira A. Fulton School of Engineering

Official Degree Awarded: PHD Civil and Environmental Engineering

Program Description: The faculty in the Ira A. Fulton School of Engineering offer a graduate program leading to the Ph.D. in civil and environmental engineering. A broad range of theoretical and experimental research programs have been established in civil and environmental engineering to prepare graduate students for careers in professional practice and research. These programs are constantly evolving with the changes in society and the profession, and many are multidisciplinary in nature.

The pattern of course work applicable to the degree is potentially unique for each student, although it must conform to the general guidelines for subject matter content for the degree as authorized here and in the program’s graduate handbook. Students are admitted to one of the following specialty areas:

- Construction engineering.
- Geotechnical engineering.
- Environmental engineering.
- Structural engineering.
- Transportation engineering.
- Water resources engineering.

Program Requirement: All candidates for the Ph.D. are required to complete 84 approved graduate credit hours (of these, 30 hours can be from the master's degree). Additional graduate credit work may be assigned by the graduate supervisory committee, depending on the background of the candidate.
The graduate credit hours must include a minimum of 12 credit hours of research and 12 (and only 12) credit hours of dissertation work.

This degree also requires a comprehensive examination and approval of the dissertation prospectus, for the student to be eligible for doctoral candidacy.

After entering candidacy, students complete their research, write and defend their dissertation.

A final oral examination in the defense of the dissertation work is required for all students.

Admission Requirements: Applicants are expected to satisfy all requirements for admission to the Graduate College. Entry into this program normally requires a master’s degree in engineering or in a closely related master’s degree program. Exceptionally qualified students with a bachelor’s degree may be admitted to the doctoral program.

The student’s credentials for admission are evaluated by the specialty area coordinator or by a committee chaired by the specialty area coordinator. A minimum requirement is an overall undergraduate GPA of 3.00 (on a 4.00 scale) and a minimum GPA of 3.20 in graduate course work.

A student whose undergraduate or master’s degree is not in civil engineering is required to take appropriate undergraduate and/or graduate courses as deficiency courses to establish a base of knowledge in the discipline. Deficiencies for admission to the Ph.D. degree program are specified at the time of admission and details can be obtained at the Graduate Studies section of the program’s Web site.

Applicants must take the GRE and have their scores sent to the Graduate College.

Applicants whose native language is not English must demonstrate proficiency in the English language by meeting the Graduate College’s English proficiency requirements. For more information, see http://graduate.asu.edu/admissions/international.html#proficiency. Applicants required to demonstrate English proficiency and seeking a teaching assistantship must demonstrate proficiency in spoken English; a score of 55 or better on the Speaking Proficiency English Assessment Kit (SPEAK) is required.

Contact:
Civil, Environmental and Sustainable Eng Program
http://cee.fulton.asu.edu/graduate/graduate-studies
cee@asu.edu
480/965-0595
Computer Science - Art, Media and Eng (MS) ESAMECSMS
Ira A. Fulton School of Engineering

Official Degree Awarded: MS Computer Science (Arts, Media and Engineering)

Program Description: The computer science/arts, media and engineering M.S. program emphasizes research on the integration of the human physical experience with computation and digital media. Arts, media and engineering researchers produce experiential media systems and models that evolve human ability, facilitate learning, enhance scientific discovery, empower creativity, assist the disadvantaged and improve quality of life. Within these application areas, researchers explore experiential construction, interaction and feedback, knowledge creation, sensing, perception and modeling.

The purpose of the arts, media and engineering concentration in computer science is to train hybrid engineering-arts graduates who get their inspiration from the arts and their methodology from computer science and engineering. Students will specialize in transdisciplinary media development.

Program Requirement: Students complete 30 credit hours of course work, including nine credit hours of AME-approved course work and six credit hours of thesis, to graduate with the degree.

Students will complete one course in three areas to cover a wide range of knowledge. The three areas consist of foundations, systems and applications.

Foundations courses focus on algorithms, mathematical logic, programming languages and theory. Systems courses cover topics in architecture, networks, operating systems and software engineering. Applications courses are in the areas of artificial intelligence, databases, graphics and multimedia.

Admission Requirements: Students interested in applying to this program must submit an online application to the Graduate College. An applicant for the M.S. program should normally have a bachelor's degree in computer science, computer engineering or a closely related area.

The applicant's undergraduate GPA and depth of preparation in computer science and engineering are the primary factors affecting admission.

Every applicant must submit scores for the GRE. Verbal, quantitative and analytical scores are required; the subject test in computer science is optional.

International students must also submit Test of English as a Foreign Language (TOEFL) scores.

The application deadline for admission in the fall semester is Dec. 1, and the deadline for admission in the spring semester is Aug. 1. Deadlines for financial aid
are the same as the admission deadlines.

The statement of purpose must fulfill any requirements defined by the graduate programs office and also address the transdisciplinary nature of the arts, media and engineering program. Applicants should explain in a concise and persuasive manner how their educational, professional and personal experiences inform their research and creative interests, writing on any aspect of their background that supports candidacy to the program. For further information on how this statement can be expanded upon by students interested in a research assistantships or an Integrative Graduate Education and Research Traineeship (IGERT) within arts, media and engineering, please visit the financial aid page.

Please submit a current curriculum vitae with your statement of purpose.

Contact:
Computer Science and Engineering Program
http://www.sci.asu.edu
sci.advising@asu.edu
BYENG 553
480/965-3190

Computer Science - Art, Media and Eng (PhD) ESAMECSPHD
Ira A. Fulton School of Engineering

Official Degree Awarded: PHD Computer Science (Arts, Media and Engineering)

Program Description: The computer science/arts, media and engineering Ph.D. program emphasizes research on the integration of the human physical experience with computation and digital media. Arts, media and engineering researchers produce experiential media systems and models that evolve human ability, facilitate learning, enhance scientific discovery, empower creativity, assist the disadvantaged and improve quality of life. Within these application areas, researchers explore experiential construction, interaction and feedback, knowledge creation, sensing, perception and modeling.

The purpose of the arts, media and engineering concentration is to train hybrid engineering-arts graduates who get their inspiration from the arts and their methodology from computer science and engineering. Students will specialize in transdisciplinary media development.

Program Requirement: The computer science/AME Ph.D. must contain a minimum of 84 credit hours of approved graduate-level work, of which 36 credit hours focus on arts, media and engineering and 12 credit hours of CSE 799 Dissertation. Additional credit hours are to be in computer science course work and 18 credit hours of research (CSE 792).

All Ph.D. students must take at least three credit hours in each of the following three
areas: foundations, systems and applications. All three area courses must be at 500 levels (not CSE 598). Please see the area courses section on the program's Web page for a list of courses in each area.

The Ph.D. also requires a dissertation, a written comprehensive examination, and an oral comprehensive examination.

**Admission Requirements:** Students interested in applying to this program must submit the Graduate College online application. An applicant for the Ph.D. program should have the equivalent of a bachelor’s degree in computer science, computer engineering or a closely related area. Most applicants should have earned a master’s degree, but applicants with exceptional attainments in their baccalaureate may be admitted directly into the Ph.D. program.

The primary factors affecting admission include the applicant’s GPA, depth of preparation and GRE scores. International students must also submit Test of English as a Foreign Language (TOEFL) scores. Applicants must submit a statement of purpose, curriculum vitae and three letters of recommendation. The application deadline for admission in the fall semester is Dec. 1, and the deadline for admission in the spring semester is Aug. 1. The deadlines for financial aid are the same as the admission deadline.

The statement of purpose must fulfill any requirements defined by the graduate programs office and also address the transdisciplinary nature of the arts, media and engineering program. Applicants should explain in a concise and persuasive manner how their educational, professional and personal experiences inform their research and creative interests, writing on any aspect of their background that supports candidacy to the program. For further information on how this statement can be expanded upon by students interested in a research assistantships or an Integrative Graduate Education and Research Traineeship (IGERT) within arts, media and engineering, please visit the financial aid page.

**Contact:**
Computer Science and Engineering Program
http://www.sci.asu.edu
sci.advising@asu.edu
BYENG 553
480/965-3190

**Computer Science - Information Assurance (MCS) ESCSEIMCS**
Ira A. Fulton School of Engineering

**Official Degree Awarded:** MCS Computer Science (Information Assurance)

**Program Description:** The M.C.S. with a concentration in information assurance is designed for graduate students who want to pursue a thorough education in the area of information assurance. The goal of this concentration is to provide students
the knowledge, skills and the advanced development capability in science and engineering for information assurance, including computer and network security, software security, data and information security, applied cryptography and computer forensics.

Students will have a competitive advantage to secure employment. According to the National Security Agency, information assurance is defined as the set of measures intended to protect and defend information and information systems by ensuring their availability, integrity, authentication, confidentiality and nonrepudiation. This includes providing restoration of information systems by incorporating protection, detection and reaction capabilities.

**Program Requirement:** Each M.C.S. student defines a potentially unique plan of study subject to approval by the graduate programs office and the Graduate College. The program of study must contain:

1. A minimum of 30 credit hours of approved graduate-level work including 15 hours of information assurance and related areas.
2. At least 18 of the 30 credit hours must be CSE 500-level credits at ASU (excluding CSE 598 courses).
3. At least 30 credit hours must be for formal course work (including CSE 591 but excluding credits for independent projects).
4. No credits for CSE 590 Reading and Conference or CSE 599 Thesis are allowed on a program of study for the M.C.S.
5. Students must complete a project portfolio from three courses they took and receive a “B” (3.00) grade or higher.

All students must take at least three credit hours in each of the following three areas: foundations, systems and applications. At least two out of the three area courses must be at the 500 level (but not CSE 598). No 400-level courses are allowed in the student’s plan of study. The graduate programs office may prescribe additional courses based on the background of the candidate.

**Admission Requirements:** Students interested in applying to the M.C.S. program must submit an online application to the Graduate College. An applicant for the M.C.S. program should normally have a bachelor’s degree in computer science, computer engineering or a closely related area.

The applicant’s undergraduate GPA and depth of preparation in computer science and engineering are the primary factors affecting admission.

Every applicant must submit scores for the GRE. Verbal, quantitative and analytical scores are required; the subject test in computer science is optional.

International students must also submit Test of English as a Foreign Language (TOEFL) scores.
The application deadline for admission in the fall semester is Dec. 1, and the deadline for admission in the spring semester is Aug. 1. Deadlines for financial aid are the same as the admission deadlines.

Contact:
Computer Science and Engineering Program
http://sci.asu.edu/about/cse.php
cse@asu.edu
BYENG 553
480/965-3190

**Computer Science - Information Assurance (PHD) ESCSEIAPHD**

Ira A. Fulton School of Engineering

**Official Degree Awarded:** PHD Computer Science (Information Assurance)

**Program Description:** The computer science/information assurance Ph.D. program is designed for graduate students who want to pursue a thorough education in the area of information assurance. The goal of this concentration is to provide students the knowledge, skills and the advanced development capability in science and engineering for information assurance, including applied cryptography, computer forensics, computer and network security, data and information security and software security. Students will have a competitive advantage to secure employment. According to the National Security Agency, information assurance is defined as the set of measures intended to protect and defend information and information systems by ensuring their availability, integrity, authentication, confidentiality and nonrepudiation. This includes providing restoration of information systems by incorporating protection, detection and reaction capabilities.

**Program Requirement:** The computer science/information assurance Ph.D. must contain a minimum of 84 credit hours of approved graduate-level work, 12 hours (and only 12 hours) of CSE 799 Dissertation.

A minimum of 18 credits in information assurance and related areas are required (including CSE 591 but excluding CSE 790 and CSE 799). Additional credit hours are to be in computer science course work and 18 hours of research (CSE 792).

All Ph.D. students must take at least three credit hours in each of the following three areas: foundations, systems and applications. All three area courses must be at the 500 level (not CSE 598). Please see the area courses section on the program Web page for a list of courses in each area.

Students must pass a written comprehensive examination.

**Admission Requirements:** An applicant for the Ph.D. program should have the equivalent of a bachelor's degree in computer science, computer engineering or a
closely related area. Most applicants should have earned the master’s degree, but applicants with exceptional attainments in their undergraduate education may be admitted directly into the Ph.D. program.

The primary factors affecting admission include the applicant’s GPA, depth of preparation in computer science and engineering and GRE (verbal, quantitative, analytical and computer science) scores. International students must also submit Test of English as a Foreign Language (TOEFL) scores. Applicants must submit a statement of purpose and three letters of recommendation. The application deadline for admission in the fall semester is Dec. 1, and the deadline for admission in the spring semester is Aug. 1. The deadlines for financial aid are the same as the admission deadline.

Contact:
Computer Science and Engineering Program
http://www.sci.asu.edu
sci.advising@asu.edu
BYENG 553
480/965-3190

Computer Science (MCS) ESCOMSCMCS
Ira A. Fulton School of Engineering

Official Degree Awarded: MCS Computer Science

Program Description: The M.C.S. is an advanced degree targeted at students with an undergraduate education in computing and related disciplines who can best profit from further breadth and background in computer science. The M.C.S. also affords an opportunity for students employed in industry to seek a breadth of advanced education in computer science.

The M.C.S. program provides a professionally oriented, graduate-level education in computer science. The program reflects the dual nature of computer science as both a scientific and engineering discipline by allowing emphasis on theory as well as practical applications. Students seeking the M.C.S. submit a project portfolio compiling projects completed in three courses during their studies. Students can study topics such as artificial intelligence, computer-aided geometric design, computer architecture, computer graphics, computer science theory, database concepts, digital systems design, distributed systems, language processing, networking, operating systems and software engineering.

Program Requirement: Each student defines a potentially unique program of study subject to approval by the graduate programs office and the Graduate College. The program of study must contain a minimum of 30 credit hours of approved graduate-level work. At least 18 of these hours must be computer science and engineering 500-level credits at ASU (excluding CSE 598 courses). At least 30 hours must be for formal course work (including CSE 591 but excluding credits for independent

Academic Catalog Archive 2009-10  364
projects).

No credits for CSE 590 Reading and Conference or CSE 599 Thesis are allowed on a program of study for the M.C.S. degree. M.C.S. students must complete a project portfolio from three courses they took and receive a “B” (3.00) grade or higher.

All M.C.S. students must take at least three credit hours in each of the following three areas: foundations, systems and applications. At least two of the three area courses must be at the 500 level (not 598). No 400-level courses are allowed in this degree program. The graduate programs office may prescribe additional courses based on the background of the candidate.

Admission Requirements: Students interested in applying to the M.C.S. program must submit an online application to the Graduate College.

An applicant for the M.C.S. program should normally have a bachelor's degree in computer science, computer engineering or a closely related area.

The applicant’s undergraduate GPA, GRE (verbal, quantitative and analytical) score, and depth of preparation in computer science and engineering are the primary factors affecting admission. The GRE subject test in computer science is optional.

International students must also submit the results of the Test of English as a Foreign Language (TOEFL).

The application deadline for admission in the fall semester is Dec. 1, and Aug. 1 for the spring semester. The deadlines for financial aid are the same as the application deadlines.

Contact:
Computer Science and Engineering Program
http://sci.asu.edu
sci.advising@asu.edu
BYENG 553
480/965-3190

Computer Science (MS) ESCOMSCMS
Ira A. Fulton School of Engineering

Official Degree Awarded: MS Computer Science

Program Description: The M.S. in computer science is a research-oriented degree targeted toward students with an undergraduate education in the science of computation. It provides instruction in advanced course work and emphasizes research by the student. Areas of study and research areas include algorithms, artificial intelligence, bioinformatics, computer-aided geometric design, computer graphics, computer networks, database systems, distributed computing and
operating systems, embedded systems, information assurance, intelligent information integration, multimedia information systems and software engineering.

In addition, the faculty conduct research in various aspects of computer science, working closely with the Center for Cognitive Ubiquitous Computing, the Center for Research in Arts, Media and Engineering, and the Partnership for Research in Spatial Modeling.

Program Requirement: Students complete 30 credit hours of course work, including six credit hours of thesis to graduate with the M.S. Students will complete one course in three areas to cover a wide range of knowledge. The three areas consist of foundations, systems and applications.

Foundations courses focus on algorithms, mathematical logic, programming languages and theory. Systems courses cover topics in architecture, networks, operating systems and software engineering. Applications courses are in the areas of artificial intelligence, databases, graphics and multimedia.

The remainder of the student’s course work focuses on the research area of interest, conducted with the guidance of a faculty advisor. Students have many options to conduct cutting-edge research with a wide variety of research areas, including artificial intelligence, embedded systems and information assurance/security.

Admission Requirements: Students interested in applying to the M.S. program must submit an online application to the Graduate College. An applicant for the M.S. program should normally have a bachelor's degree in computer science, computer engineering or a closely related area.

The applicant’s undergraduate GPA and depth of preparation in computer science and engineering are the primary factors affecting admission.

Every applicant must submit scores for the GRE (verbal, quantitative and analytical required; the subject test in computer science is optional).

International students must also submit Test of English as a Foreign Language (TOEFL) scores.

The application deadline for admission in the fall semester is Dec. 1, and the deadline for admission in the spring semester is Aug. 1. Deadlines for financial aid are the same as the admission deadlines.

Contact:
Computer Science and Engineering Program
http://sci.asu.edu
sci.advising@asu.edu
BYENG 553
480/965-3190
Computer Science (PhD) ESCOMSCPHD
Ira A. Fulton School of Engineering

Official Degree Awarded: PHD Computer Science

Program Description: The computer science Ph.D. program prepares students to undertake fundamental and applied research in computer science in academia, government and industry. The faculty offer a graduate program leading to the Ph.D. in computer science.

Areas of study and research areas include algorithms, artificial intelligence, bioinformatics, computer-aided geometric design and computer graphics, computer networks, database systems, distributed computing and operating systems, embedded systems, information assurance, intelligent information integration, multimedia information systems and software engineering.

In addition, the faculty conduct research in various aspects of computer science, working closely with The Center for Cognitive Ubiquitous Computing, The Center for Research in Arts, Media and Engineering and The Partnership for Research in Spatial Modeling.

Program Requirement: The Ph.D. program requires 84 credit hours of approved graduate-level work, including 12 credit hours of CSE 799 Dissertation. Students are also required to pass written and oral comprehensive examinations and complete a dissertation.

All Ph.D. students must take at least three credit hours in each of the following three areas: foundations, systems and applications. All three area courses must be taken at the 500 level and do not include CSE 598 courses.

Admission Requirements: Students interested in applying to this program must submit to the Graduate College an online application. An applicant for the Ph.D. program should have the equivalent of a bachelor's degree in computer science, computer engineering or a closely related area. Most applicants should have earned the master's degree, but applicants with exceptional attainments in their undergraduate education may be admitted directly to the Ph.D. program.

The primary factors affecting admission include the applicant's GPA, depth of preparation in computer science and engineering. Every applicant must submit scores for the GRE (verbal, quantitative and analytical required; the subject test in computer science is optional). International students must also submit Test of English as a Foreign Language (TOEFL) scores. Students must submit a statement of purpose and three letters of recommendation.

The application deadline for admission in the fall semester is Dec. 1, and the deadline for admission in the spring semester is Aug. 1. The deadlines for financial aid are the same as the admission deadline.
Contact:
Computer Science and Engineering Program
http://sci.asu.edu
sci.advising@asu.edu
BYENG 553
480/965-3190

Computer Science (Biomedical Informatics)(MS) ESCSBIOIMS
Ira A. Fulton School of Engineering

Official Degree Awarded: MS Computer Sciences (Biomedical Informatics)

Program Description: The computer science/biomedical informatics M.S. program is designed for graduate students who wish to specialize in such topics as genomics and computational systems biology. The concentration is interdisciplinary in nature, providing preparation that integrates technological expertise in the information sciences, computer science, bioscience and statistics with an understanding of the clinical environment of the health care professional. It will expose computer science students to current issues in clinical practice as well as the use of information systems in health care settings.

Program Requirement: Students complete 30 credit hours of course work, including nine credit hours of course work in biomedical informatics and six credit hours of thesis work to graduate with the degree. Students will complete one course in three areas to cover a wide range of knowledge. The three areas consist of foundations, systems and applications.

Foundations courses focus on algorithms, mathematical logic, programming languages and theory. Systems courses cover topics in architecture, networks, operating systems and software engineering. Applications courses are in the areas of artificial intelligence, databases, graphics and multimedia.

The remainder of the student's course work focuses on the research area of interest, within biomedical informatics including public health, decision making and bioinformatics. Students have many options to conduct cutting-edge research with a wide variety of research areas, including artificial intelligence, embedded systems and information assurance/security.

Admission Requirements: Students interested in applying to this program must submit to the Graduate College an online application. An applicant to the M.S. program should normally have a bachelor's degree in computer science, computer engineering or a closely related area.

The applicant’s undergraduate GPA and depth of preparation in computer science and engineering are the primary factors affecting admission.

Every applicant must submit scores for the GRE. The verbal, quantitative and analytical are required. The subject test in computer science is optional.
International students must also submit Test of English as a Foreign Language (TOEFL) scores.

The application deadline for admission in the fall semester is Dec. 1, and the deadline for admission in the spring semester is Aug. 1. Deadlines for financial aid are the same as the admission deadlines.

Contact:
Computer Science and Engineering Program
http://cse.asu.edu
sci.advising@asu.edu
BYENG 553
480/965-3190

Construction (MS) ESCONSTMS
Ira A. Fulton School of Engineering

Official Degree Awarded: MS Construction

Program Description: The faculty in the Del E. Webb School of Construction offer a graduate program leading to the M.S. in construction. Concentrations are available in construction management and facilities management. The interdisciplinary nature of the program allows a candidate's program of study to reflect both individual interests and career goals.

The primary objective of the program is to allow students with a bachelor's degree in construction or a related field such as architecture, business or engineering to broaden and improve their professional capabilities in construction. The program is designed to meet the growing need for professionals with advanced technical, management and applied research skills in the construction industry.

The facilities management concentration supports the needs of the student desiring a career in the maintenance, operation, renovation or decommissioning of existing facilities. The construction management concentration allows students seeking upper-level management positions in various sectors of the construction industry to improve their competency in project, program and company management areas.

Program Requirement: The program of study consists of the following:

1. Thesis option: thirty credit hours of graduate study culminating in a thesis and an oral defense.
2. Nonthesis option: thirty-six credit hours of graduate study culminating in an applied project.

If appropriate graduate-level courses are not available in a student's pursued area of interest, the supervisory committee has the option to approve a maximum of two
400-level courses to be part of the program of study. Students may not use 400-level deficiency courses to satisfy degree requirements.

**Admission Requirements**: Applicants are expected to satisfy all requirements for admission to the Graduate College. In addition, applicants are expected to be competent in basic construction topics. Admission is based on:

1. An evaluation of the student’s academic and professional background.
2. Scores from the verbal, quantitative, and analytical writing portions of the GRE.
3. Letters of recommendation.
4. A personal statement.
5. A current resume.
6. Students whose native language is not English must also submit a Test of English as a Foreign Language (TOEFL) score of at least 550.

**Contact**:
Del E. Webb Construction  
http://construction.asu.edu  
dewsc_graduate@asu.edu  
USE 118  
480/965-9272

**Construction (PHD) ESCONPHD**  
Ira A. Fulton School of Engineering

**Official Degree Awarded**: PHD Construction

**Program Description**: The purpose of this construction Ph.D. program is to prepare research scholars, new faculty and professionals for positions in industry, universities and government, as well as facilitate a higher level of investigation and knowledge creation through the professor-Ph.D. student dynamic.

The Del E. Webb School of Construction is distinctively positioned to provide students with an interdisciplinary educational and research experience at the Ph.D. level, which will provide value in construction education, research and industry programs, private construction research facilities, and high-level management positions in the construction industry.

The objectives of the degree program include research experience for doctoral students who might wish to pursue careers in either industry or academia as members of interdisciplinary research teams, as well as providing a high-level interdisciplinary doctoral education for those who wish to develop academic careers teaching at the university level.

**Program Requirement**: The Ph.D. in construction will require three to four years of full-time study and research beyond the master’s degree. Generally, students will be admitted into the Ph.D. degree program at or near the completion of their master’s
The program requires 84 credit hours post-bachelor’s degree or 54 credit hours post-master’s degree.

The program consists of:

1. Admission to candidacy.
2. A comprehensive examination.
3. Core construction courses.
4. Elective courses.
5. A qualifying examination.

Admission Requirements: Students who hold a bachelor’s or a master’s degree in a related field from a regionally accredited university or equivalent are eligible to apply for admission to the program. Related fields include construction, civil engineering, architecture and business. At the discretion of the admission committee, students from other disciplines may be eligible as well.

Applicants are expected to satisfy all requirements for admission to the Graduate College. In addition, applicants are expected to be competent in construction topics. Admission is based upon:

1. Research interests.
2. An evaluation of the student’s academic and professional background.
3. Scores from the verbal, quantitative and analytical writing portions of the GRE.
4. Letters of recommendation.
5. A personal statement from each applicant describing their career goals and research objectives.
7. A current resume.
8. Students whose native language is not English must also submit a Test of English as a Foreign Language (TOEFL) score of at least 550.

Contact:
Del E. Webb Construction
http://construction.asu.edu
dewsc_graduate@asu.edu
USE 118
480/965-9272

Electrical Engineering (MS) ESEEMS
Ira A. Fulton School of Engineering

(This major is no longer accepting applications)
Official Degree Awarded: MS Electrical Engineering

Program Description: This program does not accept applications to the M.S. directly. Students should apply to the M.S.E. program at https://webapp.asu.edu/eadvisor/MajorInfo.external?sp=SASU00&sp=SESEE MSE&sp=5graduate, and, once admitted, consult with the M.S.E. program if interested in the M.S. program.

The electrical engineering faculty in the Ira A. Fulton School of Engineering offer a research program leading to the M.S. in electrical engineering.

Graduate courses and programs are offered in the following six areas of specialization:

1. Control systems.
2. Electromagnetics, antennas and microwave circuits.
3. Electronic and mixed-signal circuit design.
4. Electric power and energy systems.
5. Signal processing and communications systems.

Program Requirement: The M.S. is a research degree requiring a minimum of 30 credits. These credits must include a minimum of eight courses (24 hours minimum) and six hours of EEE 599 (thesis). As part of the eight courses, at least two should be outside the area of specialization. Requirements include:

- At least four EEE courses.
- At most two 400-level courses.
- At least three EEE 500-level courses.
- At least two courses outside the area of specialization.
- At most one EEE 590 Reading and Conference or FSE course.
- A final oral examination in defense of the thesis completes the M.S. requirements.

Courses are available on campus and online. The degree can be completed taking classes in any combination of on-campus and online modes.

Admission Requirements: Students applying to an M.S. in electrical engineering must initially apply to the M.S.E. program. Students who later obtain a research advisor may transfer to the M.S. program. Students pursuing the M.S. thesis option must have a cumulative GPA of 3.20 in their course work.

Contact:
Department of Electrical Engineering
http://ee.fulton.asu.edu
askee@asu.edu
GWC 212
480/965-3424
Electrical Engineering (MSE) ESEEMSE
Ira A. Fulton School of Engineering

Official Degree Awarded: MSE Electrical Engineering

Program Description: The electrical engineering faculty in the Ira A. Fulton School of Engineering offer a professional program leading to the M.S.E. in electrical engineering. Graduate courses and programs are offered in the following six areas of specialization:

1. Control systems.
2. Electromagnetics, antennas and microwave circuits.
3. Electronic and mixed-signal circuit design.
4. Electric power and energy systems.
5. Signal processing and communications systems.

Courses are available on campus and online. The degree can be completed taking classes in any combination of on-campus and online modes.

A dual degree, the M.B.A./M.S.E. in electrical engineering is available as an online option. For more information, visit http://wpcarey.asu.edu/mba/online/program/dual-degree.cfm and http://cpd.asu.edu/online/?page=online_mba_mse_ee.

Program Requirement: The M.S.E. is a professional degree requiring a minimum 30 hours of course work (a minimum of 10 classes) and a final comprehensive examination. There is no thesis.

Requirements include:

1. At least five EEE courses.
2. At most two 400-level courses.
3. At least three EEE 500-level courses.
4. At least two courses outside the area of specialization.
5. At most one EEE 590 Reading and Conference or FSE course.

A final comprehensive examination in the area of specialization completes the M.S.E. requirements. The examination is given each semester at the end of the sixth week of classes.

Admission Requirements: The decision to admit a student who has earned a bachelor’s degree from a program accredited by ABET to a master’s program in electrical engineering is based on a number of factors. A minimum requirement is an undergraduate GPA of 3.00 (out of 4.00) in the student’s last two years of undergraduate work. A student whose undergraduate degree is not from an ABET-accredited program must have the equivalent of at least a 3.50 GPA in the last two years of undergraduate study and score at least 720 on the quantitative portion of
the GRE and a good score on the writing portion.

In addition, an applicant whose native language is not English must demonstrate proficiency in the English language by meeting the English proficiency requirements stated on the Graduate College’s website, http://graduate.asu.edu/admissions/international.html. International students seeking teaching assistantships must demonstrate proficiency in spoken English by scoring at least 24 on the speaking portion of the iBT or 50 on the ASU administered Speaking Proficiency English Assessment Kit (SPEAK).

The admissions deadline for the fall semester is the preceding Dec. 31; for the spring semester, the preceding July 31.

A student whose undergraduate degree is not in electrical engineering may need to take appropriate undergraduate courses to establish a baseline of knowledge in the discipline.

Contact:
Department of Electrical Engineering
http://ee.fulton.asu.edu
askee@asu.edu
GWC 212
480/965-3424

Electrical Engineering (PhD) ESEEPHD
Ira A. Fulton School of Engineering

Official Degree Awarded: PHD Electrical Engineering

Program Description: The Ph.D. in electrical engineering is awarded upon evidence of excellence in research leading to a scholarly dissertation that is a contribution to knowledge. Graduate courses and programs are offered in the following six areas of specialization:

1. Control systems.
2. Electromagnetics, antennas and microwave circuits.
3. Electronic and mixed-signal circuit design.
4. Electric power and energy systems.
5. Signal processing and communications systems.

Program Requirement: Ph.D. students are required to complete 84 credit hours of academic credit beyond the bachelor’s degree. The following summarizes the degree course requirements:

1. Master’s degree: 30 hours, from any accredited institution.
2. 500-level or above: 18 hours, at least nine from EE.
3. Research or Omnibus: 12 hours, can be 400-level and above.
4. Research: 12 hours.
5. Dissertation: 12 hours.

The 84 hours include 30 credit hours for the master’s degree, a required 18 credit hours of Ph.D. class work, 12 hours of research (EEE 792), and 12 hours (and only 12 hours) of dissertation (EEE 799).

The additional 12 hours can be more hours of research (EEE 792) or can be class work as determined by the supervisory committee. At least half (nine hours) of the minimum requirement of 18 credit hours of Ph.D. course work must be in electrical engineering. EEE 790 Reading and Conference can be used for no more than three credit hours toward the required 18, but does not count towards the nine hours of 500-level EE classes required.

All courses counting toward the required 18 hour minimum must be at the 500-level or higher. Note that all courses having the prefix EEE 591 count as 400-level courses. No more than one three-hour reading and conference (EEE 790) course can be taken as part of the 18 hour requirement. The content of any proposed Reading and Conference course must be reviewed and approved by the director of graduate studies before registering for the course.

A qualifying examination, a comprehensive exam, and the dissertation defense are required. Additional information on the program and can be found in the Blue Student Guide published and available on the program’s Web page.

*Admission Requirements*: In general, a student must have a least a 3.00 GPA (out of 4.00) in all undergraduate course work and at least a 3.50 GPA in all graduate course work for admission to the Ph.D. program. A student must usually hold a master’s degree before being admitted to the Ph.D. program. Direct Ph.D. admission is available for students graduating from an ABET-accredited electrical engineering program with a GPA of 3.60 or higher.

A student whose master’s degree is not from a U.S. institution must provide a score of at least 720 on the quantitative portion of the GRE. A score of 4.0 or better on the writing portion is considered desirable. In addition, an applicant whose native language is not English must demonstrate proficiency in the English language by meeting the English proficiency requirements stated on the Graduate College’s website, http://graduate.asu.edu/admissions/international.html. International students seeking teaching assistantships must demonstrate proficiency in spoken English by scoring at least 24 on the speaking portion of the iBT or 50 on the ASU administered Speaking Proficiency English Assessment Kit (SPEAK).

The admissions deadline for the fall semester is the preceding Dec. 31; for the spring semester, the preceding July 31.

A student whose undergraduate degree is not in electrical engineering may need to
take appropriate undergraduate courses to establish a baseline of knowledge in the discipline.

**Contact:**
Department of Electrical Engineering  
http://ee.fulton.asu.edu  
askee@asu.edu  
GWC 212  
480/965-3424

**Electrical Engineering - Art, Media and Eng (MS) ESAMEMS**
Ira A. Fulton School of Engineering

**Official Degree Awarded:** MS Electrical Engineering (Arts, Media and Engineering)

**Program Description:** A concentration in arts, media and engineering has been established as a collaboration between the electrical engineering program at ASU and the Herberger Institute for Design and the Arts. This concentration is available both for the M.S. and the Ph.D. students admitted to this program, who take two-thirds of their course, research and thesis credits from the Electrical Engineering and one-third of the credits from the arts, media and engineering program.

The arts, media and engineering (AME) program represents an ambitious interdisciplinary research community at ASU that is focused on the parallel development of media hardware, software, content and theory. AME research addresses the discontinuity that exists between media content and media technologies through a paradigm shift in media and arts training. The objective is to produce a new kind of hybrid graduate student who draws creativity from the arts and methodology from engineering sciences. AME trains students to integrate principles of digital signal processing and multimedia computing with artistic ideas and objectives, with the goal of enabling new paradigms of human-machine experience that directly address societal needs and facilitate knowledge. For more information, see http://ame.asu.edu.

**Program Requirement:** The M.S. in electrical engineering with a concentration in AME requires 30 credit hours and a thesis. Eight courses are required, typically five from EEE and three from AME. In addition, six hours of thesis are required, typically four credits from EEE and two from AME.

**Admission Requirements:** Students interested in applying to this program must submit the Graduate College online application. Students from ABET-accredited undergraduate programs who wish to be considered for a master’s program must have a minimum GPA of 3.00 (on a four-point scale) in the last two years of undergraduate course work. Students from undergraduate programs that are not accredited by ABET must have a minimum GPA of 3.50 (on a four-point scale) in the last two years of undergraduate course work or have graduated first class with distinction and must score in the 90th percentile or higher on the quantitative
section of the GRE general test.

In addition, an applicant whose native language is not English must demonstrate proficiency in the English language by meeting the English proficiency requirements stated on the Graduate College’s website, http://graduate.asu.edu/admissions/international.html. International students seeking teaching assistantships must demonstrate proficiency in spoken English by scoring at least 24 on the speaking portion of the iBT or 50 on the ASU administered Speaking Proficiency English Assessment Kit (SPEAK).

Applicants should submit materials that reflect the hybrid nature of the arts/engineering degree, including a statement of purpose and curriculum vitae demonstrating interest and relevant experience in the area. Students will have the opportunity to upload their curriculum vitae and statement of purpose when completing the online application. Additionally, AME requires three letters of recommendation from individuals familiar with the applicant’s ability to succeed in an interdisciplinary research environment.

Contact:
Department of Electrical Engineering
http://ee.fulton.asu.edu
askee@asu.edu
GWC 212
480/965-3424

Electrical Engineering - Art, Media and Eng (PhD) ESAMEPHD
Ira A. Fulton School of Engineering

Official Degree Awarded: PHD Electrical Engineering (Arts, Media and Engineering)

Program Description: A concentration in arts, media and engineering has been established as a collaboration between the electrical engineering program at ASU and the Herberger Institute for Design and the Arts. This concentration is available both for the M.S. and the Ph.D. students admitted to this program, who take two-thirds of their course, research and thesis credits from Electrical Engineering and one-third of the credits from the arts, media and engineering program.

The arts, media and engineering (AME) program represents an ambitious interdisciplinary research community at ASU that is focused on the parallel development of media hardware, software, content and theory. AME research addresses the discontinuity that exists between media content and media technologies through a paradigm shift in media and arts training. The objective is to produce a new kind of hybrid graduate student who draws creativity from the arts and methodology from engineering sciences.

AME trains students to integrate principles of digital signal processing and multimedia computing with artistic ideas and objectives, with the goal of enabling
new paradigms of human-machine experience that directly address societal needs and facilitate knowledge. For more information, see http://ame.asu.edu.

**Program Requirement:** The Ph.D. in electrical engineering with a concentration in AME requires:

1. Eighty-four credit hours.
3. A written comprehensive examination.
4. An oral comprehensive examination.
5. Ten courses are required, typically seven from EEE and three from AME.
6. Twelve hours of research are required, typically eight credits from EEE and four from AME.
7. Twelve hours of thesis are required, typically eight credits from EEE and four from AME.
8. A qualifying examination.
9. A comprehensive examination.
10. The dissertation defense.

**Admission Requirements:** Applicants with a master’s degree who wish to be considered for the Ph.D. program must have a minimum GPA of 3.50 (on a 4.00 scale) in their master’s program. Students interested in applying to this program should submit the Graduate College online application. Applicants without a master’s degree must have a minimum GPA of 3.60 (on a 4.00 scale) in the last two years of undergraduate course work and have graduated from an ABET-accredited undergraduate program.

In addition, an applicant whose native language is not English must demonstrate proficiency in the English language by meeting the English proficiency requirements stated on the Graduate College’s website, http://graduate.asu.edu/admissions/international.html. International students seeking teaching assistantships must demonstrate proficiency in spoken English by scoring at least 24 on the speaking portion of the iBT or 50 on the ASU administered Speaking Proficiency English Assessment Kit (SPEAK).

Applicants should submit materials that reflect the hybrid nature of the arts/engineering degree, including a statement of purpose and curriculum vitae demonstrating interest and relevant experience in the area. Students will have the opportunity to upload their curriculum vitae and statement of purpose when completing the online application. Additionally, AME requires three letters of recommendation from individuals familiar with the applicant’s ability to succeed in an interdisciplinary research environment.

**Contact:**
Department of Electrical Engineering
http://ee.fulton.asu.edu
askee@asu.edu
Official Degree Awarded: MSE Engineering Science (Enterprise Systems Innovation and Management)

Program Description: The ASU Ira A. Fulton School of Engineering offers the enterprise systems innovation and management concentration, providing enterprise and technology managers a wide range of analytical and strategic methods in enterprise systems, innovation and management. The core focus of the program includes enterprise product/service (offering) innovation, process innovation and strategy innovation within the enterprise, in addition to enterprise management, asset, design and business model innovation.

The enterprise systems innovation and management program allows professionals the opportunity to enhance their leadership abilities and analytical thinking and bring value to their organization and professional advancement. In today’s global environment, business execution is becoming increasingly competitive. Managing resources, products, and customers across the globe magnifies organizational challenges and requires more sophisticated systems, tactical thinking and advanced methods of measuring, analyzing and controlling performance. Managers must understand the underlying issues across the enterprise to impact and create business value.

The M.S.E. in engineering science with a concentration in enterprise systems innovation and management is only available through distance learning. The degree program is supported through online courses available from the Ira A. Fulton School of Engineering.

Program Requirement:

1. Students must complete a total of 30 credit hours, equaling 10 courses, to earn an M.S.E.
2. Students must complete a three-credit-hour applied project (CSE 593), three credits of applied engineering mathematics and three credits of engineering management/business.
3. A culminating event is required and will be identified by the student's advisory committee. It could be a final examination or the final report for an applied project.
4. Additional requirements may exist for some academic units.

Admission Requirements: Applicants must submit:

1. The Graduate College online application.
2. A minimum grade point average of 3.00, on a 4.00 scale, for the last 60 credit hours of the undergraduate transcript.
3. The schools attended and major of study completed are also significant factors in admission; an example of undergraduate degrees of applicants might include, but not be limited to, a B.S. in business, B.S. in mathematics or B.S. in engineering.
4. Completion of a basic statistics course and calculus course is required for admission; a prerequisite course in industrial statistics and tools might be required for some students not meeting this requirement.
5. GRE scores are not required.
6. Applicants whose native language is not English must provide evidence of English proficiency according to the guidelines defined by the ASU Graduate College.

Contact:
Dean, Ira A. Fulton School of Engineering
http://www.asuengineeringonline.com
asu.cpd@asu.edu
BYENG 310
480/965-1740

Engineering Science (Software Engineering) (MSE) ESSFEMSE
Ira A. Fulton School of Engineering

Official Degree Awarded: MSE Engineering Science (Software Engineering)

Program Description: The M.S.E. in engineering science with a software engineering concentration offers specialized courses founded on the fundamentals and principles of software engineering. The program provides the knowledge and skills needed to work as a software engineer or software task leader on both large and small projects using either agile methodologies or formal Capability Maturity Model Integration (CMMI) approaches. The program addresses major software development methodologies, techniques, tools and processes for both developing and managing software projects. The curriculum is based on the Software Engineering Body of Knowledge (SWEBOK) under the leadership of the IEEE Computer Society. Each course will place an emphasis on applied assignments and projects that are relative to the student’s workplace.

The M.S.E. in engineering science with a concentration in software engineering is only available through distance learning. The degree program is supported through online courses available from the Ira A. Fulton School of Engineering.

Program Requirement:

1. Students must complete a total of 30 credit hours equaling 10 courses to earn an M.S.E.
2. Students must complete a three-credit-hour applied project (CSE 593), three credits of applied engineering mathematics and three credits of engineering management/business.

3. A culminating event is required and will be identified by the student's advisory committee. It could be a final examination or the final report for an applied project.

4. Additional requirements may exist for some academic units.

Admission Requirements: Applicants must submit:

1. The Graduate College online application.
2. Applicants must have earned a B.S. in computer engineering, software engineering or a related field.
3. A minimum grade point average of 3.00 (on a 4.00 scale) in the last 60 credit hours of the undergraduate transcript (or for the last 12 units of the post-baccalaureate transcript).
4. GRE scores are not required.
5. Applicants whose native language is not English must provide evidence of English proficiency according to the guidelines defined by the ASU Graduate College.

Contact:
Dean, Ira A. Fulton School of Engineering
http://www.asuengineeringonline.com
asu.cpd@asu.edu
BYENG 310
480/965-1740

Industrial Engineering (MS) ESINDENMS
Ira A. Fulton School of Engineering

(This major is no longer accepting applications)

Official Degree Awarded: MS Industrial Engineering

Program Description: This program does not accept applications to the M.S. directly. Students should apply to the M.S.E. program at https://webapp.asu.edu/eadvisor/MajorInfo.external?sp=SASU00&sp=SESINDMSE&sp=Sgraduate, and, once admitted, consult with the M.S.E. program if interested in the M.S. program.

Industrial engineering combines knowledge from the physical, mathematical and social sciences to design efficient manufacturing and service systems that integrate people, equipment and information. Improvements made by industrial engineering in automation, information control and process quality revolutionized manufacturing in the past century and greatly increased our quality of life. Trends towards globalization, increased complexity and rapid technological innovation create an even greater need for industrial engineering in the 21st century.
Successful industrial engineering concepts are also spreading to the financial, logistics and health care service industries, affording new areas of opportunity. The Department of Industrial, Systems and Operations Engineering at ASU is ranked among the top 20 in the nation for graduate programs.

**Program Requirement:** The 30-credit-hour program requires 24 credit hours of course work and six credit hours of thesis.

Core courses:

- IEE 505
- IEE 545, 566, or 567
- IEE 572 or 578
- IEE 574 or 575
- Three to four area courses
- Zero to one elective course
- IEE 599 Thesis (6)

A final oral examination in defense of the thesis is required.

**Admission Requirements:** Students applying to an M.S. in industrial engineering must initially apply to the M.S.E. program. Students who later obtain a research advisor may transfer to the M.S. program. Students pursuing the M.S. thesis option must have a cumulative GPA of 3.20 in their course work.

**Contact:**
Industrial, Systems & Operations Engineering Prgm
http://ie.fulton.asu.edu/
askee@asu.edu
ERC 552
480/965-6874

**Industrial Engineering (MSE) ESINDENMSE**
Ira A. Fulton School of Engineering

**Official Degree Awarded:** MSE Industrial Engineering

**Program Description:** The faculty in the Ira A. Fulton School of Engineering offers a professional program leading to the M.S.E. in industrial engineering. The program is designed to bridge the gap between knowledge of engineering sciences and creative engineering practice, while at the same time increasing the depth and breadth of knowledge in selected areas of emphasis. The program of course work applicable to the degree is potentially unique for each student, although it must conform to the general guidelines for subject matter content for the degree.

**Program Requirement:** The 30 credit hour program requires four core courses, four area courses, two electives and a written comprehensive examination.
Core courses:

- IEE 505
- IEE 545, 566, or 567
- IEE 572 or 578
- IEE 574 or 575
- Four area courses
- Two elective courses

A final comprehensive examination on three of the four core courses is required. A student who maintains a 3.75 GPA in the four core courses is exempt from the written comprehensive examination.

Admission Requirements: For full consideration, a complete application is required by the specified deadline. Check the program Web site for more information.

Submit online application to the Graduate College. Required supplementary application materials include:

1. A statement of purpose.
2. GRE scores.
3. Three letters of recommendations.

At the time of the application, all applicants must have completed a minimum of 12 credit hours of calculus mathematics with a grade of “C” (2.00) or higher. Additionally, the following prerequisite ASU courses will be evaluated in the student’s transcripts to see if the student has met the minimum admission requirements:

- CSE 110 Principles of Programming with Java
- CSE 205 Concepts of Computer Science and Data Structures
- IEE 380 Probability and Statistics for Engineering Problem Solving
- IEE 385 Engineering Statistics with Probability
- IEE 376 Operations Research Deterministic Techniques/Applications
- MAT 242 Linear Algebra

Contact:
Industrial, Systems & Operations Engineering Prgm
http://ie.fulton.asu.edu/
ie@asu.edu
GWC 502
480/965-6874

Industrial Engineering (PhD) ESINDENPHD
Ira A. Fulton School of Engineering

Official Degree Awarded: PHD Industrial Engineering
Program Description: The industrial, systems and operations engineering faculty offer a Ph.D. in industrial engineering. The overall educational objective of graduate study in industrial engineering is to improve each student's ability to understand, analyze, resolve problems and perform original research. Industrial engineers must develop qualitative and quantitative abilities to guide the design and operation of complete organizations.

The industrial, systems and operations engineering faculty are internationally recognized for their innovative research projects, funded through both the government and industry.

Program Requirement: The Ph.D. requires a minimum of 85 credit hours after the bachelor's degree:

- A minimum of 57 credit hours of graduate course work
  - IEE 792 Research (12)
  - IEE 799 Thesis (12)
  - IEE 594 Conference and Workshop (1)
  - IEE 700 Research Methods (1)
  - IEE 784 Teaching Internship (1)
  - IEE 790 Independent Study or IEE 584 Internship (1)

As part of the degree requirements, students are required to successfully pass the qualifying examination after one year on the core courses outlined by the graduate programs office at the start of the program.

A written and an oral comprehensive examination is required on or before completion of the 57 credit hours of course work in the program of study. The candidate must also successfully pass the dissertation prospectus and the dissertation oral defense.

Admission Requirements: For full consideration, a complete application is required by the specified deadline. Check the program's Web site.

Submit online application to the Graduate College. Required supplementary application materials include:

1. A statement of purpose.
2. Three letters of recommendation.
3. GRE scores.

At the time of application, all applicants must have successfully completed a minimum of 12 credit hours of calculus mathematics with a grade of "C" (2.00) or higher. Also, the following prerequisite courses will be evaluated in the student’s transcripts to see if the student has met the minimum admission requirements.

ASU courses:
CSE 110 Principles of Programming with Java
CSE 205 Concepts of Computer Science and Data Structures
IEE 380 Probability and Statistics for Engineering Problem Solving
IEE 385 Engineering Statistics with Probability
IEE 376 Operations Research Deterministic Techniques/Applications
MAT 242 Linear Algebra

Contact:
Industrial, Systems & Operations Engineering Prgm
http://ie.fulton.asu.edu
ie@asu.edu
GWC 502
480/965-6874

Master of Engineering (MEng) ESENGRMENG
Ira A. Fulton School of Engineering

Official Degree Awarded: MEng Engineering

Program Description: When pursuing a M.Eng., students can customize their learning experience by selecting a curriculum that addresses their academic and professional goals. The M.Eng. is designed for working professionals and delivered entirely online to meet the unique needs of professional engineers. It is a practice-oriented degree.

In the M.Eng. program, multiple emphasis areas are available with additional areas under development. Within each area, there are specific course requirements in addition to the general program requirements. Students can select a traditional area of study, such as electrical and mechanical engineering, or one of the nontraditional areas of study, such as embedded systems, modeling and simulation, quality and reliability, and systems engineering.

Engineers who enter the M.Eng. program have the opportunity to gain valuable experience applicable to their industry while gaining an advanced degree. Convenience and flexibility are key advantages of this program. The M.Eng., which can be earned totally through distance learning, is a 30-credit-hour degree program that does not require GRE results, a thesis or on-campus attendance.

The M.Eng. is only available through distance learning. The degree program is supported through online courses available from the Ira A. Fulton School of Engineering.

Program Requirement:

1. Students must complete a total of 30 credit hours equaling 10 courses to earn a M.Eng. One half of all course work, excluding the practice-oriented project, must be in engineering.
2. Students must complete three credit hours of applied engineering mathematics and three credit hours of engineering management/business.

3. A culminating event is required and will be identified by the student's advisory committee. It could be a final written or oral examination or the final report for a practice-oriented project. Additional requirements may exist for some academic units and emphasis areas of the M.Eng. program.

**Admission Requirements:**

1. The Graduate College online application.
2. Bachelor's degree required with a background for the desired field of study.
3. A minimum GPA of 3.00, on a 4.00 scale, for the last 60 credit hours of the undergraduate transcript.
4. Graduates of non-U.S. institutions must satisfy admission requirements established by the ASU Graduate College.
5. Applicants whose native language is not English must provide evidence of English proficiency according to the guidelines defined by the ASU Graduate College.
6. GRE scores are not required.

**Contact:**
Dean, Ira A. Fulton School of Engineering
http://www.asuengineeringonline.com
asu.cpd@asu.edu
BYENG 310
480/965-1740

**Materials Science and Engineering (MSE) ESMATEMSE**
Ira A. Fulton School of Engineering

**Official Degree Awarded:** MSE Materials Science and Engineering

**Program Description:** The School of Materials offers an M.S.E. in materials science and engineering. This degree does not require a thesis. The program is intended for students who are working full-time in local industry. Many of the courses are offered online. Three concentration options are available:

- General.
- Semiconductor processing and packaging (SPP) processing track.
- Semiconductor processing and packaging (SPP) packaging track.

Courses for the SPP concentrations are available entirely online.

**Program Requirement:** A total of 32 credit hours are required for the M.S.E. in materials science and engineering. Students must take 30 credit hours of technical electives, with the following conditions:
1. Either IEE 570 Advanced Quality Control or IEE 572 Design of Experiments are highly recommended.
2. Up to six credit hours may be at the 400 or higher level.
3. Up to nine credit hours may be outside MSE, by approval.
4. Up to six credit hours of either applied project or reading and conference may be taken in place of six credit hours of electives.

Students must take two credit hours of seminar (MSE 591), which is one credit hour per semester.

Preparatory Courses

Students who do not have a background in materials science and engineering may have to take prerequisite or deficiency courses. Students should contact the graduate advisor to discuss any deficiencies.

Financial Aid

Financial aid is not available for materials science and engineering students.

Faculty Supervisory Committee

Students select a supervisory committee consisting of three members from the graduate faculty in the School of Materials, which includes both core and affiliate faculty. The majority of members should be full-time faculty in the School of Materials. The committee may include research scientists, academic and industrial professionals and other non-ASU-affiliated individuals, subject to approval by the school director and the Graduate College.

Interactive Plan of Study (iPOS)

The interactive plan of study (iPOS) is an online form that all graduate students must submit by the time they reach 26 credits or enroll in 50 percent of the degree requirements. The form lists the course work taken and the course work to be taken to complete the credit and course requirements for the degree. The iPOS becomes a contract between the university and the student that guides the student in completing the degree requirements. The iPOS must be approved by the student’s faculty committee, the academic unit and the Graduate College.

Culminating Event

A final comprehensive examination that captures the essence of the master’s degree focus and represents a major portion of the student’s course work is required for students in this degree. The examination consists of an applied project culminating in a final overview report and oral presentation incorporating knowledge gained from the program with integration and reflection of learning as applied to the job.
This comprehensive report, typically 20-25 pages (double-spaced) plus figures, is on a topic of their choice and approved by the faculty supervisory committee. Arrangements can be made for the distance learning students to conduct an oral examination by telephone.

**Graduation**

The student is eligible for graduation when all course work is finished, the culminating report has been approved, presented and submitted to the Graduate College and all other graduation requirements have been met.

*Admission Requirements*: Application requirements, procedures and deadlines are outlined in the School of Materials Web site at http://som.asu.edu. Applicants must submit the Graduate College online application. Admission to the School of Materials graduate programs is highly competitive. The program cannot determine an applicant's chances of admission in advance. All application materials must be submitted and once the application file is complete, it is then forwarded to the Graduate Admissions Committee for evaluation and recommendation. Recommendations are sent to the Graduate College, where they are subject to final review. The Graduate College will send the applicant a formal letter of acceptance or denial. The application deadline for the fall semester is Jan. 31; spring semester, Sept. 30.

Applicants must submit the following application materials:

1. Online application.
2. Applicable application fees.
4. Test of English as a Foreign Language (TOEFL) score for international students.
5. Supplemental application.
6. Resume.
7. Statement of purpose.
8. Three letters of recommendation.

GRE scores are not required for admission to the M.S.E. program.

*Contact:*
Materials Program
http://som.asu.edu
som-grad@asu.edu
ECG 303
480/727-9314

Materials Science and Engineering (PhD) ESENMATPHD
Ira A. Fulton School of Engineering
Official Degree Awarded: PHD Materials Science and Engineering

Program Description: The School of Materials offers a Ph.D. in materials science and engineering at Arizona State University. This graduate program prepares students for professional careers in materials science and engineering and related fields in industry, government and educational institutions.

Program Requirement:

1. Credit Requirements

The Ph.D. in materials science and engineering consists of 84 credit hours of graduate work. A total of 10 lecture courses (30 credits) plus three credits of seminar are required. Students entering the program with a master's degree in materials science may apply up to 30 credits toward the Ph.D. program of study, but must take five lecture courses at ASU. If the M.S. has not been completed, a maximum of 12 credit hours of graduate work may be applied.

2. Required Courses

The core courses contain the foundation knowledge in the discipline of materials science that will prepare students for further graduate study in specialized areas, represented elective courses. The four lecture courses should be completed in the first two semesters of the program, in preparation for the qualifying examination, which students must take after completing the core courses.

Any core course may be waived by petition to the associate director of the graduate program, with evidence of an equivalent course at another accredited university with a grade of “B” (3.33) or better. The student must provide proof in the form of transcripts and a syllabus of that course. A petition should be submitted to the associate director of the graduate program who reviews requests for waivers or substitutions of the core courses. Students are expected to demonstrate a working knowledge of this material in the qualifying examination. The following are required courses, for a total of 15 credit hours:

Core Courses

- MSE 523 Structure and Mechanical Properties (3)
- MSE 524 Advanced Thermodynamics (3)
- MSE 525 Physics of Materials or MSE 526 Materials Physics I and MSE 527 Materials Physics II (3)
- MSE 561 Kinetics and Phase Transformations in Solids (3)
- SEM 591 Graduate Student Seminar (3)

3. Electives

Graduate elective courses may be selected from any of the courses in the School of
Materials (with the MSE prefix) as well as courses from related disciplines such as chemistry, physics, electrical engineering, etc., subject to approval by the faculty advisor. These courses should comprise a focused program of study in a particular area of materials science, organized in consultation with faculty supervisory committee. A current list of course offerings may be found at http://som.asu.edu.

4. **Interactive Plan of Study (iPOS)**

The interactive plan of study is an online document where the student lists the courses he/she has taken and the courses he/she will take to complete the 84 credits required for the degree, which would include research and dissertation credits. The student should file the (iPOS) prior to completing 50 percent or 42 credits of the required course work. The iPOS can be accessed through My ASU at http://my.asu.edu.

5. **Faculty Supervisory Committee**

Students select a faculty supervisory committee consisting of three to five members from the roster of Graduate Faculty in the School of Materials, which includes both core and affiliate faculty. The chair and the majority of members should be full time faculty or affiliated faculty in the School of Materials. The committee may include research scientists, academic and industrial professionals and other non-ASU-affiliated individuals, subject to approval by the school director and the Graduate College.

6. **Qualifying Examination**

All students in the Ph.D. program must pass a qualifying examination. A single repeat attempt is allowed. This examination should be taken at the beginning of the third semester, immediately following completion of the four core courses, but no later than the fourth semester. The format is a 90-minute, oral examination covering the material in the four core courses.

7. **Comprehensive Examination and Dissertation Prospectus**

All students in the Ph.D. program must take a comprehensive examination, which should be completed within two semesters of passing the qualifying exam. This exam consists of a 20-25-page report on the topic of the expected thesis subject, which is presented orally to the student’s faculty supervisory committee. The policy and procedures for the doctoral comprehensive examination is outlined in the student handbook. This also comprises the dissertation prospectus.

8. **Dissertation Credits**
Ph.D. students must take 12 dissertation credits to complete the Ph.D. program of study. Dissertation credits should be taken once the student begins research on a dissertation topic under the guidance of a faculty mentor.

9. The Dissertation

The Ph.D. dissertation is based on original and independent research conducted by the student, under the guidance of the faculty mentor and the faculty advisory committee. The dissertation should demonstrate the candidate’s mastery of research methods, theory and tools of the discipline. The dissertation should demonstrate the candidate’s ability to address a major intellectual problem and to propose meaningful questions and hypothesis. The student must also present their dissertation in an oral defense to the faculty supervisory/dissertation committee. Ph.D. dissertation defenses are open to all members of the university community. Announcements are sent to materials science and engineering faculty and students and the announcement is also printed in the university newspapers. A copy of the dissertation is given to the graduate programs office and a copy is placed in the ASU library.

Admission Requirements: Specific requirements and procedures for application to the School of Materials graduate programs can be found at http://som.asu.edu.

In summary, applicants must submit the following application materials:

1. Graduate College online application.
2. Applicable application fees.
4. GRE score.
5. Test of English as a Foreign Language (TOEFL) score for international students.
6. Supplemental application.
7. Resume.
8. Statement of purpose.

Once the application file is complete, the file is forwarded to the faculty admissions committee for evaluation and recommendation. Financial aid is available to highly qualified students. The most common type of financial aid is teaching and research assistantships, which are accompanied by waivers of tuition and major medical insurance benefit. Other types of financial aid include Fulton School fellowships and Science Foundation Arizona fellowships.

Contact:
Materials Program
http://som.asu.edu
som-grad@asu.edu
**Program Description:** The mechanical and aerospace engineering faculty offer a graduate program leading to the M.S. in mechanical engineering. A number of wide and diverse research areas may be pursued. All of the graduate programs stress a sound foundation leading to a specialized area of study. Additional information can be found in the mechanical and aerospace guidelines at [http://mae.fulton.asu.edu/graduate/](http://mae.fulton.asu.edu/graduate/).

**Program Requirement:** The M.S. is the research master's degree; majors in aerospace engineering and mechanical engineering are available. All candidates for the M.S. are required to complete 30 credit hours and a thesis.

The student is encouraged to select a program committee chair (faculty advisor) as soon as possible but must select a program committee chair prior to completing 15 credit hours. The name of the student's program committee chair must be filed with the graduate programs office. A change of program committee chair requires approval of the mechanical and aerospace engineering graduate programs office.

The program committee chair, in consultation with the student, will establish a Master of Science Program Committee. The Master of Science Program Committee shall be composed of a minimum of three members from the ASU faculty with at least two being from mechanical and aerospace engineering faculty. Participation of individuals from institutions external to ASU is encouraged but these shall be non-voting members.

As soon as possible, but prior to completing 15 credit hours, the student, in consultation with the program committee chair, must file a program of study (POS) with the university. The Master of Science Program Committee and the Mechanical and Aerospace Engineering chair must approve changes to the POS.

The POS must be in accordance with university and program requirements. For students currently enrolled in a master’s degree program at another institution and wishing to transfer to ASU, note that a maximum of six credit hours may be counted toward an M.S. at ASU. A minimum cumulative GPA of 3.00 is required throughout the program. Candidates for the M.S. must complete a minimum of 30 credit hours of course and thesis work distributed as follows:

1. At least 12 credit hours of course work directly related to the research area.
2. At least six credit hours of mathematics.
3. At least six credit hours of graduate courses outside the major research area; these must be in mathematics, engineering and/or science.


A final defense of the thesis will be administered by the Master of Science Program Committee.

**Admission Requirements:**

1. Student interested in applying to this program must submit the Graduate College online application. A minimum GPA of 3.00 (on a 4.00 scale) is required for graduates from accredited U.S. institutions. The Graduate College is responsible for international GPA interpretation.

2. All applicants are required to take the GRE.

3. Students who do not have English as their primary language are required to achieve a minimum score of 80 on the internet-based Test of English as a Foreign Language (TOEFL).

4. Three letters of recommendation are required, using the format specified by the Mechanical and Aerospace Engineering.

5. All applicants are required to submit a statement of academic and career objectives and address the desire to pursue graduate studies at ASU in mechanical engineering.

**Contact:**
Mechanical and Aerospace Engineering Program
http://mae.fulton.asu.edu
mae@asu.edu
ECG 325
480/965-7261

**Mechanical Engineering (MSE) ESMEMSE**
Ira A. Fulton School of Engineering

**Official Degree Awarded:** MSE Mechanical Engineering

**Program Description:** The mechanical and aerospace engineering faculty offer a graduate program leading to the M.S.E. in mechanical engineering. A number of wide and diverse research areas may be pursued. All of the graduate programs stress a sound foundation leading to a specialized area of study. Additional information can be found in the Mechanical and Aerospace program guidelines at http://mae.fulton.asu.edu/graduate.

**Program Requirement:** The M.S.E. is the professional degree; majors in aerospace engineering and mechanical engineering are offered. Only the non-thesis option is available in mechanical and aerospace engineering. A minimum of 30 hours must be completed for this degree.

The student is encouraged to select a program committee chair (faculty advisor) as
soon as possible but must select a program committee chair prior to completing 15 credit hours. The name of the student’s program committee chair must be filed with the graduate programs office. A change of program committee chair requires approval of the mechanical and aerospace engineering programs office.

The program committee chair, in consultation with the student, will establish a Master of Science in Engineering Program Committee (MSEPC). The MSEPC shall be composed of a minimum of three members from the ASU faculty with at least two being from mechanical and aerospace engineering faculty.

As soon as possible, but prior to completing 15 credit hours, the student, in consultation with the program committee chair, must file a program of study (POS) with the University. The MSEPC and the mechanical and aerospace engineering programs office must approve changes to the POS.

The POS must be in accordance with university and program requirements. For students currently enrolled in a master’s degree program at another institution and wishing to transfer to ASU, note that a maximum of six credit hours may be counted toward an M.S.E. at ASU. A minimum cumulative GPA of 3.00 is required throughout the program. Candidates for the M.S.E. must complete a minimum of 30 credit hours of course work distributed as follows:

- At least fifteen 15 credit hours of course work directly related to a research area.
- At least six credit hours of mathematics.
- At least nine credit hours of graduate courses outside the major research area; these may be engineering, science, mathematics or other areas approved by the student’s program committee, the director of graduate studies and the graduate programs office.

A final comprehensive examination or applied project will be administered by the MSEPC. The purpose of this culminating event is to determine the student's ability to integrate the knowledge gained in his or her course work.

**Admission Requirements:**

1. Student interested in applying to this program must submit the Graduate College online application. A minimum GPA of 3.00 (on a 4.00 scale) is required for graduates from accredited U.S. institutions. The Graduate College is responsible for international GPA interpretation.
2. All applicants are required to take the GRE.
3. Students who do not have English as their primary language are required to achieve a minimum score of 80 on the internet-based Test of English as a Foreign Language (TOEFL).
4. Three letters of recommendation are required, using the format specified by Mechanical and Aerospace Engineering.
5. All applicants are required to submit a statement of academic and career objectives and address the desire to pursue graduate studies at ASU in mechanical engineering.

Contact:
Mechanical and Aerospace Engineering Program
http://mae.fulton.asu.edu
mae@asu.edu
ECG 325
480/965-7261

Mechanical Engineering (PhD) ESMEPHD
Ira A. Fulton School of Engineering

Official Degree Awarded: PHD Mechanical Engineering

Program Description: The graduate programs in Mechanical and Aerospace Engineering accommodate individual interests and encourage independent and innovative study. Students are part of a diverse intellectual community dedicated to advancing the state of the art and practice of aerospace and mechanical engineering. All graduate programs stress a sound foundation in technical fundamentals, communication and professionalism. Additional information can be found in the Mechanical and Aerospace Engineering program guidelines at http://mae.fulton.asu.edu/graduate/.

Program Requirement: The Ph.D. is directed toward original research. Candidates for the Ph.D. must complete a minimum of 84 credit hours. The student is required to write and defend a dissertation that describes an original contribution within the chosen discipline. The research results should be suitable for publication in a reputable journal. The Ph.D. is currently offered for majors in aerospace engineering and mechanical engineering.

The student must select a program committee chair (faculty advisor) with the selection being made prior to completing 42 credit hours. The program committee chair’s name must be filed with the graduate programs office. A change of program committee chair requires approval of the Mechanical and Aerospace Engineering programs office.

A graduate student pursuing a Ph.D. program of study in aerospace or mechanical engineering, must complete within the first year of his/her graduate studies at ASU, three 500-level (preferably core) courses in the major area and one 500-level mathematics course with an average GPA of 3.25 or higher. Specific qualifying course requirements for each major area are identified in the MAE graduate guidelines.

University regulations note the possibility of having two separate supervisory committees, a program committee and a dissertation committee. In Mechanical and
Aerospace Engineering these will normally be one and the same and will be designated as the program committee. The program committee chair, in consultation with the student, will establish a program committee, the purposes of which are to:

1. Approve the program of study (POS).
2. Provide guidance for the student’s research.
3. Administer the comprehensive examination.
4. Administer the dissertation defense.

The program coordinator shall consist of at least five ASU faculty with the majority being from MAE faculty, but at least one being from outside the program. Participation of individuals from institutions external to ASU is encouraged, but these shall be non-voting members. Furthermore, the program committee should have the following character:

1. Advisor (program committee chair); must be from MAE.
2. Two or three additional faculty in the student’s general area of research.
3. At least one faculty outside the student’s general area of research (e.g., mathematics, physics or other engineering disciplines).

Note: A change in the program committee requires approval of the graduate programs office.

The student, in consultation with his/her program committee chair and the program committee, must file a POS prior to completing 42 credit hours. The POS must meet general university requirements, including residency and the need for rigorous fundamental knowledge of engineering principles. Thirty credit hours of appropriate course work from a previously earned master's degree may be applied toward the total credit hours; at least 54 hours must be taken at ASU. A minimum cumulative GPA of 3.25 is required. Ph.D. candidates must complete a minimum of 84 credit hours of course and dissertation work, distributed as follows:

- At least 18 credit hours of course work directly related to the research area (major).
- At least nine credit hours of mathematics.
- At least nine credit hours of graduate courses outside the major research area; these must be in mathematics, engineering and/or science.
- 12 hours of MAE 799 dissertation.
- MAE 792 research credit hours may be applied toward the 84 total hours.

All students intending to earn the Ph.D. are required to pass a comprehensive examination. The examination will be administered by the program coordinator and consists of two parts:

1. Subject matter examination
- The purpose of this portion of the examination is to determine a student's grasp of essential concepts relevant to the Ph.D. in general and the student's ability to project beyond existing knowledge. Written and oral questions covering the student's graduate course work must be included.

2. Research Proposal
- The purpose of this portion of the examination is to evaluate a student's research acumen and ability to develop and present an original research proposal; and, equally important, to advise the student in finalizing successful research goals and procedures. The formal written proposal containing the research goals, methodology, expected results and contributions of publishable quality will be defended orally before the entire committee.

The comprehensive examination is taken soon after completing the Ph.D. qualifying requirements, or qualified Ph.D. students should take the examination by their fifth semester as full-time students in the mechanical and aerospace engineering Ph.D. program and must pass the examination by the end of the sixth semester. Part-time students should apprise the mechanical and aerospace engineering chair of a timely schedule for exam completion. Ph.D. students achieve candidacy status in a letter from the graduate college dean upon passing the comprehensive examination and successfully defending the dissertation prospectus.

The dissertation defense is an oral examination administered by the program committee in accordance with Graduate College guidelines. The purpose of the examination is to evaluate the student's research efforts and written presentation (dissertation), and to determine if the candidate is worthy of receiving a Ph.D. The major area of emphasis of this examination is the student's research dissertation and the general areas of study related thereto. The final dissertation defense must be taken within five years of passing the comprehensive examination.

*Admission Requirements:*

1. Student interested in applying to this program must submit the Graduate College online application. A minimum GPA of 3.00 (on a 4.00 scale) is required for graduates from accredited U.S. institutions. The Graduate College is responsible for international GPA interpretation.
2. All applicants are required to take the GRE.
3. Students who do not have English as their primary language are required to achieve a minimum score of 80 on the internet-based Test of English as a Foreign Language (TOEFL).
4. Three letters of recommendation are required, using the format specified by Mechanical and Aerospace Engineering.
5. All applicants are required to submit a statement of academic and career objectives and address the desire to pursue graduate studies at ASU in mechanical engineering.
Nuclear Power Generation (Grad Certificate) ESNPGGRC

Official Degree Awarded: CERT Nuclear Power Generation (Certificate)

Program Description: The nuclear power generation (NPG) graduate certificate is a multidisciplinary professional option within the Ira A. Fulton School of Engineering. The goal of the NPG certificate program is to prepare students and professionals from a variety of engineering and scientific disciplines to work effectively in the nuclear power industry. The certificate program offers students a comprehensive, interdisciplinary education as courses from multiple academic units constitute both the core and elective classes available to the student.

Students typically begin with the study of nuclear science and engineering fundamentals. Subsequent core courses focus on reactor theory, power plant dynamics, structural materials, and operational safety.

Elective courses allow students to tailor the remaining studies toward facilitating their career goals and focusing on studies tied to their discipline. The primary mode of instructional delivery is online using the facilities of the Engineering Office of Global Outreach and Extended Education (GOEE).

Program Requirement: Core courses* with a total of 18 required credit hours:

- MSE 565 Structural Materials in Nuclear Power Systems (3)
- EEE 562 Nuclear Reactor Theory and Design (3)
- EEE 563 Nuclear Reactor System Dynamics and Diagnostics (3)
- EEE 564 Interdisciplinary Nuclear Power Operations (3)
- Electives (6)

*EEE 460 Nuclear Power Engineering is a prerequisite to the core courses; for those students who have not successfully completed such a course, EEE 460 may be taken as an elective prior to enrolling in the core courses and applied toward the 18 hours required for the graduate certificate.

Students must enroll in at least six credit hours per calendar year. The certificate program must be completed within five calendar years. All courses which will count for the certificate must have a cumulative GPA of 3.00 or higher, and each course used to earn the certificate must be completed with a grade of “C” (3.00) or higher.

Admission Requirements: Applicants who hold a bachelor's degree in an engineering or science discipline, such as physics, chemistry and mathematics, from a regionally
accredited institution are eligible to apply to the program. Applicants are required to submit:

1. An official ASU graduate online application.
2. Official transcripts of all undergraduate and graduate course work.
3. A statement of career and educational goals.

Regular admission may be granted to applicants who have achieved a GPA of 3.00 (4.00 scale) or better in the last two years of work leading to a bachelor's degree and are competitive in the applicant pool.

Contact:
Department of Electrical Engineering
http://ee.fulton.asu.edu/
askee@asu.edu
GWC 212
480/965-3590

Graduate College

Biological Design (PhD) GCBDSPHD
Graduate College

Official Degree Awarded: PHD Biological Design

Program Description: The doctoral program in biological design seeks to develop a new type of scientist by training students in core disciplines related to biology while simultaneously preparing them to participate successfully in the interdisciplinary research teams of the future.

The research emphasis is on projects that are use-inspired, contributing directly to solutions for important societal challenges. This is a highly mentored program of personalized study that provides significant interaction with the large and vibrant research community at ASU and with partner organizations locally and nationally. Students are expected to complete the program in four to five years. Students accepted into the biological design Ph.D. program will be supported as research assistants in the first year of study and generally through the term of their studies.

Program Requirement: The Ph.D. program requires 84 credit hours, a comprehensive examination, a defense of a written dissertation, required course work BDE 701, BDE 702, BDE 721, BDE 722, BDE 751 and 6 credits of elective courses. Because this is a highly-mentored program designed around each student, your advisor will provide guidance on the appropriate curriculum based on your core discipline of interest.

The key distinguishing features of the curriculum are:
• A personalized program of study that allows you to explore the disciplinary areas of greatest interest to you.
• Three ten-week laboratory rotations during your first year of study.
• A two-semester core course sequence consisting of two courses that will provide core training in all the relevant bio-related areas.
• Encouragement to choose dissertation research projects that are use-focused, contribute to solving a large-scale challenge and promise rich interdisciplinary experiences.
• Students accepted into the biological design Ph.D. program will be supported as research assistants in the first year of study and generally through the term of their studies.

If you are accepted to the biological design Ph.D. program:

During the first academic year, in addition to a core course sequence, you will complete three 10-week laboratory rotations. Rotations can be in any laboratory on the ASU campus provided it is centered largely on biological research and is approved by the biological design graduate faculty chair. Your advisor will help coordinate these rotations to help you choose the best laboratory and mentor for you, and one which exposes you to diverse approaches to science.

At the end of the first year of course work and rotations (May), you will choose a lab and professor to work in consultation with the Biological Design Program and prospective mentors. One semester of teaching assistant participation will be required to gain experience in teaching. All biological design graduate students, through the course of the graduate experience, will participate in special seminars, meetings and social activities to encourage broad research interactions. You will be eligible for program support to attend scientific meetings.

You may request to work in a laboratory at ASU the summer prior to the start of your graduate studies.

Admission Requirements: Applications for the biological design Ph.D. program are taken and processed through the ASU Graduate College. The application deadline for the program is Jan. 1.

Prior to submitting the online application, candidates should prepare the following documents (these documents can be uploaded into the application as .doc, .rtf. or .txt file types):

1. Personal Statement: This document should reflect your career and educational goals, and should explain why you are interested in pursuing this program. Candidates should describe their prior and current research experience. Your statement should be one to three pages.
2. Resume: Your resume should reflect your prior research and employment experience and list honors, awards, memberships held and any publications.
Additionally, candidates must submit the following information:

1. GRE test scores: The institution code for ASU is 4007 and the department code is 0000. Subject test scores are also recommended but not required.
2. Letters of Recommendation: Please enter the names and contact information for three recommenders into the online application where requested. Recommendations should be relative to your academic career. Recommenders will receive the request to provide recommendations by automatic e-mail.

For additional Graduate College application requirements, including transcripts, fee and international application requirements, please see http://www.asu.edu/graduate/admissions/admissions_checklist.htm.

Contact:
Graduate College
http://biologicaldesign.asu.edu/
biologicaldesign@asu.edu
BD A320CB
480/727-9298

Human and Social Dimensions of Science and Technology (PhD) GCHSDSTPHD
Graduate College

Official Degree Awarded: PHD Human and Social Dimensions of Science and Technology

Program Description: Under the auspices of the Graduate College, a steering committee administers the Ph.D. program in human and social dimensions of science and technology (HSD). This program prepares students to teach and conduct research on the conceptual, historical, social and policy foundations of science and technology and their interactions with society, using humanistic and social scientific methods.

The HSD program responds to the growing demand for interdisciplinary research in the humanities and social sciences that can provide insights into the dynamic relationship between science, technology and society. Solutions to the problems of applying science and technology to human well-being can only be found by fully integrating research from across many social science and humanities disciplines. The Ph.D. program in HSD is flexible, combining a strong, integrated, first-year experience, with substantial freedom for students, in conjunction with their advisors, to design carefully crafted programs of study relevant to their own areas of specialization and expertise. Unique among programs of this kind nationally, students will also learn to communicate and work with scientists, engineers, policy, business and community officials and/or the public in conducting and applying research.
**Program Requirement:** The Ph.D. in HSD is a research degree, culminating in a dissertation, which must draw on multiple disciplinary perspectives.

The degree requires completion of 84 credit hours, of which 12 hours (and only 12) are for dissertation. Students may apply up to 30 hours from a prior master's degree toward the total hour requirement upon approval of the steering committee. Each student, with his or her supervisory committee, develops a unique program of study, which the student's supervisory committee approves.

Each student completes a year-long core seminar, a second-year research project, two major fields, one minor field, methods training, electives and research. Students also regularly attend the program colloquia. There are no foreign language or statistics requirements, except as needed for certain dissertation projects.

**Fields**

In consultation with the student's supervisory committee, each student develops three distinct fields to provide the in-depth training necessary to formulate and carry out his or her dissertation research. Each student must complete two major and one minor field. Major fields consist of the equivalent of three courses of specialized work (either in existing elective courses or through independent reading or research projects) designed to achieve mastery of a particular intellectual subject. The minor field consists of the equivalent of two courses of specialized work. For each field, the supervisory committee and student will select a field director, who is a member of the student's supervisory committee and who will be responsible for working with the student to determine field content as well as the format for demonstrating mastery of the field, such as a field exam, field paper or exemplary course paper.

After the completion of course work or other assigned activities for each field, a student will demonstrate mastery of the field. The student's supervisory committee will assess mastery, in a format proposed by the committee and the student and approved to by the steering committee. Common formats for demonstrating mastery of a field include a field exam, a field paper or an exemplary course paper. The timing of demonstration of mastery of each of the three fields is determined by the student and his or her supervisory committee; the demonstrations need not occur at the same time.

**Supervisory Committee**

Each student appoints his or her supervisory committee no later than the end of the second semester of program enrollment. A supervisory committee includes a chair, who is a tenured or tenure-track faculty member of the HSD faculty, and two to four additional members. Fifty percent or more of the supervisory committee members must be HSD faculty. The student's field directors are members of his or her supervisory committee. A student may change the members of his or her supervisory committee with approval of the program steering committee chair.
Study Plan and Study Plan Review

During the second semester, each student develops, in collaboration with the student's supervisory committee, a study plan. The study plan specifies the second-year research project topic, fields and electives the student will pursue.

The study plan review is a formal meeting of each student's supervisory committee at which the student presents the study plan for supervisory committee approval. This meeting is typically held during the second semester of enrollment or at the beginning of the third semester. Students may not begin a fourth semester of study without an approved study plan.

Comprehensive Examination

Each student develops a written dissertation prospectus, including a bibliography, discussion of relevant research skills and a brief (less than one page) description of each field completed and how mastery was demonstrated. The dissertation prospectus shows that the student can integrate and synthesize the knowledge and skills developed through course work and apply it to the development of a research project. The student makes an oral defense of the dissertation prospectus to his or her supervisory committee, which must approve the prospectus. The writing prospectus and its oral defense constitute the written and oral comprehensive examinations required by the Graduate College for advancement to candidacy. Students normally complete the dissertation prospectus and its defense in the fifth semester.

Dissertation

The Ph.D. dissertation represents an original body of research that contributes to existing knowledge in a significant way.

Final Examination

Upon completing the dissertation, the student makes an oral defense of the dissertation to his or her supervisory committee, which must approve the dissertation. The Ph.D. is granted upon successful completion of the oral defense and any revisions to the dissertation required by committee members.

Admission Requirements: Preference is given to students with demonstrated interest and competence in relevant areas of intellectual work. All students must hold an undergraduate degree from a regionally accredited institution or university of recognized standing when they enter, and have a minimum GPA of 3.00 (on a 4.00 scale) for the last 60 credit hours of undergraduate work.

To apply to the program, applicants are required to submit:
1. An official ASU Graduate College application.
2. Official transcripts of all undergraduate and graduate course work.
3. The HSD academic record form.
4. A curriculum vitae or resume.
5. A statement of proposed research program that clearly identifies why the student feels ASU is the appropriate place to pursue his or her Ph.D. degree and identifies one or more faculty member(s) whose interests and/or work are relevant to the student’s proposed research.
6. A writing sample.
7. General GRE scores.
8. Three academic letters of recommendation.

Regular admission may be granted to applicants who meet Graduate College admission requirements.

Contact:
Graduate College
http://hsd.asu.edu
hsd@asu.edu
LSC 284
480/965-1778

Neuroscience (PHD) GCBMENPHD
Graduate College

Official Degree Awarded: PHD Neuroscience

Program Description: Neuroscience involves the study of the nervous system and its relation to an organism’s function. It encompasses how gene and nerve networks interact with the environment throughout an organism’s development to account for behavior. The study of neuroscience is essential for the understanding of many brain and neuromuscular diseases, their treatment and rehabilitation and must incorporate studies at multiple levels of function, including studies at the cellular, organ and organism level. Therefore, this program will bring together broadly distributed research programs in the analysis of nervous system function from many disciplines including biology, mathematics, biochemistry, engineering and psychology. As such, the field of neuroscience is broadly interdisciplinary and is not adequately captured by any single existing academic program. In fact, most research programs are not carried out by a single investigator. Instead research emphasizes teamwork by integrating researchers from several disciplines.

The Ph.D. in neuroscience degree program will also have tremendous social relevance. Many ASU researchers have funding from federal, state and private sources to perform basic research on the relation between the brain, neuromuscular function and behavior. Another major focus of federally funded and industry sponsored neuroscience research lies in understanding the bases for, and ultimately treatment of, many important livestock and human disease conditions. Many times
this type of clinical research involves working directly with patient populations to develop treatment methodologies. Translational research provides a bridge between basic and clinical research program. It therefore drives development of novel technologies of the near future from advances in basic research today. By enhancing communication between different communities of researchers, the Ph.D. in neuroscience degree program will build those bridges.

Because of the highly interdisciplinary nature of neuroscience research, there will be two primary missions of the graduate training program. First, students will need to receive detailed training in a core discipline that will represent their primary field of expertise. Second, students will receive training in methods for conduction of interdisciplinary, collaborative research. At the completion of this program students will be able to undertake independent research and seek employment in a variety of public and private settings.

**Program Requirement:** The Ph.D. in neuroscience degree program will integrate aspects of graduate level training from many different units on campus as well as from the program’s partner institutions distributed across the greater Phoenix area. Partner institutions will include, but are not be limited to The Barrow Neurological Institute (BNI), Translational Genomics Research Institute (TGen) and The Mayo Clinic and Sun Health.

The program requires the completion of 84 credit hours of which 12 hours, and only 12, are dissertation credits. At least 18 credits of formal course work are required. In consultation with their committee and their supervisor/mentor, students will be able to customize their program of study to suit their particular interests and goals. Each student completes six credit hours of the core course credits. The core course sequence must be completed before the oral and written evaluation examinations are taken. Additional credits will be comprised of specialized disciplinary courses or research credits chosen in consultation with their mentor and advisory committee.

A one-credit-hour seminar will be required each semester.

Advancement to candidacy will be dependent on successfully passing a formal comprehensive examination that includes both a written proposal of the dissertation research and an oral examination in the broader areas that pertain to that research study. When the research is completed, the dissertation must be written and presented in a public seminar and successfully defended before the supervisory committee.

**Admission Requirements:** The graduate committee will be responsible for decisions concerning potential recruitment of students and admission recommendation of students to the program. They will also be highly active in the recruitment procedure each year.

**Requirements**
A bachelor's degree in science or engineering from a regionally accredited institution (or equivalent degree) is required.

1. An official ASU Graduate College application.
2. Official GRE scores.
3. Official transcripts of all undergraduate and graduate course work.
4. A statement of career and educational goals.
5. Three letters of recommendation (two of which should be academic recommendations).

Regular admission may be granted to applicants who have achieved a GPA of 3.00 (4.00 scale) or better in the last two years of work leading to a bachelor's degree and who are competitive in the applicant pool as evidenced by GRE verbal, quantitative and analytical scores, the statement of educational/career goals and the letters of recommendation. Particular attention will be paid to research experience and overall preparation in problem solving abilities as evidenced by previous course work, research experiences and/or GRE scores.

Because this program draws on an extremely broad range of disciplinary backgrounds in recruiting students, there is no specific set of undergraduate course requirements other than those implied by the degree requirements described above. Most students will be expected to have had some biological course work, or demonstrated ability through a subject test GRE. During the first semester, student progress in the core course will be closely monitored for difficulty in specific areas.

Contact:
Graduate College
http://neuroscience.asu.edu/index.html
Wendi.Simonson@asu.edu
INTDSB 288
480/965-7490

Statistics (MS) GCSTATMS
Graduate College

Official Degree Awarded: MS Statistics

Program Description: The committee on statistics offers a program leading to the degree M.S. in statistics. The program is interdisciplinary in that it draws upon faculty research and teaching interests from various academic units so that programs of study can be tailored to reflect individual needs and goals. The committee, which sets program requirements and supervises programs of study, is composed of faculty from departments in the Ira A. Fulton School of Engineering, the College of Liberal Arts and Sciences, the W. P. Carey School of Business and the New College of Interdisciplinary Arts and Sciences.
The program for the M.S. in statistics provides preparation for either a research-oriented or a practice-oriented career. Requirements specific to this program ensure balanced attention to the theoretical and applied aspects of the discipline of statistics. The program prepares students for careers in business, education, industry and government. Graduates understand the theory that is fundamental to proper use of statistics, are knowledgeable about the tools of applied statistics and are familiar with computer software packages available for doing statistical computations. In addition, students interested in research in statistics can obtain the background needed to begin a doctoral program. Flexibility in the program reflects the fact that statistical analysis is one of the most widely used tools of modern scientific reasoning.

Program Requirement: Completion of the degree requires 30 credit hours of approved credit, none of which may be from the prerequisites. The program must include the nine credit hours from three required theory courses:

- Probability (STP 421).
- Mathematical statistics (STP 427).
- Theory of statistical linear models (STP 526).

The required theory courses are fundamental to the education of statisticians and are necessary for more advanced graduate study. Two courses in applied linear statistical models are also required:

- Applied regression analysis (IEE 578, ECN 525 or STP 530).
- Applied analysis of variance/design of experiments (IEE 572, ECN 530 or STP 531).

The program must also include either three credit hours of applied project (IEE 593, ECN 593 or STP 593) or six credit hours of thesis (IEE 599, ECN 599 or STP 599). The applied project or thesis must be defended at an oral examination. The content of the applied project report or thesis must, in its final form, be suitable for submission to an academic journal or conference proceedings. The thesis must conform to Graduate College format requirements.

The remaining nine or 12 credit hours come from elective courses chosen by the student with the approval of supervising faculty. A maximum of six credit hours may be chosen from a related field on which statistics relies (such as computer science) or in which statistics is an essential tool (e.g., biostatistics, quality control). The elective courses allow the student to emphasize a particular area of statistical inference, culminating in an applied project report or a thesis on a topic in that area. No foreign language or written comprehensive examinations are required.

The student has considerable flexibility in selecting an area of specialty. Possible areas of specialty include, among others:

- Applied data analysis.
• Bayesian analysis.
• Biostatistics.
• Categorical data analysis.
• Data mining.
• Design of experiments.
• Industrial statistics.
• Six sigma methodology.
• Linear models.
• Multivariate analysis.
• Sampling and survey research.
• Smoothing methods.
• Statistical computing.
• Statistical process control.
• Time series analysis.

**Admission Requirements**: Applicants must satisfy the general requirements for admission to the Graduate College. Applicants should have completed the following courses (equivalents at ASU are given in parentheses):

2. Advanced calculus (MAT 371).
3. Linear algebra (MAT 342).
4. Computer programming (CSE 100).
5. Introductory applied statistics (QBA 221 or STP 420).

Applicants who lack any of these prerequisite courses must complete the prerequisites before being considered for admission. The submission of GRE scores is strongly encouraged, but not required. In addition applicants must submit three letters of academic recommendation and a brief statement of purpose to the director of the committee on statistics. Although most applicants earn the bachelor's degree in a quantitative area (such as statistics, quantitative business analysis, mathematics, engineering or computer science), this is not required for admission to the program.

**Contact:**
Graduate College
http://graduate.asu.edu/statistics
statistics@asu.edu
PSA 744
4809652671

**Journalism and Mass Communication, Walter Cronkite School of**

**Journalism and Mass Communication PHD CSJMC PHD**
Walter Cronkite School of Journalism and Mass Communication
Official Degree Awarded: PHD Journalism and Mass Communication

Program Description: This program is designed to be a small, student-centered, scholarly, research-oriented Ph.D. in journalism and mass communication. It is based on the following priorities:

1. A journalism and mass communication focus that especially considers the postmodern mediascape.
2. One-on-one, faculty-student mentoring.
3. An interdisciplinary approach that requires course work outside of the Cronkite School.
4. Program flexibility.

The emphasis of this degree is the creation of scholarly, peer-reviewed, juried presentations in addition to a scholarly dissertation, which caps the student’s program of study. It is a degree based in journalism and mass communication philosophy, theory, a variety of scientific methodologies and critical thinking. The proposed program will prepare students for research-oriented careers in journalism and mass communication education and related fields.

Program Requirement: A minimum of 84 credit hours is required for this Ph.D. program. Students entering the program with a master's degree in journalism or mass communication, or a related field, must complete 60 credit hours of course work. Students who are admitted to the program without a master's degree will be required to complete an additional 24 credits of course work.

1. Core Courses, for a total of 18 credit hours.
2. Elective Courses, for a total of 18 credit hours.
3. Research, for a total of 12 credit hours.
4. Dissertation, for a total of 12 credit hours.
5. Previous master's degree or additional hours approved by the supervisory committee, for a total of 24 credit hours.
6. Total credit hours required is 84.

Admission Requirements: Applicants must have at least a bachelor's degree in journalism or mass communication or a related field such as communication or media. Applicants must complete the Graduate College online application and will normally have achieved a minimum of a 3.00 GPA in their last 60 credit hours of course work in their first bachelor's degree program.

Contact:
Walter Cronkite School of Journalism & Mass Comm
http://cronkite.asu.edu/grad/index.php
masscom@asu.edu
CRONK 302B
602/496-6612
Master of Mass Communication (MMC) CSMCOMMMC
Walter Cronkite School of Journalism and Mass Communication

Official Degree Awarded: MMC Mass Communication

Program Description: The M.M.C. program offers basic journalism skills instruction, education in journalism values and instills 21st-century vision and perspective. Students gain practical hands-on experience in specialties including print, broadcast, strategic media and online journalism.

The cornerstones of the graduate program are the Cronkite school’s specialized experiences:

- Cronkite News Service print.
- Cronkite News Service broadcast.
- NewsWatch.
- New Media Innovation Lab.
- Projects covering the borderland with Mexico.
- Strategic media experience.
- The Knight Center for Digital Media Entrepreneurship.

Program Requirement: The master's program is a full-time, three-semester-long, 36-credit-hour immersion program. Students with extensive professional experience may be offered the opportunity to pursue the 30-credit-hour, mid-career option.

Admission Requirements: Applicants must submit a Graduate College online application. Admission is granted for the fall semester only. The application deadline is Feb. 1. Applicants must meet all deadlines and application requirements to be considered. The Cronkite school’s graduate committee reviews complete and on time applications. Recommendations for admission are made to ASU’s Graduate College, where the final admission decisions are made.

ASU’s Graduate College requires that all those admitted have at least a 3.00 GPA (based on a 4.00 scale) in the last 60 credit hours or 90 quarter hours of undergraduate course work. The scores on the quantitative and verbal sections of the GRE of those admitted average about 1,213, with the verbal score being particularly important to the Cronkite school’s graduate committee. Test of English as a Foreign Language (TOEFL) scores must be at least 600 for the paper-based examination and 100, Internet-based. Applicants must submit three letters of recommendation, a personal statement of interest (350-500 words in length) and a resume.

Contact:
Walter Cronkite School of Journalism & Mass Comm
http://cronkite.asu.edu/grad/index.php
masscomm@asu.edu
Law, Sandra Day O'Connor College of

Juris Doctor (JD) LWJDJD
Sandra Day O'Connor College of Law

Official Degree Awarded: JD Juris Doctor of Law

Program Description: The Sandra Day O'Connor College of Law offers programs in traditional law studies that culminate in a J.D.. Within the J.D. program, there are many areas of concentration, such as Indian law, science and technology, tax and philosophy. In addition, the college offers several concurrent degree programs for individuals who wish to earn additional degree distinctions along with the J.D.

The Sandra Day O'Connor College of Law offers a fully ABA-accredited J.D. program. The program is full-time and classes are offered during the day. The college enrolls about 170 students each fall.

Program Requirement: Students must successfully complete a total of 88 credit hours, including required first-year and upper-division courses, the graduation writing requirement, the seminar writing requirement and the professional skills requirement, in order to be eligible for graduation.

First-year students are required to take a specific set of classes, including contracts, torts, criminal law, civil procedure, constitutional law I, property, law and the regulatory state, dean's session and legal research and writing. After the first year, the only required courses are professional responsibility and criminal procedure or constitutional law II. Students may choose to participate in the various clinics, simulation courses or externships.

Admission Requirements: The Sandra Day O'Connor College of Law at Arizona State University enrolls only one first-year class per year, and it enters in the fall semester. The program is full-time, day-time only. Each year, far more applications are submitted to the College of Law than the college's facilities and programs can accommodate. Thus, admission is competitive. The College of Law makes its admissions decisions based upon all information contained in the applicant's file.

To be considered for admission to the J.D. program, an applicant must have taken the LSAT and have earned, or expect to earn by the time of enrollment in law school, a bachelor's degree from an accredited, four-year college or university. Further, a candidate must complete the application for admission and submit all mandatory attachments. Transcripts and letters of recommendation must be submitted through the Law School Data Assembly Service (LSDAS) and will be provided to the College.
of Law by LSAC with the applicant's LSAT record.

The Sandra Day O'Connor College of Law at Arizona State University will provide full file review to 100 percent of the completed applications to the J.D. program. While the applicant's undergraduate record and LSAT score are important predictors, no decision will be made on objective criteria alone. Among the other factors considered by the admissions committee are:

- The rigor of the undergraduate course of study.
- Graduate study.
- Demonstrated commitment to public service.
- Work experience.
- Leadership experience.
- Extracurricular or community activities.
- History of overcoming economic or other disadvantage.
- Personal experiences with discrimination.
- Overcoming disability.
- Geographic diversity.
- Diversity of experience and background.
- Maturity.
- Ability to communicate.
- Foreign language proficiency.
- Honors and awards.
- Service in the Armed Forces.
- Publications.
- Exceptional personal talents.
- Other factors.

**Early Admission**

To be considered timely for early admission, an applicant must take the LSAT no later than the September/October administration, and submit a completed application for admission postmarked or electronically submitted no later than Nov. 1. Any application postmarked or electronically submitted after Nov. 1, or remaining incomplete as of Dec. 10, even if marked for early admission, will be considered along with the regular admission applications.

The admissions committee will make every effort to provide a response on all completed early admission applications by the end of January. Please note that some applicants will not receive a final decision of admission or denial, but will instead receive notice that they are being held for review with the regular applicant pool.

**Regular Admission**

To be considered timely for regular admission, an applicant must take the LSAT no later than the February administration, and submit a completed application for
admission postmarked or electronically submitted no later than Feb. 1. Any
application postmarked or electronically submitted after Feb. 1, or remaining
incomplete as of March 10, is untimely and may be at a disadvantage in the review
process.

For an application to be considered complete, it must include the following:

1. A $50 application fee (credit card/check/money order).
2. A personal statement that does not exceed three double-spaced, typed pages.
3. A resume that does not exceed three typed pages.
4. Explanations to affirmative answers to any conduct questions.
5. Law School Admissions Test (LSAT) score(s) from Law Services.
6. A complete Law School Data Assembly Service (LSDAS) report with all
   transcripts and letters of recommendation. The LSDAS report must be from
   the current application year.

Applicants who have received an undergraduate or graduate degree from a foreign
institution should refer to the special instructions for foreign-educated applicants
section the college’s Web site. Applicants are urged to file their application as early
as possible after Sept. 15.

Contact:
Sandra Day O’Connor College of Law
http://www.law.asu.edu
law.admissions@asu.edu
LAW
480/965-1474

**Law - Biotechnology & Genomics (LLM) LWGENOMLLM**
Sandra Day O’Connor College of Law

**Official Degree Awarded:** LL.M. Biotechnology and Genomics

**Program Description:** The LL.M. in biotechnology and genomics program is offered
through the Sandra Day O’Connor College of Law’s Center for the Study of Law,
Science, and Technology, the nation’s oldest, largest and most comprehensive
research center focusing on the intersection of law and science. Through classroom
instruction and guided independent study, LL.M. candidates (those who have
received their J.D. or comparable terminal law degree) will examine the legal issues
surrounding genetic applications such as genetically modified organisms, forensic
evidence, gene testing, gene therapy, cloning, stem cells and behavioral genetics. The
issues relate to privacy, confidentiality, regulation, liability, international trade,
evidentiary standards, intellectual property, licensing and business planning.

LL.M. students explore and examine the law that enables and constrains the
development, control, and application of biotechnology and genomics. Relevant legal
fields include health law, particularly public health law, agricultural law and policy
and intellectual property. Forensic science and ethical constraints upon the various contemplated uses are also important elements of the program. Because the legal, ethical and policy aspects of genomics and biotechnology are of global significance, this program will also be beneficial for non-U.S. lawyers.

Program Requirement: The program is designed to be completed in nine months on a full-time basis, but may also be pursued on a part-time basis. A degree candidate must complete 24 credit hours of course work to obtain the LL.M. in biotechnology and genomics. A candidate may elect to write a graduate thesis for either three or six credit hours, or can instead elect to not write a thesis and fulfill the equivalent credits with other course work. Two courses are required:

- Genetics and the Law and Biotechnology Science, Policy and Law

The remaining credit hours will generally be obtained from the list of elective courses. With faculty advisor approval, a candidate may satisfy up to six credit hours with courses offered by other ASU departments or by law courses that are not included on the approved elective list.

Admission Requirements: Criteria for admission include grades in law school and other academic programs, recommendations by professors and/or employers, employment and life experience and evidence of interest and potential in biotechnology and genomics. The admissions committee recommends and appreciates early applications. We do not anticipate matriculating more than 20 full-time students annually. Applications are currently accepted on a rolling basis, with preference given for fall start dates.

Applicants to the program must submit:

1. Proof of a law degree; either a J.D. from an ABA-accredited law school in the United States or a comparable law degree from a foreign law school approved by either the government or the relevant accrediting authority of the nation where the school is located.
2. An essay describing their interest in the program.
3. A writing sample.
4. Two letters of recommendation.
5. Completed LL.M. application.
6. Official transcripts of undergraduate and law degree studies.
7. Application fee.

International Applicants.

Applicants who have earned academic credit in countries other than the United States: The World Education Services (WES) must independently evaluate all academic documents issued in countries other than the United States. Please contact WES at their Web site (http://www.wes.org/) to obtain an application for an
evaluation. You must request a course-by-course evaluation and have an official copy from WES be sent directly to:

Sandra Day O’Connor College of Law  
Arizona State University  
Office of Admissions and Financial Aid  
1100 S. McAllister Ave.  
P.O. Box 877906  
Tempe, AZ 85287-7906

Contact:  
Sandra Day O’Connor College of Law  
http://www.law.asu.edu  
llm-mls.admissionsl@asu.edu  
LAW  
480/965-1474

Law - Legal Studies (MLS) LWLGSMLEGS  
Sandra Day O’Connor College of Law

Official Degree Awarded: MLS Legal Studies

Program Description: The M.L.S. program offers an interdisciplinary immersion in the law school’s curriculum to highly qualified non-lawyers who do not seek a degree that will enable them to practice law, but instead wish to achieve a basic familiarity with legal thought and to explore the relation of law to their ongoing fields of work or scholarship.

The program seeks M.L.S. candidates from a variety of backgrounds with a diversity of goals:

- Natural scientists and engineers who want to study the legal regulation of science or the protection of intellectual property.
- Social scientists who seek a foundation in law and legal process in order to design and conduct better informed empirical research on policy issues.
- Humanities scholars who desire a foundational understanding of law and legal culture to enrich their primary historical or philosophical or literary scholarship.
- Journalists who want to report on law-related events in a more informed and illuminating way.
- Entrepreneurs and managers who hope to better advance their companies in industries as diverse as banking, insurance, construction, development, agribusiness and electronics by better understanding the legal system in which they operate.
This program is intended for the professional who wishes to study law, but does not seek to become an attorney. Completed course work from the M.L.S. will not qualify as law school credit.

Program Requirement: The program consists of 30 credit hours of approved study. The degree can be completed in two semesters of full-time study or spread out over two or more years in part-time study. Each student is assigned a faculty advisor to help develop a curriculum that best meets the student’s goals. M.L.S. students are required to choose at least two of the following basic first-year law courses:

- Contract.
- Constitutional Law.
- Criminal Law.
- Property.
- Torts.

Other courses can be chosen from legal process, legislation or jurisprudence in order to include a broad perspectives course in their curriculum. These core courses will provide 10 to 12 of the requisite 30 credit hours. The remainder of the credits are electives. Course selection will be flexible to accommodate the diversity of intellectual interests the program is intended to serve. Students will earn the remainder of their credits through whatever combination of elective law school courses—and in some instances courses offered elsewhere in the university—best complements and advances the student’s goals.

Admission Requirements: To begin this graduate-level program, students must have earned an undergraduate degree from an regionally accredited four-year college or university in the United States or a comparable degree from a foreign institution. All applicants must submit official transcripts of their undergraduate and graduate degree studies, a personal statement, a resume, a writing sample and two letters of recommendation. The admissions committee recommends and appreciates early applications.

Criteria for admission include prior academic experience, recommendations by professors and/or employers, employment and life experience and evidence of potential for success. Graduate school entrance exams (e.g., LSAT, GRE, GMAT, etc) are not required, but applicants who have taken those exams are invited to report their scores.

One goal of the admissions committee is to admit a diverse student body that will contribute to a dynamic and interesting learning environment. Academic background and strength, though important, are not the only criteria evaluated in the application process. For this reason, a personal statement, written by the applicant, limited to 1250 words on double-spaced, typed pages, is a required part of the application. In this statement we seek information about your distinctive qualities, talents, successes, achievements, interests, life experiences and interest in
the program. Your writing sample should be a professional or academic sample, written solely by the applicant, that provides an indication of your writing ability.

**Application Process**

To apply for the M.L.S. program you must provide:

1. Proof of a four-year degree from either an accredited college or university in the United States or a comparable degree from a foreign institution approved by either the government or the relevant accrediting authority of the nation where the school is located.
2. A personal statement.
3. A resume.
4. A writing sample.
5. Two letters of recommendation.
6. A completed M.L.S. application and application fee.
7. Official transcripts of undergraduate and graduate degree studies.

Mail these items to the following address:

Sandra Day O'Connor College of Law
Arizona State University
Office of Admissions and Financial Aid
P.O. Box 877906
Tempe, AZ 85287-7906

**International Applicants**

Applicants who have earned academic credit in countries other than the United States: The World Education Services (WES) must independently evaluate all academic documents issued in countries other than the United States. Please contact WES at their website (http://www.wes.org/) to obtain an application for an evaluation. You must request a course-by-course evaluation and have an official copy from WES be sent directly to:

Graduate Admissions
Sandra Day O'Connor College of Law
Arizona State University
P.O. Box 877906
Tempe, AZ 85287-7906

Your application for admission to the Sandra Day O’Connor College of Law at Arizona State University will not be complete until this evaluation is received by the Sandra Day O’Connor College of Law.

International applicants must meet the requirements of the Graduate College as well
as those of the Sandra Day O'Connor College of Law.

If English is not your native language, you must provide evidence of English proficiency as indicated by acceptable scores. Applicants should have a Test of English as a Foreign Language (TOEFL) score above 600 (paper-based test) or 250 (computer-based test). Exceptional candidates with relevant experience and background who have scores of at least 590 (paper-based) or 243 (computer-based) also will be considered.

Contact:
Sandra Day O'Connor College of Law
http://www.law.asu.edu/
llm-mls.admissions@asu.edu
LAW
480/965-1474

Law, Science, and Technology Certificate LWLAWSTCE
Official Degree Awarded: CERT Law, Science, & Technology (certificate)

Program Description: The law, science and technology certificate program is for students with science and technology interests and is limited to students pursuing a J.D. at the College of Law.

The program allows for specializations in the areas of intellectual property, health law, environmental law, genomics and biotechnology law and law and psychology.

Program Requirement: The law, science and technology certificate program requires substantive course work, a minimum GPA for that course work, a substantive paper, extracurricular activities and regular advising.

Specific requirements for completion of the law, science and technology certificate can be found on the College of Law Web site.

Admission Requirements: Students wishing to pursue the law, science and technology certificate must be enrolled in the J.D. program at the Sandra Day O'Connor College of Law and be in good standing.

Specific requirements for admission to the law, science and technology certificate program can be found on the College of Law Web site.

Contact:
Sandra Day O'Connor College of Law
http://www.law.asu.edu/
law.admissions@asu.edu
LAW
480/965-9042
Law - Tribal Policy, Law, and Government (LLM) LWTBLMLAWS
Sandra Day O’Connor College of Law

Official Degree Awarded: LLM. Tribal Policy, Law and Government

Program Description: The LL.M. in tribal policy, law and government is designed for lawyers and law school graduates who desire to work on issues related to tribal law and federal Indian law at the professional and academic levels. The Indian Legal Program is nationally known and was established in 1988. The Sandra Day O’Connor College of Law is a leading institution in producing graduates specializing in Indian law.

The LL.M. program provides students with a detailed understanding of the nature of tribal government, law and policy development within the domestic federal structure. Candidates will benefit from the extensive resources committed to the Indian Legal Program, including a full-time director and staff and an Indian Law Clinic with its own full-time director and staff.

The core curricular offerings focus on domestic tribal law, federal Indian law, and American institutions of law and government. The program explores the expression of domestic law within contemporary administrative, governmental and judicial institutions.

ASU is located in the heart of the southwestern United States, home to roughly one-third of the native population in the United States and where many of the largest Indian nations in the country reside. It is the academic home for several nationally known scholars who do research on American Indian issues, and houses many unique resources for such scholarship, including the Labriola Collection at Hayden Library.

Program Requirement: The program is administered by the Indian Legal Program and consists of two different tracks intended to serve two distinct groups of students. Candidates will choose either the practicum track or the thesis track.

The LL.M. Practicum Track

The LL.M. practicum track is oriented toward students who seek practical experience in tribal law and federal Indian law. It provides intensive instruction to students who graduated from a law school that had few or no courses in Indian law and who now seek to practice in these areas at a professional level. This track requires a minimum of 24 credit hours of study. A thesis is not required.

Students will immerse themselves in the study of tribal law and federal Indian law and will apply the knowledge and experience they gain through the practical component of the degree program which may consist of state, tribal and federal court practice; tribal code drafting; and research projects for tribal courts and
governments. Graduates will be well equipped for professional positions that require knowledge and expertise in tribal law and federal Indian law. Students on the practicum track will have the option of pursuing the degree on a part-time basis.

The LL.M. Thesis Track

The LL.M. thesis track is oriented toward students who desire to undertake the academic study of tribal law and federal Indian law in preparation for careers as professors and scholars. This track is designed for candidates who have demonstrated analytic and research ability, and who desire to undertake extended study, research and scholarly writing. This track will require a minimum of 30 credit hours of study, including completion of a thesis of publishable quality.

Students will build a foundation in scholarly research and writing in tribal law and federal Indian law. While matriculating in the program, LL.M. students may have an opportunity to teach at the law school level. Students will be assigned to an Indian law professor who will mentor them in creating a thesis and submitting publishable articles. Graduates will have the necessary skills for entry-level positions in academia.

Admission Requirements: Criteria for admission include grades in law school and other academic programs, written recommendations by professors and/or employers, relevant professional and practical experience and evidence of interest and potential in Indian law.

Students admitted to the LL.M. program in tribal policy, law and government must possess either a J.D. from a law school in the United States accredited by the American Bar Association or a comparable terminal law degree from a law school accredited by the government or the highest accrediting authority of the nation in which the school is located. The program is oriented, however, toward students who have a basic understanding of American government and have taken the relevant foundational course in federal constitutional law. For this reason, it is assumed that most applicants will have earned their degrees from law schools within the United States.

The LL.M. program is designed to accommodate seven students per year. Interest in this program appears to be large. Because the committee utilizes a “rolling admissions” process and space is limited, your chances of acceptance are higher the earlier you apply.

Applicants to the program must submit:

1. Proof of a law degree; either a J.D. from an ABA-accredited law school in the United States or a comparable law degree from a foreign law school approved by either the government or the relevant accrediting authority of the nation in which the school is located.
2. An essay describing their interest in the program.
3. A writing sample.
4. Two letters of recommendation.
5. A completed LL.M. application and application fee.
6. Official transcripts of undergraduate and law degree studies.

International Applicants

Applicants who have earned academic credit in countries other than the United States: The World Education Services (WES) must independently evaluate all academic documents issued in countries other than the United States. Please contact WES at their website (http://www.wes.org/) to obtain an application for an evaluation. You must request a course-by-course evaluation and have an official copy from WES be sent directly to:

Graduate Admissions
Sandra Day O'Connor College of Law
Arizona State University
P.O. Box 877906
Tempe AZ 85287-7906

Your application for admission to the Sandra Day O'Connor College of Law at Arizona State University will not be complete until this evaluation is received by the college.

International applicants must meet the requirements of the Graduate College as well as those of the Sandra Day O'Connor College of Law. If English is not your native language, you must provide evidence of English proficiency as indicated by acceptable scores. Applicants should have a Test of English as a Foreign Language (TOEFL) score above 600 (paper-based test) or 250 (computer-based test). Exceptional candidates with relevant experience and background who have scores of at least 590 (paper-based) or 243 (computer-based) also will be considered.

Contact:
Sandra Day O'Connor College of Law
http://www.law.asu.edu/
llm-mls.admissions@asu.edu
LAW
480/965-1474

Letters and Sciences, School of

Behavioral Health DBH LSBEVHEDBH
School of Letters and Sciences
Official Degree Awarded: DBH Behavioral Health

Program Description: The D.B.H. is a new degree to prepare behavioral clinicians to work within an interdisciplinary primary care team. The D.B.H. is an upgrade for master’s-level clinicians who are interested in working at a doctoral level in primary care. Primary care patients can have untreated behavioral conditions that can result in poor clinical outcomes and increased medical costs related to overuse of medical services. Behavioral interventions in primary care have demonstrated improved clinical outcomes and decreased medical costs. A key recommendation in health care reform is improved integration of medical and behavioral care. Traditional doctoral training does not prepare clinicians with the interdisciplinary knowledge required in integrated care. Programs continue to graduate clinicians into private practice settings not aligned with medical providers. The D.B.H. program reflects a paradigm shift to a curriculum based on:

1. Evidence-based behavioral interventions for primary care.
2. Medical literacy in order to understand and consult with the medical team.
3. Healthcare economics and policy in order to respond to emerging healthcare reform.
4. Business skills such as writing a business plan, marketing and return on investment.

The D.B.H. curriculum is unique in that it:

1. Is a cohort-based, accelerated program that enables students already holding a clinical master’s degree to complete the D.B.H. in 18 months.
2. Replaces the dissertation with a culminating clinically focused project.
3. Incorporates practicum experience in primary care settings.
4. Integrates clinical and professional affiliated faculty as well as faculty associates who are experts and are directly employed in healthcare environments in the area that they are teaching.

The D.B.H. program is also unique in offering the program in a hybrid-online format. Approximately one-third of the curriculum in each course is delivered in a traditional classroom setting, and two-thirds is completed in a Web-based format. Several different modalities are used to enhance the student’s learning, including multimedia presentations, asynchronous discussion boards and live chats. Travel to campus is required for up to a week for orientation at the beginning of your program, and after orientation only two to three times per semester (two- to three-day sessions), depending on the courses being taught; students will encounter concentrated, interactive case-based seminar experiences. International students are notified that ASU can not provide paperwork for student visas per federal law if they are admitted to the program.

Focused clinical practicum experiences are arranged with preceptors and administrators in the student’s local healthcare setting. Rural health and experiences with disadvantaged and multicultural populations are encouraged.
Graduates of the D.B.H. program will contribute to a societal transformation by leading to improved access to behavioral care, integration of a behavioral provider on the medical team, improved patient outcome and satisfaction, and decreased cost of care.

Program Requirement: The 84 credit hours (students may utilize 30 credit hours from a previously awarded master’s degree if applicable) required for this doctoral program are:

- Core course requirements, for a total of 33 credit hours
- Elective courses, for a total of nine credit hours
- Practicum and culminating experience, for a total of 12 credit hours
- Previously awarded master’s degree or other courses approved by the supervisory committee, for a total of 30 credit hours

Admission Requirements: All applicants must submit a Graduate College application and possess a bachelor’s degree from a regionally accredited postsecondary institution in the United States or an equivalent degree from a recognized international postsecondary institution. Normally, applicants will have a minimum of a 3.00 GPA calculated on the last 60 credit hours of their first bachelor’s degree.

All applicants from countries whose native language is not English will be expected to meet university and degree program English proficiency requirements.

Contact:
Dean, School of Letters & Sciences
http://sls.asu.edu/
dbh@asu.edu
3404 W Cheryl Dr, Suite A-205, Phoenix
602/942-2247

Liberal Arts and Sciences, College of

African Studies (Grad Certificate) LAAFRICACE
College of Liberal Arts and Sciences

Official Degree Awarded: CERT African Studies (certificate)

Program Description: The graduate certificate in African and African diaspora studies is an interdisciplinary program with four areas of emphasis:

1. African studies.
3. Comparative studies.
These areas of emphases provide students with access to an extensive range of information and systematic knowledge committed to the new model of African and African diaspora studies that focuses on the intersections of race, culture, and gender with interdisciplinary perspectives.

The required course, AFR 500 RM: Theory and Methods, offers students an overview of the focus and explicates relevant methodologies and theories. This required course, along with the courses within the areas of emphasis and the capstone course, complete the certificate. As this certificate program offers students an international dimension to the study of peoples and cultures of African descent, students will invigorate their knowledge about global issues and further expand their research pursuits. This certificate program characterizes the faculty's intellectual and research strengths and the curriculum's interdisciplinary strategies and research approaches that highlight the continuities and disjuncture of history and experiences throughout Africa and the diaspora.

**Program Requirement:** The certificate program requires 18 hours of course work:

- AFR 500 RM: Theory and Methods (3)
- Emphasis courses* (9)
- Capstone project (3)
- Elective (3)

* Students select one of the four emphases.

**Admission Requirements:** Applicants must submit the Graduate College online application. Admission to the graduate certificate in African and African diaspora studies program is open to any student who has completed a bachelor's degree at an accredited U.S. institution or equivalent. Students who are regularly admitted to a graduate degree program may pursue the certificate in tandem with their degree program. Students who are not regularly admitted to a graduate degree program may still pursue the certificate as nondegree graduate students.

**Contact:**
School of Social Transformation
http://aaas.clas.asu.edu/
aframstu@asu.edu
WILSN 140
480/965-4399

**American Media and Popular Culture (MAS) LAAMPCMAS**
College of Liberal Arts and Sciences

**Official Degree Awarded:** MAS American Media and Popular Culture

**Program Description:** The M.A.S. in American media and popular culture will offer working professionals and international students in the United States, particularly secondary education teachers interested in film and media studies and media...
literacy education, an opportunity to earn a graduate-level degree in the aesthetics, history and culture of American media (film, television and the Internet). Arizona high schools are slowly but continually expanding their offerings in film, television and media literacy, and teachers need to continue their education and earn graduate-level degrees to advance in their profession. We also believe the program will attract non-traditional students interested in advancing their knowledge of moving image culture. The program will be offered through distance learning, thereby providing students from around the state and globe with a visually interactive yet flexible learning environment. As such, we believe it will be of particular interest to international students.

Since this is a distance learning program, international students will not be issued any non-immigrant documents since they will not be eligible to obtain a student visa.

**Program Requirement:** All students will complete a minimum of 30 credit hours:

- Required courses: 12 credit hours
- Elective courses: 18 credit hours

**Admission Requirements:** All applicants must complete the Graduate College online application and meet all Graduate College admission criteria. Students from a country whose native language is other than English will be required to meet the Graduate College English proficiency requirement.

**Contact:**
Dean, College of Liberal Arts and Sciences
http://www.film.asu.edu/gradpopculture
filminfo@asu.edu
LL 641
480/965-6747

**Anthropology (Museum Studies) (MA) LAMUSEUMMA**
College of Liberal Arts and Sciences

**Official Degree Awarded:** MA Anthropology (Museum Studies)

**Program Description:** The School of Human Evolution and Social Change offers an M.A. in anthropology with a concentration in museum studies. Museum anthropology encompasses theoretically oriented analyses of museums as cultural institutions (including the activities of staff members, visitors, represented peoples and all implicated others) as well as applied aspects of working in museums and related agencies.

Drawing on all subdisciplines of anthropology, special emphasis is placed on
connecting material culture and ideation in a variety of institutional and field settings. Museum anthropology students apply museum philosophy, principles, practices and current critiques to explore the many dimensions of curatorship, including:

- Administration.
- Collections management.
- Exhibition work.
- Educational programming.
- Research.

Program Requirement: A minimum of 30 credit hours of graduate work approved by a student’s supervisory committee and the Graduate College is required. The program offers a thesis and nonthesis option.

Admission Requirements: In addition to the general requirements for admission to the Graduate College, the School of Human Evolution and Social Change requires applicants to provide a statement of their interests and professional goals and three letters of recommendation. Applicants who received their B.A. during the past ten years must also submit scores on the GRE.

Undergraduate course work in anthropology is not a prerequisite for admission, but is generally advisable. Students may be admitted without such a background and may be required to acquire knowledge of general anthropology in a manner to be specified at the time of admission.

Contact:
School of Human Evolution & Social Change
http://shesc.asu.edu/graduate_studies
shescgrad@asu.edu
SHESC 233
480/965-6215

Anthropology (PhD) LAANTHRPHD
College of Liberal Arts and Sciences

Official Degree Awarded: PHD Anthropology

Program Description: The School of Human Evolution and Social Change is an excellent choice for students wanting to pursue a Ph.D. in the traditional fields of anthropology:

- Archaeology.
- Physical anthropology.
- Sociocultural anthropology.

It is also an ideal environment for students who want to combine these approaches
and other disciplines to explore specific issues or research questions. Our flexible graduate curricula are designed to encourage students to design innovative programs of study to pursue their interests, while receiving broad training in key areas. The anthropology faculty actively engage with faculty in other disciplines, including:

- Environmental economics.
- Formal modeling.
- Science.
- Sociology.
- Technology.
- Urban planning.

The school offers many exciting hands-on learning opportunities through laboratories and field-based research that focus on:

- Appreciating the cultures of such diverse areas as Southeast Asia, Latin America, and the Mediterranean Basin.
- Disease and medicine.
- Finding ancient human fossils.
- Human-environmental interactions.
- Topics that explore humans of the past and present.
- Unearthing buried cities, villages, and hunter-gatherer camps.
- Understanding the development of language.

Students without a master's degree apply to phase I of the program, where they will receive a master's degree-in-passing. During this phase, students develop a research skills portfolio and present one of their papers in a school-wide research symposium. A formal evaluation is then completed to determine the student's readiness to enter phase II of the program.

Students with an M.A. in anthropology or related field begin in phase II of the Ph.D. program, where they receive training to become expert scholars able to contribute not only to their chosen field, but to finding solutions to humankind's greatest challenges.

*Program Requirement:* This degree program requires 84 credit hours, a dissertation and a written comprehensive examination. The doctoral program is divided into two phases.

The first consists of 30 credit hours of course work and readings, culminating in a research portfolio, which normally consists of two research papers. The faculty may require additional hours of course work or other preparation for entering students who are unfamiliar with the concepts of general anthropology at a level equivalent to that of the ASU undergraduate anthropology core. Mastery of the phase I course material is demonstrated by successful completion of a sequence of core courses.
Admission to phase II of the doctoral program is granted to students on the basis of performance in phase I, the quality of the M.A. research portfolio, prior course work, faculty recommendations and other relevant information.

The second phase consists of 54 credit hours of course work. Thirty of these hours consist of readings in anthropology and related fields and directed research designed to prepare the student for the dissertation project. Proficiency in one foreign language may be required by the supervisory committee. The student is advanced to candidacy when both of the following have been met:

1. Passing a written comprehensive examination.
2. Passing the oral defense of the dissertation proposal.

The student then completes 12 hours of research and 12 hours of dissertation and writes and defends the dissertation.

Admission Requirements: In addition to the general requirements for admission to the Graduate College, the School of Human Evolution and Social Change requires applicants to provide:

1. A statement of their interests and professional goals.
2. Three letters of recommendation.
3. Applicants who received their B.A. during the past ten years must also submit scores on the GRE.

Undergraduate course work in anthropology is not a prerequisite for admission, but is generally advisable. Students may be admitted without such a background and may be required to acquire knowledge of general anthropology in a manner to be specified at the time of admission.

Contact:
School of Human Evolution & Social Change
http://shesc.asu.edu/graduate_studies
shescgrad@asu.edu
SHESC 233
480/965-6215

Anthropology (Urbanism) Phd LAURBPHD
College of Liberal Arts and Sciences

Official Degree Awarded: PHD Anthropology (Urbanism)

(This program is no longer acception applications.)

Program Description: The past two decades have witnessed a surge of scholarship and professional interest in urbanism. However, there is a tendency for disciplines concerned with urbanism to be disconnected from one another. While powerful
analytical and technical knowledge has been created within each field, the resulting specialized approaches to the study of urbanism present an impediment to understanding the nature, function and shaping of the human habitat. The concentration in urbanism will be a mechanism for organizing varied perspectives on urbanism into a collective body of scholarship. The study of anthropology will be enriched by grounding it in a comprehensive understanding of the characteristics of urban context and the dynamic forces that shape them.

The concentration in urbanism will leverage the varied interests in urbanism and help emerging scholars as they attempt to compare, contrast and take stock of urbanism. Working with faculty from across a range of departments and programs at ASU, doctoral students will be able to capture the creative tensions that scholarship on urbanism has inspired in order to stimulate a provocative, constructive kind of inquiry. Academic units students might engage with to fulfill the requirements of the urbanism concentration include:

- Herberger Institute for Design and the Arts.
- School of Community Resources and Development.
- School of Geographical Sciences and Urban Planning.
- School of Government, Politics and Global Studies.
- School of Historical, Philosophical and Religious Studies.
- School of Human Evolution and Social Change.
- School of Sustainability.

Students without a master's degree apply to phase I of the program, where they will receive a master's-in-passing. During this phase, students develop a research skills portfolio and present one of their papers in a school-wide research symposium. A formal evaluation is then completed to determine the student's readiness to enter phase II of the program.

Students with a master's degree in anthropology or a related field begin in phase II of the doctoral program, where they receive training to become expert scholars able to contribute not only to their chosen field, but to finding solutions to humankind's greatest challenges.

Program Requirement: This degree program requires 84 credit hours, a dissertation and a written comprehensive examination. The doctoral program is divided into two phases.

The first phase consists of 30 credit hours of course work and readings, culminating in a research portfolio, which normally consists of two research papers. The faculty may require additional hours of course work or other preparation for entering students who are unfamiliar with the concepts of general anthropology at a level equivalent to that of the ASU undergraduate anthropology core. Mastery of the phase I course material is demonstrated by successful completion of a sequence of core courses. Admission to phase II of the doctoral program is granted to students
on the basis of performance in phase I, the quality of the master’s research portfolio, prior course work, faculty recommendations and other relevant information.

The second phase consists of 54 credit hours of course work. Thirty of these hours consist of readings in anthropology and related fields and directed research designed to prepare the student for the dissertation project. Proficiency in one foreign language may be required by the supervisory committee. The student is advanced to candidacy when both of the following have been met:

1. Passing a written comprehensive examination.
2. Passing the oral defense of the dissertation proposal.

The student then completes 12 hours of research and 12 hours of dissertation and writes and defends the dissertation.

For the concentration in urbanism, 15 credit hours will be selected from an approved list of applicable courses related to urbanism. These courses will include the core urbanism course, GCU 516, as well as one course from each of the four urbanism clusters. These clusters are:

1. Natural environment.
2. Built form.
3. Institutions and governance.
4. Culture and society.

Admission Requirements: Applicants must apply to the Graduate College for admission to the urbanism concentration under the Doctor of Philosophy in anthropology and meet both Graduate College criteria and doctoral program criteria for admission. In addition to the general requirements for admission to the Graduate College, the School of Human Evolution and Social Change requires applicants to provide:

1. A statement of their interests and professional goals.
2. Three letters of recommendation.
3. Applicants who received their bachelor’s during the past ten years must also submit scores on the GRE.

Undergraduate course work in anthropology is not a prerequisite for admission, but is generally advisable. Students may be admitted without such a background and may be required to acquire knowledge of general anthropology in a manner to be specified at the time of admission.

Contact:
School of Human Evolution & Social Change
http://shesc.asu.edu/node/214
shescgrad@asu.edu
SHESC 233
480/965-6215
**Applied Ethics (Ethics and Emerging Technologies) MA LAAEPEETMA**

College of Liberal Arts and Sciences & New College of Interdisciplinary Arts and Sciences

**Official Degree Awarded:** MA Applied Ethics and the Professions (Ethics and Emerging Technologies)

**Program Description:** The purpose of this program is to examine ethical challenges posed by emerging technologies, including nanotechnology, neurotechnology, biotechnology, robotics and advanced information and communication technology. Not only are these technologies being developed at an unprecedented pace, they also share several unique characteristics, including system complexity, social embeddedness and the potential to converge with one another. Emerging technologies will not only change how humans live and work, but have the potential to alter the very nature of human existence. Questions considered by courses in the program include:

- Promise and perils of emerging technologies.
- Emerging technologies and public policy.
- Ethical responsibilities of professionals engaged in development of emerging technologies.
- Whether traditional ethical concepts and processes can and should be applied to emerging technologies.

**Program Requirement:** All students are required to complete 30 credit hours of graduate course work distributed as follows:

- Required core courses (6).
- Required concentration course (3).
- Elective concentration courses (15).
- Required capstone courses (6).

**Admission Requirements:** All applicants must submit the Graduate College online application and meet all Graduate College admission criteria, and submit the following:

1. GRE, LSAT or MCAT scores.
2. Official transcripts from all postsecondary institutions attended.
3. Statement of interest in applied ethics and career goals.
4. Three letters of recommendation.

**Contact:**
Dean, College of Liberal Arts and Sciences
DISCVRY 213
KellyOBrien@asu.edu
480/727-1548
Applied Ethics (Executive Concentration - Emerging Technologies) MA LAAEPECMA
College of Liberal Arts and Sciences

Official Degree Awarded: MA Applied Ethics & the Professions (Executive Concentration in Applied Ethics & Emerging Technologies)

Program Description: The purpose of this online program is to examine ethical and practical challenges in the management of high risk technologies, including the following: industrial ecology and designs for sustainability, nanotechnology, neurotechnology, biotechnology, robotics, genetics and advanced information and communication technology. Not only are these technologies being developed at an unprecedented pace, they also share several unique characteristics, including system complexity, social embeddedness and the potential to converge with one another. The management of emerging technologies will not only change how humans live and work, but it has the potential to alter the very nature of human existence. Questions considered by courses in the program include:

- Management of both the promise and the perils of emerging technologies.
- Emerging technologies and public policy.
- Ethical responsibilities of professionals engaged in development of emerging technologies.
- Whether traditional or new management concepts and processes are applicable to emerging technologies

Program Requirement: All students are required to complete 30 credit hours of graduate course work distributed as follows:

- 3. Required core courses (6).
- 4. Required concentration course (3).
- 5. Elective concentration courses (15).
- 6. Required capstone courses (6).

Admission Requirements: All applicants must submit the Graduate College online application and meet all Graduate College admission criteria, and submit the following:

- 5. GRE, LSAT or MCAT scores.
- 6. Official transcripts from all postsecondary institutions attended.
- 7. Statement of interest in applied ethics and career goals.
- 8. Three letters of recommendation.

Contact:
Dean, College of Liberal Arts and Sciences
DISCVRY 213
KellyOBrien@asu.edu
480/727-7691
Applied Ethics (Ldrshp, Mgmt, and Ethics) MA LAAEPLMEMA

College of Liberal Arts and Sciences & New College of Interdisciplinary Arts and Sciences

Official Degree Awarded: MA Applied Ethics and the Professions (Leadership, Management, and Ethics)

Program Description: Students pursuing the M.A. in applied ethics and the professions concentration, leadership, management and ethics, examine a variety of considerations facing managers and leaders in public, private and nonprofit organizations, and consider the question of how ethical judgments might be made in these settings.

Topics covered include, but are not limited to, the following issues:

- Is the manager or leader seeking moral objectives or moral ends, the right policies or outcomes?
- Is the manager or leader doing the right things for the right reasons and with the proper attention to matters of character and integrity?
- What is the relationship between managers or leaders and followers, and how, if at all, does the act of leadership itself appreciably alter the values of the group in a positive way?
- How does management or leadership contribute to the organization's overall sense of social responsibility?

Completion of this degree concentration prepares the student to act more ethically and responsibly as an individual in their organization and in society, as well as to help those groups develop more ethical cultures.

Program Requirement: All students are required to complete 30 credit hours of graduate course work distributed as follows:

1. Required core courses (6).
2. Required concentration course (3).
3. Elective concentration courses (15).
4. Required capstone courses (6).

Admission Requirements: All applicants must submit the Graduate College online application and meet all Graduate College admission criteria, and submit the following:

1. GRE, LSAT or MCAT scores.
2. Official transcripts from all postsecondary institutions attended.
3. Statement of interest in applied ethics, and career goals.
4. Three letters of recommendation.

Contact:
http://spa.asu.edu/
Applied Ethics (Medical Ethics) MA LAAEPMEMA

College of Liberal Arts and Sciences & New College of Interdisciplinary Arts and Sciences

Official Degree Awarded: MA Applied Ethics and the Professions (Medical Ethics)

Program Description: Medicine is infused with moral values, and is deeply embedded in a variety of social and cultural contexts which significantly determine the effectiveness of medical care in achieving healthy outcomes for patients and populations. The objective of the biomedical ethics concentration is to integrate academic and clinical dimensions of moral issues in medical practice and biomedical research. Students from a broad range of backgrounds will be exposed to the internal and external logics of medicine and healthcare, and gain substantive understanding of ethical, cultural and societal issues in a variety of domains. Through course work and internships, students will deliberate individually and collectively about a wide range of issues and problems in contemporary medicine and the history of medicine, develop advanced critical normative reasoning and judgment capacities, and cultivate effective communication skills for academic, clinical and policy contexts.

Program Requirement: All students are required to complete 30 credit hours of graduate course work distributed as follows:

- Required core courses (6).
- Required concentration course (3).
- Elective concentration courses (15).
- Required capstone courses (6).

Admission Requirements: All applicants must submit the Graduate College online application and meet all Graduate College admission criteria, and submit the following:

1. GRE, LSAT or MCAT scores.
2. Official transcripts from all postsecondary institutions attended.
3. Statement of interest in applied ethics and career goals.
4. Three letters of recommendation.

Contact:
School of Life Sciences
DISCVRY 213
480/727-8857
Applied Ethics (Sustainability and Environmental Ethics) MA LAAEPEEEMA
College of Liberal Arts and Sciences & New College of Interdisciplinary Arts and Sciences

Official Degree Awarded: MA Applied Ethics and the Professions (Sustainability and Environmental Ethics)

Program Description: The sustainability and environmental ethics concentration of the applied ethics and the professions degree focuses on the ethical issues arising from the multiple challenges involved in balancing economic, technological, environmental, social and cultural development in a world increasingly affected by the activities of human beings. It provides the student with a general background in ethics and ethical systems with an emphasis on environmental and sustainability ethics, as well as exposing students to new challenges posed by rapidly evolving technological systems in the context of what scientists are increasingly calling the Anthropocene, the age of humans.

Program Requirement: All students are required to complete 30 credit hours of graduate course work distributed as follows:

- Required core courses (6).
- Required concentration course (3).
- Elective concentration courses (15).
- Required capstone courses (6).

Admission Requirements: All applicants must submit the Graduate College online application and meet all Graduate College admission criteria, and submit the following:

1. GRE, LSAT or MCAT scores.
2. Official transcripts from all postsecondary institutions attended.
3. Statement of interest in applied ethics and career goals.
4. Three letters of recommendation.

Contact:
School of Life Sciences
DISCVRY 213
480/727-8594

Applied Mathematics (PHD) LAAPPMPHD
College of Liberal Arts and Sciences

Official Degree Awarded: PHD Applied Mathematics

Program Description: The Ph.D. includes rigorous training in fundamental applied mathematics and its application to real world problems in fields such as biology, physics, geology and various engineering disciplines. All students will participate in individual and collaborative research.
Program Requirement: Ph.D. students must complete 84 credit hours of course work including:

1. Five core courses.
2. Three credit hours of research project (700).
3. 3 credit hours of seminar (591).
4. Twelve credit hours of dissertation (799).

Students must pass a written comprehensive examination and an oral comprehensive examination. Each student must write a dissertation and defend it orally in front of five dissertation committee members. See the department Web site for examination information.

Admission Requirements: Applicants must submit the Graduate College online application. Minimum background for consideration of admission to the Ph.D. program in applied mathematics includes:

1. A bachelor’s degree in mathematics, applied mathematics, economics, engineering or a natural science from a regionally accredited university with at least a 3.00 GPA (on a four-point scale).
2. Students must be competitive in an applicant pool as evidenced by course work in linear algebra (equivalent to ASU course MAT 342) and advanced calculus (equivalent to ASU course MAT 371).
3. Letters of recommendation.
4. A statement of educational and career goals.
5. Taking the GRE is not required, but it is highly recommended.
6. Scientific programming skills are also desirable.

Contact:
School of Mathematical and Statistical Sciences
http://math.asu.edu/graduate/index.html
grad@math.la.asu.edu
PSA 216
480/965-3951

Applied Mathematics for the Life & Social Sciences (PhD) LAAMLPHD
College of Liberal Arts and Sciences

Official Degree Awarded: PHD Applied Mathematics for the Life & Social Sciences

Program Description: The applied mathematics for the life and social sciences doctoral degree focuses on the training of researchers working on scientific questions at the interface of the mathematical, life and social sciences. Graduates of the program will be making innovative and far reaching scientific contributions that rely on the cutting-edge computational mathematical and modeling approaches. This degree focuses on producing quantitative scientists and applied mathematicians conducting high-level interdisciplinary and crossdisciplinary research. The program’s faculty includes mathematicians, statisticians, theoretical
biologists and social scientists from five different schools at Arizona State University.

There is a high demand for such an applied doctoral program from students interested in meeting the challenges faced by communities in the 21st century—and by research and planning programs at institutions whose mission is to address global challenges. Arizona's and the nation's health, environmental and natural resource challenges are urgently in need of a large pool of researchers with these interdisciplinary skills.

Applied mathematics for the life and social sciences (AMLSS) is a challenging field because it requires balancing various ways of thinking (computational, mathematical, statistical, sociological and scientific) and combining them through the production of coherent applications to life and social sciences. Students with strong but possibly highly heterogeneous scientific and cultural backgrounds will find a natural home in this field.

The specific skills that successful students should master in an ideal world would result in a large set whose implementation would be daunting. It is unlikely that all these skills could be taught within a reasonable time frame to a single student at the university separately. Hence, the focus of this degree is on finding ways for students to learn a way of thinking, that is, an appropriate philosophy of learning that will potentially help them (as a lifelong project) to become first-rate scientists. The curriculum includes dynamic and statistical approaches as critical and unifying components.

In AMLSS, the subject of the studies are people and subsequently relevant solutions of each research question which has a natural time scale pertaining to the particular question and level of social applicability. The fundamental challenge associated with the development of AMLSS curricula comes from the fact that it must provide a bridge connecting the stream of research that is being carried out at particular temporal and spatial scales across scales and levels of social organization. The program builds upon foundations already established in mathematical epidemiology, population dynamics, ecology, genomics, bioinformatics, mathematical analysis, nonlinear dynamic, computational sciences and the social science fields by offering courses that enhances interdisciplinary exchanges and collaboration among the faculty and students interested in addressing questions of social relevance.

In short, AMLSS is a new and exciting frontier at the intersection of the environmental, health, life, social, mathematical, physical and computational sciences. It deals with challenges that are inherent to complex adaptive systems, particularly, those that involve human interactions. The graduate experience stresses exposure to interdisciplinary learning, the interweaving of theory, applications, analytical approaches and cross-disciplinary and international collaboration.
Program Requirement: The program requires a total of 84 credit hours. Up to 30 credit hours can be counted from a previously awarded master's degree. After a master's degree, the students must complete a minimum of 30 credit hours, 12 hours of research, plus 12 hours of dissertation research, for a total of 54 hours. The core competences shall consist of math biology, stochastic modeling, deterministic modeling or computational methods, statistics and probability and core math skills.

All students are required to complete:

AML 610 Topics in Applied Mathematics for the Life and Social Sciences (3)
AML 611 Research Design and Proposal Writing (3) or approved equivalent
AML 612 Applied Mathematics for the Life and Social Sciences Modeling Seminar (3) or approved equivalent
AML 613 Probability and Stochastic Modeling for the Life and Social Sciences (3) or approved equivalent
A course in Theory of Statistics or advanced Biostatistics (3)
Applied Mathematical Analysis or Mathematical Methods (3) (This includes topics in advanced calculus, complex variables, advanced linear algebra and ODEs and PDEs.)

Remaining electives are selected from an approved list. Students must also demonstrate competency in a computer programming or modeling language. This can be done either by course work or practical applications or both. Due to the interdisciplinary nature of the program, students are encouraged to propose additional courses from any ASU unit as possible electives to the executive committee.

The degree policies and procedures are designed to promote degree completion in three years for those entering with a master's degree, and no more than five years for those entering directly from the bachelor's degree. These timelines are to be considered goals contingent on the individual circumstances and educational aspirations of the student. There are three different timeline tracks: post-bachelor's full-time, post-master's full-time and post-master's half-time. Students are required to follow the timelines as closely as possible. The half-time track is only available to those who have a master's degree in an area that provides basic background in a relevant subject area (e.g., applied mathematics, biology, sociology), and students must have the approval of both their major professor and the executive committee to be on the half-time track.

Within the first year, and ideally in the first semester, the student selects a temporary major professor who is an affiliate of the AMLSS program. The major professor is affirmed no later than the end of the third semester.
When a student selects a supervisory committee, there must be three or more members, and the committee must be approved by the executive committee and the ASU Graduate College.

There are three tracks a student can concentrate in:

- **Life sciences**—focus on understanding the tools for representing the structure and operation of complex biological and ecological processes.
- **Social sciences**—focus on understanding the tools for representing the structure and operation of complex social systems and processes.
- **Applied mathematics**—more in-depth focus on the tools themselves as applied to the life and social sciences, i.e., on dynamical systems, computational and numerical methods, simulation and mathematical analysis.

The choice should be reflected in the choice of classes and the research topic chosen. Appropriate balance is by oversight and subject to approval by the graduate committee. A minimum competency in biology and social sciences is expected. To demonstrate this at least four of the electives will consist of two graduate courses in the areas of life sciences—evolutionary biology, molecular biology, genetics, physiology, etc., and two in the social—sociology, geography, demography, anthropology, etc., (for post-master's students these credits can be fulfilled with courses taken prior to entry into the program, subject to approval).

- In the first semester, the student prepares a program of study that addresses all the course requirements, to be approved by their temporary major professor. This program of study is revised if necessary, and then approved by the full formal supervisory committee by the time the student completes 27 hours in their program or no later than the end of the second year whichever comes first.
- Based on their track timeline, the student prepares for the doctoral comprehensive exam and a written doctoral prospectus that must be defended in an oral exam. At the completion of all requirements, including any computer language requirements, the student is advanced to candidacy.
- Students write a research-based dissertation, which must be approved by their committee. The dissertation must be presented in an oral public defense. Because of the program’s emphasis on use-inspired research, the dissertation should include a perspective or component that addresses the relevance of the research to society.
- Students must maintain a 3.20 average GPA in their courses and complete degree requirements per the program’s satisfactory progress policy.
- No more than six hours of 400-level courses may be counted toward the degree.

**Admission Requirements**: Entry-level competencies: Prior to admission, students should have completed, at a 300 or 400 level a minimum of the following:
1. Fifteen hours of mathematics and/or statistics.
2. A total of nine hours of life sciences and social sciences course work at the senior or college graduate level.
3. No fewer than three hours each of life sciences and social sciences course work. Minimum GPA for consideration for admission is a 3.20, on a 4.00 scale, for the last two years of study leading to the bachelor’s degree.

Students must meet the admissions criteria of the Graduate College.

Admission decisions will be competitive, based on evidence of GRE scores, undergraduate and graduate GPA, letters of recommendation, prior relevant experience and statement of purpose.

Applicants submit:

1. An official ASU graduate application.
2. Official GRE scores.
3. Transcripts of all undergraduate and graduate course work.
4. A statement of purpose outlining career and educational goals,
5. Three letters of academic recommendation.

A master’s degree in the social sciences (e.g., anthropology, sociology, gender studies, geography), life sciences or related fields (e.g., biology, genomics, ecology), applied mathematics, mathematics or statistics is preferred. A bachelor’s degree in a relevant field from a regionally accredited university is required. Students with master’s degrees or course work in appropriate fields will usually be favored over those with only bachelor’s level qualifications. Given the interdisciplinary goals of the program, a diverse pool of students is desirable. Thus, prior training in any one particular field (e.g., applied math or statistics) will not be considered a necessarily better preparation and selection of applicants will also seek to maintain some diversity based on prior disciplinary training and experiences. However, given the quantitative nature of the degree, fluency in calculus and statistics as well as competency in a computer programming or modeling language will be required.

Contact:
School of Human Evolution & Social Change
http://shesc.asu.edu/graduate_studies
shescgrad@asu.edu
SHESC 233
480/965-6215

Asian Languages/Civilizations: Chinese (MA) LACHINAMA
College of Liberal Arts and Sciences

Official Degree Awarded: MA Asian Languages and Civilizations (Chinese)

Program Description: The Asian languages faculty in the School of International Letters and Cultures offers a graduate program leading to an M.A. in Asian languages
and civilizations—Chinese. In addition to preparing some students for further academic training, the program also helps to prepare students for jobs dealing with China (in such fields as law, business or journalism) and for entrance into professional schools.

Program Requirement: The program of study for the M.A. includes a minimum of 30 credit hours of graduate-level work, as approved by the candidate's supervisory committee and a thesis. The program must include a 500-level bibliography and research methods course offered by the department. When approved by the candidate's supervisory committee, nine hours of advanced-level work in another language or in closely related courses may be included in the program. Students who are primarily interested in teaching at the secondary or community college levels may select a program of study with a concentration in language pedagogy.

Students seeking an M.A. in Asian languages and civilization should consult with the Graduate College. In keeping with the idea of in situ experience as a key ingredient for advanced intellectual understanding, all degree candidates must have spent at least nine continuous months in a Chinese language environment within four years of completing the program.

Admission Requirements: Students interested in applying to the program must submit a Graduate College online application. Candidates for the M.A. should, upon entrance, present the equivalent of an undergraduate major in the language in which the degree is sought. Those who lack this background, but who show strong potential and meet Graduate College admissions requirements, may be admitted to a graduate program on a provisional basis, pending removal of specified deficiencies. These deficiencies must be completed in addition to the regular program of study for the master's degree.

Contact:
School of International Letters and Cultures
http://silc.asu.edu/graduate
silc@asu.edu
LL 440
480/965-6281

Asian Languages/Civilizations: Japanese (MA) LAJAPANMA
College of Liberal Arts and Sciences

Official Degree Awarded: MA Asian Languages and Civilizations (Japanese)

Program Description: The Asian languages faculty in the School of International Letters and Cultures offers a graduate program leading to an M.A. in Asian languages and civilizations—Japanese. In addition to preparing some students for further academic training, the program also helps to prepare students for jobs dealing with Japan (in fields such as law, business or journalism) and for entrance into professional schools.
**Program Requirement:** The program of study for the M.A. includes a minimum of 30 credit hours of graduate-level work and a thesis, as approved by the candidate's supervisory committee. The program must include a 500-level bibliography and research methods course offered by the department. When approved by the candidate’s supervisory committee, nine hours of advanced-level work in another language or in closely related courses may be included in the program.

Students who are primarily interested in teaching at the secondary or community college levels may select a program of study with an area of study in language pedagogy. Students seeking an M.A. in Asian languages and civilization should consult with the Graduate College. In keeping with the idea of in situ experience as a key ingredient for advanced intellectual understanding, all degree candidates must have spent at least nine continuous months in a Japanese language environment within four years of completing the program.

**Admission Requirements:** Students interested in applying to this program must submit an online Graduate College application. Candidates for the M.A. should, upon entrance, present the equivalent of an undergraduate major in the language in which the degree is sought. Those who lack this background, but who show strong potential and meet Graduate College admissions requirements, may be admitted to a graduate program on a provisional basis, pending removal of specified deficiencies. These deficiencies must be completed in addition to the regular program of study for the master's degree.

**Contact:**
School of International Letters and Cultures
http://silc.asu.edu/graduate
silc@asu.edu
LL 440
480/965-6281

**Asian Studies (Grad Certificate) LAASIANC**

**Official Degree Awarded:** CERT Asian Studies (certificate)

**Program Description:** The graduate certificate in Asian studies offers graduate students an interdisciplinary specialization in Asian language and area studies. The certificate is available in two tracks, East Asia (China, Japan and Korea) and Southeast Asia (Indonesia, Laos, Thailand and Vietnam).

**Program Requirement:** The certificate requires the completion of 18 credit hours, distributed among a language requirement, core course requirements and electives, and a thesis or capstone project on a topic related to the student's region of emphasis. Some courses may be applied to both the certificate and the student's degree program.

**Admission Requirements:** Applicants must submit a Graduate College online application. Graduate students in any discipline may pursue a certificate in Asian
studies in conjunction with their degree programs. This program is also open to students who already hold graduate degrees and have been admitted as nondegree students.

Contact:
School of Social Transformation
http://www.asu.edu/asian
car@asu.edu
COOR
480/965-7184

Astrophysics (MS) LAASTPHMS
College of Liberal Arts and Sciences

Official Degree Awarded: MS Astrophysics

Program Description: The program provides fundamental graduate training in astrophysics to prepare candidates for careers in astrophysics, such as scientific staff positions at government laboratories, teaching at the community college level, technical positions in industry, or further graduate study.

Program Requirement: This degree program requires 30 credit hours and a thesis. Twenty credit hours are structured courses. The student, with the approval of the advisor and supervisory committee (formed upon enrollment), selects courses that make up a coherent program of study.

It is normally expected that course work consists of the existing AST 521/522/523 and AST 531/532/533 graduate sequences, which provide comprehensive graduate training in the major fields of astrophysics. These courses are combined with additional work in core fields such as physics or mathematics.

Students are expected to exhibit mastery of topics in these core fields, and may be required by their advisor and committee to include such courses in their program of study. Specific course requirements may be waived by the advisor if the student has successfully completed equivalent courses at universities elsewhere. Individual programs of study that include work in related fields may also be designed with advisor approval, subject to the requirements of the ASU Graduate College.

M.S. programs of study also include a minimum of six credit hours of research (AST 592) and thesis credit (at least three of which must be AST 599). ASU Graduate College policies and procedures must also be met for admission to the program as well as for fulfilling the requirements of the degree.

Thesis Requirements: A thesis based on observational, theoretical, laboratory and/or literature research in astrophysics is required.

Final Examination: A final oral examination in defense of the thesis is required.
Admission Requirements: Students applying for admission to the M.S. in astrophysics program must submit scores on the GRE (verbal, quantitative and analytical). Applicants must also submit official transcripts, three letters of recommendation and a statement of purpose. The deadline for applications for the fall term is January 5. Students must apply using the Graduate College online application.

Contact:
School of Earth and Space Exploration
http://sse.asu.edu
sseinfo@asu.edu
PSF 686
480/965-5081

Astrophysics (PhD) LAASTPHHD
College of Liberal Arts and Sciences

Official Degree Awarded: PHD Astrophysics

Program Description: The Ph.D. in astrophysics program is designed to develop creative scholarship and prepare students for professional careers in astrophysics, astronomy or related fields.

Program Requirement: This degree program requires 84 credit hours, a dissertation, a written comprehensive examination and an oral comprehensive examination. Students may be admitted into the program with a bachelor’s or master’s degree in a related field. Up to 30 credit hours of master’s-level work in a related field can be accepted towards the fulfillment of the Ph.D. requirements.

The program of study for the Ph.D. will be selected with the recommendation of the student’s supervisory committee, and should include sufficient course work to assure mastery of fields such as:

- Classical mechanics.
- Electrodynamics.
- Quantum mechanics.
- Statistical physics.
- Other core subjects in addition to those covered in the six-course core AST sequence.

Each program of study must include 24 credit hours of a combination of research and dissertation. ASU, Graduate College policies and procedures must also be met for fulfilling the requirements of the degree.

Foreign Language Requirements: None.

Comprehensive Examination: The student’s supervisory committee will determine the content of the comprehensive examination, consisting of a written
and an oral examination.

**Dissertation Requirements:** A dissertation is required that is based on original work demonstrating creativity in research and scholarly proficiency in the subject area.

**Final Examination:** A final oral examination in defense of the dissertation is required.

**Admission Requirements:** Applicants must submit a Graduate College online application. Students applying to the Ph.D. in astrophysics program must also submit scores on the GRE (verbal, quantitative and analytical) and the GRE physics subject test. Additionally, applicants must submit official transcripts, three letters of recommendation and a statement of purpose. The application deadline for fall semester is January 5.

**Contact:**
School of Earth and Space Exploration
http://sse.asu.edu
sse@asu.edu
PSF 686
480/965/5081

**Audiology (AuD) LAAUDAUDD**
College of Liberal Arts and Sciences

**Official Degree Awarded:** AudD Audiology

**Program Description:** The Au.D. program is designed to prepare audiologists for autonomous clinical practice. The clinical doctorate model at ASU stresses the integration of academic classroom learning and practical experience across a broad spectrum of clinical specialties and practice environments.

**Program Requirement:** The Au.D. program is designed for full-time students over a period of 45 months, including four fall and four spring semesters and three summers. The four-year course of study includes both academic and clinical practicum components. The Au.D. program requires a minimum of 101 credit hours, of which 66 are required academic credits provided through the Department of Speech and Hearing Science, and 35 are required clinical credits.

Eligibility for graduation is based upon the following:

1. Successful completion of 66 credit hours of required academic course work.
2. Successful completion of 35 credit hours of clinical experiences.
3. Achieving a passing score on the ASHA Praxis national certification examination in audiology.

Academic Catalog Archive 2009-10  445
Admission Requirements: An applicant to the Au.D. program must hold a bachelor’s degree in speech and hearing science or another discipline. All applicants must submit a Graduate College online application and have a cumulative GPA of 3.00 or higher and a GRE score of 1000 or higher (total of verbal and quantitative tests).

Applicants must submit:

1. Official transcripts.
2. GRE scores.
3. Three letters of recommendation.

All application materials must be submitted to the graduate admissions office by January 15; enrollment begins in the fall semester only.

Contact:
Department of Speech and Hearing Science
http://shs.asu.edu
shsgrad@asu.edu
COOR 2211
480/965-2374

Biochemistry (MS) LABIOCHMS
College of Liberal Arts and Sciences

Official Degree Awarded: MS Biochemistry

Program Description: The faculty in the Department of Chemistry and Biochemistry offer a program leading to the M.S. in biochemistry. The program offers a wide range of active research with an emphasis on contemporary and interdisciplinary study in the areas of biochemistry, life sciences and other biochemistry related fields. Drug design and protein chemistry, nanobiotechnology, biogeochemistry, medicinal chemistry and RNA-protein interactions are a few of the many topics currently being researched.

See http://chemistry.asu.edu/graduate/facultyResearch_grad.asp for information on faculty research and the state-of-the-art facilities available for conducting high-quality investigations. The M.S. in biochemistry prepares students for professional careers in industry, government and educational institutions.

Program Requirement: A minimum of 30 credit hours, including course work, seminars, research and thesis are required. Courses are selected by the student in consultation with his/her supervisory committee based on the research area. The M.S. in biochemistry is awarded when the student has obtained a minimum cumulative GPA of 3.00 in course work, demonstrated quality performance in the laboratory and completion of his/her research project, completed a successful thesis.
oral defense, and has met all deadline dates and requirements set by the Graduate College.

A program fee in the amount of $300 per semester is required in addition to the normal tuition costs.

Admission Requirements: All applicants must submit the Graduate College online application. All students applying for admission to the program must submit scores for the GRE. The subject test is not required. Application to chemistry and biochemistry programs includes:

1. The completion of an electronic supplemental application providing information on test scores.
2. A personal statement.
3. Contact information for three letters of recommendation.

Information on the supplemental application can be found at http://chemistry.asu.edu/graduate/applicantInfo.asp.

Contact:
Department of Chemistry and Biochemistry
http://chemistry.asu.edu/graduate
chmgrad@asu.edu
PSD 103
480/965-4664

Biochemistry (Medicinal Chemistry) (MS) LABCHMCMS
College of Liberal Arts and Sciences

Official Degree Awarded: MS Biochemistry (Medicinal Biochemistry)

Program Description: The faculty in the Department of Chemistry and Biochemistry offer a program leading to the M.S. in biochemistry with a concentration in medicinal chemistry. This program is intended for students who plan to continue their educational training in pharmacy, medical school or a related field and want to expand their background knowledge in biochemistry before beginning their professional education. Students completing the program will be awarded a M.S. in biochemistry degree with a concentration in medicinal chemistry.

Program Requirement: A minimum of 30 credit hours, including course work, seminars, research and an applied project consisting of a written research paper are required. Courses are selected by the student in consultation with his/her supervisory committee based on the research area. The M.S. in biochemistry is awarded when the student has obtained a minimum cumulative GPA of 3.00 in course work, demonstrated quality performance in the laboratory and completion of his/her research project, completed and presented an approved research paper at an oral defense to the student’s supervisory committee and met all deadline dates and requirements set by the Graduate College.
A program fee in the amount of $300 per semester is required in addition to the normal tuition.

*Admission Requirements:* All students applying for admission to the program must meet the requirements set by the Graduate College which can be found on Graduate College Web site. Applicants must have:

1. Completed a bachelor's degree in chemistry, biochemistry or a related area from a regionally accredited institution.
2. A B.S. cumulative GPA of 3.40 or better.
3. Original scores for the GRE. The subject test is not required.

Application to the Department of Chemistry and Biochemistry includes the completion of electronic supplemental application providing information on:

1. Test scores.
2. A personal statement.
3. Contact information for three letters of recommendation.

*Contact:*
Department of Chemistry and Biochemistry
http://chemistry.asu.edu/graduate/
chmgradl@asu.edu
PS D 103
480/965-4664

**Biochemistry (PhD) LABIOCHPHD**
College of Liberal Arts and Sciences

*Official Degree Awarded:* PHD Biochemistry

*Program Description:* The faculty in the Department of Chemistry and Biochemistry offer a program leading to the Ph.D. in biochemistry. The program offers a wide range of active research with an emphasis on contemporary and interdisciplinary study in the areas of biochemistry, life sciences and other biochemistry related fields. A few of the many topics currently being researched:

- Drug design.
- Protein chemistry.
- Nanobiotechnology.
- Biogeochemistry.
- Medicinal chemistry.
- RNA-protein interactions.

The faculty also participate in a number of other interdisciplinary programs leading to the Ph.D. See http://chemistry.asu.edu/graduate/facultyResearch_grad.asp for information on
faculty research and the state-of-the-art facilities available for conducting high
quality investigations. The Ph.D. in biochemistry prepares students for professional
careers in industry, government and educational institutions.

Program Requirement:

1. A minimum of 84 credit hours, including course work, seminars, research,
   and dissertation are required.
2. Courses are selected by the student in consultation with his/her supervisory
   committee based upon research area.
3. A doctoral comprehensive examination, consisting of both a written and oral
   presentation of current research and an original research proposal is
   required for advancement to candidacy.
4. The Ph.D. in biochemistry is awarded when the student has obtained a
   minimum cumulative GPA of 3.00 in course work.
5. Demonstrated quality performance in the laboratory and completion of
   his/her research project.
6. Evidence of a publishable contribution of original research.
7. Completion of a successful dissertation oral defense.
8. Meeting all deadline dates and requirements set by the Graduate College.

Admission Requirements: All students applying for admission to the program must
meet the requirements set by the Graduate College which can be found on Graduate
College Web site at http://graduate.asu.edu/admissions/index.html. Applicants
must also submit original scores for the GRE. The subject test is not required.

Application to the Department of Chemistry and Biochemistry includes:

1. The completion of an electronic supplemental application providing
   information on test scores.
2. A personal statement.
3. Contact information for three letters of recommendation.

Information on the supplemental application can be found at
http://chemistry.asu.edu/graduate/applicantInfo.asp.

Contact:
Department of Chemistry and Biochemistry
http://chemistry.asu.edu/graduate/
chmgrad@asu.edu
PS D103
480/965-4664

Biology (MS) LABIOMS
College of Liberal Arts and Sciences

Official Degree Awarded: MS Biology
Program Description: This program is designed to prepare students for careers in teaching and research in educational, medical, industrial and governmental institutions.

Program Requirement:

1. The program of each student is prepared in consultation with the supervisory committee, consisting of a major professor and two additional faculty members.
2. A minimum of 30 credit hours is required.
3. The program must include six hours of thesis and one hour of seminar.
4. The remainder of the program of study usually consists of a mixture of course work, readings and conference and seminars in the student’s primary field and related fields, and research credits.
5. Courses and research credits can be distributed in any combination appropriate to the student’s individual educational goals.
6. A typical program of study consists of six credit hours of thesis, one credit hour of seminar, nine to 15 hours of course work and additional seminars and eight to 14 credit hours of research credit.
7. A final oral examination covering the thesis and related subject matter is administered by the supervisory committee.

Admission Requirements: Applicants must submit a Graduate College online application. Admission criteria are as follows:

1. Applicants should have completed the requirements for an undergraduate major in biology or related discipline.
2. A 3.00 minimum GPA during the student’s last two years or last 60 credit hours.
3. Minimum GRE scores in verbal (50th percentile), quantitative (70th percentile), and writing (5).
4. Test of English as a Foreign Language (TOEFL) scores of 250 computer-based, 600 paper-based or 100 Internet-based.

Contact:
School of Life Sciences
http://sols.asu.edu/grad/
sols.grad@asu.edu
LS C226
480/965-1768

Biology (PhD) LABIOPHD
College of Liberal Arts and Sciences

Official Degree Awarded: PHD Biology
Program Description: The Ph.D. in biology program allows the student to acquire high research competency in one or more specialized areas while receiving a broad, solid grounding in biological sciences.

Program Requirement:

1. The program of study is planned by the student and the supervisory committee, consisting of a major professor and four additional faculty members.
2. The program is tailored to the needs of the individual student.
3. Eighty-four credit hours are required.
4. Twelve hours of dissertation are required and the remaining hours are comprised of course work showing breadth in biology subdisciplines, seminars and research.
5. An oral comprehensive examination is required in order to advance to candidacy, and a formal defense of the final written dissertation is required prior to graduation.

Admission Requirements: Applicants must submit a Graduate College online application. Admission criteria are as follows:

1. Applicants should have completed the requirements for an undergraduate major in biology, or related discipline, with an adequate background in related courses in chemistry, mathematical and physical sciences.
2. A 3.00 minimum GPA during the student's last two years or last 60 credit hours.
3. Minimum GRE scores in verbal (50th percentile), quantitative (70th percentile), and writing (5).
4. Test of English as a Foreign Language (TOEFL) scores of 250 computer-based, 600 paper-based or 100 Internet-based.

Contact:
School of Life Sciences
http://sols.asu.edu/grad
sols.grad@asu.edu
LS C226
480/965-1768

Biology (Biology and Society) MS LABIOSMS
College of Liberal Arts and Sciences

Official Degree Awarded: MS Biology (Biology and Society)

Program Description: Within the biology degree programs, students may choose a formal concentration in the areas where biology intersects with society. There are two tracks:

- Bioethics, policy and law.
• History and philosophy of science.

Bioethics, policy and law trains students in the pressing moral, policy and legal issues raised by the biosciences and biomedicine and in the disciplinary methods necessary to address these issues. The history and philosophy of science trains students in the conceptual foundations of science, including especially the epistemological and methodological assumptions that shape science and its progress.

The program is richly interdisciplinary, drawing from the following and other disciplines to develop skills for analyzing and addressing the problems where biology intersects with society:

• Anthropology.
• Biology.
• Health administration of policy.
• History.
• Justice studies.
• Law.
• Nursing.
• Philosophy.
• Political science.
• Religious studies.

The concentration tailors individual programs of study to individual needs and interests, with a solid grounding in the life and related sciences and with rigorous analytical and multidisciplinary education. The two tracks offer suggested courses for those wishing to focus on these areas.

Contact:
School of Life Sciences
http://sols.asu.edu
LSC 226
sols.grad.asu.edu
480/965-2349

Biology (Biology and Society) PHD LABIOSPHD
College of Liberal Arts and Sciences

Official Degree Awarded: PHD Biology (Biology and Society)

Program Description: Within the biology degree programs, students may choose a formal concentration in the areas where biology intersects with society. There are two tracks:

• Bioethics, policy and law.
• History and philosophy of science.

Bioethics, policy and law trains students in the pressing moral, policy and legal issues raised by the biosciences and biomedicine and in the disciplinary methods necessary to address these issues. The history and philosophy of science trains students in the conceptual foundations of science, including especially the epistemological and methodological assumptions that shape science and its progress.

The program is richly interdisciplinary, drawing from the following and other disciplines to develop skills for analyzing and addressing the problems where biology intersects with society:

• Anthropology.
• Biology.
• Health administration of policy.
• History.
• Justice studies.
• Law.
• Nursing.
• Philosophy.
• Political science.
• Religious studies.

The concentration tailors individual programs of study to individual needs and interests, with a solid grounding in the life and related sciences and with rigorous analytical and multidisciplinary education. The two tracks offer suggested courses for those wishing to focus on these areas.

Program Requirement: A total of 85 credit hours are required. An oral and written comprehensive examination are required as, along with a completed dissertation.

Admission Requirements: The biology and society concentration within the biology doctoral program admits one cohort annually for programs of study that begin in the fall semester. The deadline for applications is Dec. 15 for students wishing to begin a program of study the following August. There is no guarantee that applications received after Dec. 15 will be reviewed. The biology Ph.D. program usually notifies applicants of admissions status no later than the following April 15. Top candidates are usually interviewed prior to admission to the program. Please check out our tips on applying for graduate study in the School of Life Sciences at http://sols.asu.edu/grad/apply_tips.php for additional information. Students must submit an online application to the Graduate College.

1. Select “Sciences (Life, Natural, Physical & Chemical)” as your degree program category.
2. Select “Tempe” as your degree program campus.
3. Select “Biology Ph.D. Degree” as your degree program.
4. Identify the specific biology program faculty member(s) you are interested in working with. This will ensure that these faculty members see your application and can participate in admissions and funding decisions.
5. Download and print three copies of the School of Life Sciences recommendation form (http://sols.asu.edu/grad/pdf/recommend_form.pdf).
   - Complete and sign the top portion of each form.
   - Give one form to each of the three persons who will be writing your letters of recommendation.
   - Ask the letter writers to mail paper copies of both the form and their letters of recommendation to:
     
     Graduate Programs  
     School of Life Sciences  
     Biology Ph.D. Program  
     Arizona State University  
     P.O. Box 874601  
     Tempe, AZ 85287-4601

6. Prepare and upload the School of Life Sciences academic record form (http://sols.asu.edu/grad/pdf/academic_record_form.doc).

International Students: Students applying from outside of the U.S. will need to submit additional documents (http://graduate.asu.edu/admissions/international.html). Students from countries whose native language is not English must provide evidence of English proficiency with acceptable scores on the TOEFL or IELTS. TOEFL and IELTS scores must be current, with the test date within two years of the first day of classes of the semester you enroll at ASU. Students who wish to attend ASU while holding a student visa (F–1 or J–1) will need to submit a financial guarantee form (http://graduate.asu.edu/f1j1applicants.html).

Contact:
School of Life Sciences  
http://sols.asu.edu  
LSC 226  
sols.grad.asu.edu  
480/965-2349

Chemistry (MNS) LACHEMMNS  
College of Liberal Arts and Sciences

Official Degree Awarded: MNS Natural Science (Chemistry)
Program Description: The M.N.S. in chemistry offers the opportunity for interdisciplinary graduate training in the natural sciences (biological sciences, mathematics and physical sciences) and cognate (related) areas. The program emphasizes professional training rather than research and is designed as an individualized professional graduate program based on the background and goals of the student.

Applications are not being accepted at this time.

Program Requirement: A minimum of 30 credit hours, including course work, seminars, research, and an applied project are required. The student must complete four graduate-level courses, two within the Department of Chemistry and Biochemistry and two from a related discipline which supports the students' academic goals.

The M.N.S. in chemistry is awarded when the student has obtained:

1. A minimum cumulative GPA of 3.00 in course work.
2. Completes a preapproved project agreed on by the student and his/her supervisory committee members.
3. The culminating experience may include a short literature review paper or report of a project presented in both a written form and an oral presentation before the student's supervisory committee.
4. The student must meet all deadline dates and requirements set by the Graduate College.

Admission Requirements: Applications are not being accepted at this time.

Contact:
Department of Chemistry and Biochemistry
http://chemistry.asu.edu/graduate/applicantInfo.asp
chmgrad@asu.edu
PS D 103
480/965-4664

Chemistry (MS) LACHEMMS
College of Liberal Arts and Sciences

Official Degree Awarded: MS Chemistry

Program Description: The faculty in the Department of Chemistry and Biochemistry offer a program leading to the M.S. in chemistry. Areas of study include:

- Analytical chemistry.
- Biochemistry.
- Geochemistry.
- Inorganic chemistry.
- Organic chemistry.
Physical chemistry.
Chemical education.
Solid-state chemistry.

A few of the many topics currently being researched:

- Dynamics of liquids and glasses.
- Environmental chemistry.
- Functional semiconductors.
- Genome analysis.
- Nanomaterials.
- Organic and inorganic synthesis.
- Photosynthesis and photo chemistry.
- Theoretical chemistry.

See http://chemistry.asu.edu/graduate/facultyResearch_grad.asp for information on faculty research and the state-of-the-art facilities available for conducting high quality investigations. The M.S. in chemistry prepares students for professional careers in industry, government and educational institutions.

Program Requirement: A minimum of 30 credit hours, including course work, seminars, research, and thesis, are required. Courses are selected by the student in consultation with his/her supervisory committee based upon research area. The M.S. in chemistry is awarded when the student has obtained a minimum cumulative GPA of 3.00 in course work, demonstrated quality performance in the laboratory and completion of his/her research project, completed a successful thesis oral defense, and has met all deadline dates and requirements set by the Graduate College.

Admission Requirements: All students applying for admission to the program must meet the requirements set by the Graduate College which can be found at http://graduate.asu.edu/admissions/index.html. Applicants must also submit original scores for the GRE. The subject test is not required.

Application to the Department of Chemistry and Biochemistry includes:

1. The completion of an electronic supplemental application providing information on test scores.
2. A personal statement.
3. Contact information for three letters of recommendation.

Information on the supplemental application can be found at http://chemistry.asu.edu/graduate/applicantInfo.asp.

Contact:
Department of Chemistry and Biochemistry
Chemistry (PhD) LACHEMPHD
College of Liberal Arts and Sciences

Official Degree Awarded: PHD Chemistry

Program Description: The faculty in the Department of Chemistry and Biochemistry offer a program leading to the Ph.D. in chemistry. Areas of study include:

- Analytical chemistry.
- Biochemistry.
- Geochemistry.
- Inorganic chemistry.
- Organic chemistry.
- Physical chemistry.
- Chemical education.
- Solid-state chemistry.

A few of the many topics currently being researched:

- Dynamics of liquids and glasses.
- Environmental chemistry.
- Functional semiconductors.
- Genome analysis.
- Nanomaterials.
- Organic and inorganic synthesis.
- Photosynthesis and photo chemistry.
- Theoretical chemistry.

See http://chemistry.asu.edu/graduate/facultyResearch_grad.asp for information on faculty research and the state-of-the-art facilities available for conducting high quality investigations. The Ph.D. in chemistry prepares students for professional careers in industry, government and educational institutions.

Program Requirement:

1. A minimum of 84 credit hours, including course work, seminars, research, and dissertation, are required.
2. Courses are selected by the student in consultation with his/her supervisory committee based upon research area.
3. A doctoral comprehensive examination consisting of both a written and oral presentation of current research and an original research proposal is required for advancement to candidacy.

The Ph.D. in chemistry is awarded when the student has obtained:

1. A minimum cumulative GPA of 3.00 in course work.
2. Demonstrated quality performance in the laboratory and completion of his/her research project.
3. Evidence of a publishable contribution of original research.
5. Meeting all deadline dates and requirements set by the Graduate College.

Admission Requirements: All students applying for admission to the program must meet the requirements set by the Graduate College which can be found on the Graduate College Web site. Applicants must also submit original scores for the GRE. The subject test is not required.

Application to the Department of Chemistry and Biochemistry includes:

1. The completion of an electronic supplemental application providing information on test scores.
2. A personal statement.
3. Contact information for three letters of recommendation.

Information on the supplemental application can be found at http://chemistry.asu.edu/graduate/applicantInfo.asp.

Contact:
Department of Chemistry and Biochemistry
http://chemistry.asu.edu/graduate
chmgrad@asu.edu
PS D103
480/965-4664

Communication (MA) LACOMMOMA
College of Liberal Arts and Sciences

Official Degree Awarded: MA Communication

Program Description: The faculty in the Hugh Downs School of Human Communication offer a program leading to the M.A. in communication. Current areas of study within the major are intercultural communication, interpersonal communication, performance studies, organizational communication and rhetorical studies.
Program Requirement: The program consists of a minimum of 30 credit hours of graduate course work, which includes six hours of thesis credit. All students must successfully complete the following:

1. COM 501 Research Methods in Communication with a minimum grade of “B” (3.00).
2. COM 504 Theories and Models in Communication with a minimum grade of “B” (3.00).
3. At least one of the following three courses: COM 508 Quantitative Research Methods in Communication, COM 509 Qualitative Research Methods in Communication or COM 521 Rhetorical Criticism of Public Discourse with a minimum grade of “B” (3.00).
4. At least three content seminars (COM courses numbered 691).
5. Students may choose to complete either a thesis or one of two nonthesis options:
   - Thesis Track: students must complete a thesis of original research, and an oral examination in defense of the thesis.
   - Nonthesis Track Option 1 - Applied Project: students must complete an applied project* in a 3-credit-hour 593 omnibus designated course and defend the project in an oral examination. The applied project must be approved by the student’s supervisory committee.* e.g., design a training program, evaluate existing training or communication program, conduct and write a report of a facilitated workshop, take mediation training and work with a client, create and present a performance, analyze a health campaign, write a research report, etc.
   - Nonthesis Track Option 2 - Comprehensive Examination: Students must complete a four-hour noncredit written comprehensive examination over communication theory, methodology and the student’s area of emphasis.

Students must have an approved plan of study prior to scheduling their comprehensive examination and/or registering for their applied project course.

Admission Requirements: Admission is competitive, based upon evidence of the applicant’s scholarly and research abilities. All applicants must submit the following:

1. A Graduate College application, completed online, along with official undergraduate and graduate transcripts.
2. A statement of professional goals (approximately 500 words).
3. GRE scores (verbal, quantitative, and analytical writing) taken within the past five years, plus other relevant test data provided by the applicant.
4. Three letters of recommendation prepared within the preceding 12 months;
5. A writing sample.
6. All applicants whose native language is not English must submit Test of English as a Foreign Language (TOEFL) scores; minimum scores are 600 on the paperversion of this test or 250 on the computer version of this test.
A completed application for admission and official transcripts of all undergraduate and graduate work must be submitted to the graduate admissions office. See http://graduate.asu.edu/ for Graduate College general requirements. All application materials must be received by February 1. Late applications cannot be considered.

Contact:
Hugh Downs School of Human Communication
http://humancommunication.clas.asu.edu/
communication@asu.edu
STA 412
480/965-5095

Communication (PhD) LACOMMOPHD
College of Liberal Arts and Sciences

Official Degree Awarded: PHD Communication

Program Description: The committee of faculty offers an interdisciplinary graduate program leading to the Ph.D. in communication. Concentrations are available in communicative development, intercultural communication and organizational communication.

The program is housed in the Hugh Downs School of Human Communication and is designed to prepare scholars for research-oriented careers in universities and in the public or private sectors. Students are provided training in communication theory, research methodology and a specialization in one or more areas of concentration. The goal of the program is to meet the needs of students whose interests transcend traditional disciplinary boundaries.

Program Requirement: This degree program requires 96 credit hours, a dissertation, a written comprehensive examination and an oral comprehensive examination. If the student has completed an appropriate master’s degree, the Ph.D. requires a minimum of 66 hours beyond the master's degree.

Course work for a typical program of study is distributed as follows:

- Required core courses (six credit hours)
- Area of concentration (36 credit hours)
- Dissertation (COM 799)
- Research (COM 792) (24 credit hours)

Up to 12 credit hours of research (COM 792) may be taken before admission to candidacy. Three interdisciplinary theory and methodology courses are required of all students entering the program. The required theory course is COM 604 Theory Construction in Communication. Students are required to take three credit hours of COM 792 R: Prospectus/Dissertation Practicum and three semester hours of COM
792 R: Seminar Assistant. In addition, students must take one of the three advanced methods courses:

- COM 607 Contemporary Rhetorical Methods
- COM 608 Multivariate Statistical Analysis of Data in Communication
- COM 609 Advanced Qualitative Research Methods in Communication

The student is also required to demonstrate proficiency in research methods (statistics, computer languages, content analysis methods, participant observation, etc.) which, in the judgment of the supervisory committee, is needed for the student's dissertation research. Evidence of required proficiency may be demonstrated by established university examination procedures or by successful completion of a sequence of courses designated by the student's program committee.

The initial course work for students admitted with only a bachelor's degree is similar to the M.A. in communication degree requirements except that no thesis is required. These requirements include a total 24 credit hours of course work:

1. A general overview of research in communication (COM 501).
2. An overview of theories and models of communication (COM 504).
3. A statistics course (COM 508).
4. Electives from communication or other disciplines.

The methods, theory, and statistics courses must be completed before beginning the required theory and methodology sequence for the Ph.D. (i.e., they are prerequisites for the required courses).

**Admission Requirements:** Applicants must submit:

1. A Graduate College online application.
2. Official transcripts.
3. Statement of goals.
4. GRE scores.
5. Test of English as a Foreign Language (TOEFL) scores, if applicable.
6. Three letters of recommendation.
7. Writing sample.

Please visit the Hugh Downs School of Human Communication Web site for details.

**Contact:**
Hugh Downs School of Human Communication
http://humancommunication.cclas.asu.edu/
communication@asu.edu
STA 412
480/965-5095
Computational Biosciences - Mathematics Department (PhD) LACOMBPHD
College of Liberal Arts and Sciences

Official Degree Awarded: PHD Mathematics (Computational Biosciences)

Program Description: The Ph.D. in computational biosciences is designed such that graduates of the program will be able to transition immediately into the computational biosciences workforce with strong quantitative, computational and life science skills. The concentration in computational biosciences augments the mathematics Ph.D. with a truly interdisciplinary program. It broadens the opportunities for students to take on a completely interdisciplinary doctoral training, while also maintaining a disciplinary focus to their studies. There is increasing emphasis nationally and locally on developments in the quantitative biological sciences.

Program Requirement: This degree program requires 84 credit hours, a dissertation, a written comprehensive examination and an oral comprehensive examination. A standard doctoral degree program at ASU comprises 84 hours of study, of which 12 hours (and only 12) are for the dissertation, and of which 30 credit hours may be applied from an appropriate master’s degree.

Students must satisfy core components of the computational biosciences concentration. See Web site for detailed information.

Admission Requirements: Applicants must submit the Graduate College online application. Students are required to have satisfied courses in mathematics, statistics, biology, chemistry and computer science prior to admission to the program. Students are encouraged to plan early for admission to the program in order to allow completion of any deficiencies. Courses are available at ASU, some during the two summer sessions. Students with a limited number of deficiencies may be conditionally admitted to the program, if it is likely that the deficiencies can be completed prior to admission or concurrently with core courses of the program in at most one semester. If a student has completed courses equivalent to the following listed courses at ASU, they have satisfied conditions for regular admission to the program at ASU. Please note that there are prerequisities required for each of these courses.

Program Prerequisites:

- BIO 340 General Genetics
- BIO 353 Cell Biology
- CHM 231 Elementary Organic Chemistry
- BCH 361 Principles of Biochemistry
- MAT 275 Modern Differential Equations
- STP 420 Introductory Applied Statistics
- CSE 205 Concepts of Computer Science and Data Structures
Creative Writing (MFA) LACWRITMFA
College of Liberal Arts and Sciences

Official Degree Awarded: MFA Creative Writing

Program Description: ASU creative writing offers an exceptional program in creative activity—a curricular model that guides talented individuals in writing original poetry, fiction and nonfiction. Equally, this model informs service projects that reach out to Arizona, the nation and an international community of writers. Program innovation and vitality together with exemplary mentorship from a superior teaching faculty combine to shape and define pragmatic, successful outcomes for students of the M.F.A. program—new century graduates we distinguish as artist-citizens.

Characterized as an interdisciplinary “studio/academic program,” M.F.A. students divide work equally between writing workshops and literature and theory courses. In a flexible curriculum, poets and prose writers work with professors in the Department of English, allowing candidates time to study with several gifted writers and scholars in a program, each student confronts the challenge of producing primary works of literature in a real-world setting. Courses such as “Creative Writing and the Professions” and “Internship for Community Outreach” encourage students to envision life beyond graduation, providing training that will lead to mainstream publishing and performance, moving students from the classroom, from theory to first book.

Program Requirement: The M.F.A. in creative writing program requires 48 credit hours, a practicum and a written comprehensive examination. In poetry and fiction, the program of study requires a minimum of 48 credit hours of graduate credit approved by the student’s faculty advisor.

Admission Requirements: In addition to meeting the general requirements of the Graduate College, applicants should have an undergraduate major in English or theatre, with a GPA of 3.00 or higher. Applicants who do not have an undergraduate major in English or theatre may be admitted on the basis of excellent creative and academic work. Deficiencies in undergraduate preparation may be removed while pursuing the M.F.A. degree. Applicants must also submit the following:

1. Three letters of recommendation.
2. A professional résumé.
3. A statement of purpose.
Program Description: The Ph.D. program in East Asian languages and civilizations is a research-intensive, interdisciplinary, area-based degree in the study of traditional and modern languages and cultures of China and Japan. Students may focus on literature, literary criticism, comparative cultural studies, cultural history or linguistics. In every case, students will be expected to acquire a solid grounding in the classical and modern versions in the primary language of their area.

Program Requirement: The program will require a minimum of 84 credit hours. Up to 30 hours earned in a master’s degree program that is directly relevant to the degree may be counted toward that number. However, a minimum of 30 credit hours of course work and 24 hours of research are required beyond the M.A. level. If a student already has an M.A., it will not be necessary to complete the existing School of International Letters and Cultures M.A. in Asian languages and civilizations. However, the student will be required to satisfy all course requirements for the M.A.

All students, whether in Chinese or Japanese, are required to complete:

1. A minimum of six courses selected from advanced courses in literature, religions or intellectual history.
2. Five seminars.
3. SLC 500 Theory and Methodology of East Asian Literature and Culture.
4. Students must complete written and oral comprehensive examinations in four fields, three of which must be selected from areas that are well represented within the East Asian languages and civilizations Ph.D. graduate curriculum.
5. Students are also required to demonstrate reading knowledge of a second pertinent Asian language and one pertinent European language, aside from English.
7. Twelve core requirements.

Admission Requirements: Potential applicants who hold a bachelor’s degree from a regionally accredited institution in a related field are eligible to apply to the
program. The following entry-level competencies are needed for admission to the program:

**Chinese concentration**

Completion of at least three years of modern Chinese and one year of classical Chinese.

**Japanese concentration**

Completion of at least three years of modern Japanese and one semester of classical Japanese.

Applicants will be required to submit:

1. A statement of career and educational goals.
2. An official ASU graduate application.
3. Official GRE scores.
4. Official transcripts of all undergraduate and graduate course work.
5. Three letters of recommendation (two of which should be academic recommendations).

Regular admission may be granted to applicants who have achieved a GPA of 3.30 (4.00 scale) or better in the last two years of work leading to the bachelor’s degree and who are competitive in the applicant pool as evidenced by GRE scores (verbal, quantitative and analytical), the statement of career and educational goals and the letters of recommendation.

**Contact:**
School of International Letters and Cultures
http://silc.asu.edu/graduate
silc@asu.edu
LL 440
480/965-2715

**Official Degree Awarded:** MA English

**Program Description:** The M.A. in English encompasses four distinct concentrations. Literature students develop and hone skills in oral presentation, writing and critical thinking while exploring social, historical and cultural contexts.

In the broad-based and global linguistics concentration, students study theory and application focusing on phonology, syntax, sociolinguistics, historical linguistics and second language acquisition.
The rhetoric and composition concentration offers a wide array of courses encompassing the history, theory and practice of rhetoric and pedagogy of writing.

Comparative literature students interpret cultural productions in English and at least one other language, and explore approaches ranging from textual criticism, critical theory, and translation to cultural studies and the social sciences.

The M.A. in English prepares students to be teachers, scholars, writers and editors, and to work in a variety of professions, including government, advertising, fundraising and public relations.

Program Requirement: A student may pursue a concentration in comparative literature, English linguistics, literature or rhetoric and composition. All concentrations have a foreign language requirement.

For the concentration in comparative literature, a candidate must complete:

1. Thirty credit hours of graduate courses, with a minimum of 12 credit hours being taken in the School of International Letters and Cultures.
2. Two courses in concepts and methodology (one of which must be bibliographical methods).
3. Six credit hours of special topic courses.
5. A written comprehensive examination is required.

For the concentration in English linguistics, two tracks are available. A candidate must complete a minimum of 30 credit hours of graduate-level courses:

The general linguistics track must include: LIN 500, 511, 514 and 515 and one advanced linguistics course.

1. The applied linguistics track must include: LIN 500; 511 or 514; 515 or 516; and 520 and a course from a selection of advanced linguistics courses.
2. Both tracks require six credit hours of LIN 599 Thesis.
3. Electives are chosen in consultation with the advisor.

For the concentration in literature, a candidate must complete a minimum of 30 credit hours. The hours must include:

1. ENG 500 Research Methods.
2. A course in literary theory.
3. ENG 599 Thesis.
4. A nine-credit-hour distribution requirement.
5. Two courses selected must be graduate seminars at the 600 level.
6. Electives are chosen in consultation with the advisor.
For the concentration in rhetoric and composition, a candidate must complete a minimum of 30 credit hours of graduate courses, and these hours must include:

1. ENG 500 Research Methods.
2. A course in rhetoric theory.
3. A course in composition theory.
4. Fifteen elective course hours, that must include six credit hours of graduate seminars at the 600 level.
5. A six-credit-hour thesis.
6. Electives are chosen in consultation with the advisor.

Admission Requirements: Applicants must submit a Graduate College online application. Applicants for the M.A. in English program with a concentration in literature are required to have an undergraduate major in English. Those who do not have a major in English are encouraged to register as nondegree students while they take courses in areas of deficiency, as identified by the advisor. Applicants must also submit:

1. GRE general test scores.
2. Three letters of recommendation.
3. A statement of purpose.
4. An academic writing sample.

Applicants for the M.A. in English program with a concentration in linguistics and with a concentration in rhetoric and composition may have undergraduate majors in fields such as, but not limited to:

- Anthropology.
- Applied linguistics.
- Cognitive science.
- Communication.
- Comparative languages and literatures.
- Education.
- English literature.
- History.
- Law.
- Linguistics.
- Modern languages.
- Philosophy.
- Political science.
- Psychology.
- Religion.
- Rhetoric/composition.
- Sociology.
- Speech and hearing science.
Students should consult with an advisor to determine whether their preparation is deficient in any area. Applicants must also submit three letters of recommendation and a statement of purpose. Applicants for the rhetoric and composition concentration must also submit:

1. GRE general test scores.
2. An academic writing sample.

Applicants for the linguistics concentration must show completion of one upper-division course in a linguistics-related field.

Applicants for the M.A. in English program with a concentration in comparative literature must:

1. Prove fluency in a foreign language to a level sufficient for graduate study.
2. Submit three letters of recommendation.
3. Submit a statement of purpose.

Contact:
Department of English
http://english.clas.asu.edu/graduate
enggrad@asu.edu
LL 543B
480/965-3194

English Literature (PhD) LAENLITPHD
College of Liberal Arts and Sciences

Official Degree Awarded: PHD English (Literature)

Program Description: This Ph.D. program promotes the study of the production, distribution and reception of texts; of their linguistic, rhetorical and literary structures and functions; and of internal and external forces shaping literature. Faculty members often incorporate diverse modes of inquiry (including both traditional and recent critical approaches to literary studies) into course content and methodology allowing students flexibility to pursue work in specific periods, critical theory, cultural studies, race, class and gender, and provide a mechanism to juxtapose high and low cultural texts and/or canonical and newly emerging texts. The program prepares students for entrance into the profession as both teachers and scholars.

Program Requirement: The Ph.D. program is a total of 84 credit hours, a dissertation, a written or oral examination and a foreign language exam. In general, a student with an appropriate master’s degree must complete a minimum of 54 credit hours of approved graduate work, which includes 12 credit hours of dissertation. Research hours may be used towards course work in consultation with the advisor.

A student without an appropriate master’s degree must complete 84 credit hours of
work at ASU. At the advisor’s discretion, students may include up to 12 credit hours of appropriate, graduate-level course work undertaken at another university, and not previously counted towards any other degree. Specifically required are six credit hours in theory courses and ENG 500 Research Methods. Students must complete (or have completed at the master’s level or its equivalent) one graduate course in eight of the following 10 categories:

- Cultural studies.
- Ethnic studies.
- Gender studies.
- Genre.
- History/structure of the English language.
- Literature 1500-1660.
- Literature 1660-1900.
- Literature since 1900.
- Literature to 1500.
- Postcolonial/Anglophone literatures.

Students must take at least five graduate seminars at the 600 level en route to the Ph.D. degree, at least three of which must be taken in the Ph.D. program. Up to 12 credit hours taken outside the department may be counted toward the degree. Students should consult with their supervisory committees when choosing electives.

Admission Requirements: Applicants must submit a Graduate College online application. Applicants for the Ph.D. degree in English must submit:

1. Three letters of recommendation.
2. A statement of purpose.
3. An academic writing sample.
4. GRE general scores are required for both concentrations.

The GRE advanced literature section is optional for the literature concentration. Deadline for admission applications and requests for financial aid, including teaching assistantships, is Feb. 1. Incomplete files are not considered.

Materials should be sent to:

Graduate Coordinator
Department of English
Arizona State University
P.O. Box 870302
Tempe, AZ 85287-0302

Contact:
Department of English
http://english.clas.asu.edu/graduate
enggrad@asu.edu
Environmental Life Sciences (PHD) LAELSPHD
College of Liberal Arts & Sciences

Official Degree Awarded: PHD Environmental Life Sciences

Program Description: Environmental life sciences is a novel graduate degree that will provide Ph.D.-level training in several complementary fields focused on interactions between organisms (plant, animal or microbe) and their environment. The program will provide transdisciplinary training that includes aspects of:

- Biology.
- Chemistry/biochemistry.
- Environmental engineering.
- Geosciences.
- Mathematics.
- Social sciences.
- Sustainability.

Graduate students will be trained in core classes, seminars, reading groups and research clusters. A focus will be collaborative and integrative study of the effects of environmental variation on fluxes of materials and energy across scales ranging from the organism to the globe. Our overall goal is to provide a unique Ph.D. program that produces students with a broad appreciation of environment-organism questions in the context of natural and anthropogenic environmental change.

Program Requirement: As specified in each student’s plan of study, the total number of credit hours should consist of seven credit hours of core courses, a minimum of nine hours of electives and 12 hours of dissertation credit (ELS 799). Beyond these 28 credit hours, the remaining credit hours should be filled either from electives or from the ELS omnibus courses up to the required number of total credit hours (54 if entering with a master's degree or 84 otherwise).

Admission Requirements: Applicants must possess a minimum of a bachelor's degree (or equivalent) or a graduate degree from a regionally accredited college or university or of recognized standing in a related field. They must have had a minimum of a 3.00 cumulative GPA (on a scale of 4.00) in the last 60 hours of their first bachelor's degree. All applicants must submit GRE results.

Contact:
School of Life Sciences
http://els.asu.edu/
LSE 421
480/727-7254
Environmental Social Science (PhD) LAESSPHD
College of Liberal Arts and Sciences

Official Degree Awarded: PHD Environmental Social Science

Program Description: The Ph.D. in environmental social science (ESS) is one of the few doctoral programs in the U.S. that draws on the premise that reducing human impacts and developing more sustainable environmental practices will be difficult, if not impossible, to achieve without a focus on the social dynamics of environmental issues using critical social science perspectives.

The program is organized around theoretically based conceptual domains (political ecology, culture and the environment, environmental justice, science and technology studies, environmental hazards and vulnerability and human environment impacts). These are the basis for addressing various topical foci (including urban environments, technologies and their consequences, landscapes, institutions and health and the environment).

Students will work with faculty who have expertise in a broad range of fields including:

- Archaeology.
- Community resources.
- Cultural and medical anthropology.
- Demography.
- Environmental history.
- Geographic information systems.
- Human and physical geography.
- Planning.
- Public affairs.
- Science and technology studies.
- Sociology.

The ESS program will train students to move into teaching and research positions, or to assume leadership roles in nongovernmental organizations (NGOs), government or industry.

Course work for the degree is focused on developing real-world skills and a solid grasp of complex social science approaches to environmental issues. Students work closely with their committee to develop a curriculum appropriate to their chosen interests and career goals.

Program Requirement: All students entering the program complete a suite of classes totaling 30 hours. These include 18 hours of core classes in conceptual domains and topical foci. Additional hours come from one course each in research design and
technical expertise and six hours of electives. Students may select from a substantial range of courses to satisfy noncore requirements.

Students entering with an M.A. will be granted up to 30 credit hours toward the 84 hour total required for the Ph.D. Students without an M.A. must earn an additional 30 hours of graduate credit, selecting courses from a number of appropriate programs on campus.

All students must earn 12 (and only 12) dissertation hours and may earn up to 12 research hours for a total of 24 hours to achieve the 84 hour total.

Admission Requirements: Applicants are required to have a bachelor's degree from a regionally accredited institution with a grade point average of 3.20 (4.00 scale) or higher in the last two years of course work.

A master's degree in any relevant field is advantageous for environmental social science (ESS) students, or students can earn an M.A.-in-passing as part of the ESS graduate program.

In addition to general requirements for admission to the Graduate College, the environmental social science Ph.D. program requires students to provide:

1. A statement of their interests and goals as a professional.
2. Three letters of recommendations.
3. A sample of their written work.
4. GRE scores.

While undergraduate work in one of the social sciences (e.g. geography, political science, sociology, anthropology, planning or history) is not required, some course work in the social sciences is advantageous for admission. Students may be required to take additional courses as noted at the time of admission if they lack an adequate background in the social sciences.

Contact:
School of Human Evolution & Social Change
http://shesc.asu.edu/graduate_studies
shescgrad@asu.edu
SHESC 233
480/965-6215

Environmental Social Science (Urbanism) PHD LAESSURPHD
College of Liberal Arts and Sciences

Official Degree Awarded: PHD Environmental Social Science (Urbanism)

Program Description: The Doctor of Philosophy in environmental social science is one of the few doctoral programs in the U.S. that focus on the social dynamics of environmental issues using critical social science perspectives which are a vital
component of reducing human impacts and developing more sustainable environmental practices.

The program is organized around theoretically based conceptual domains:

- Political ecology.
- Culture and the environment.
- Environmental justice.
- Science and technology studies.
- Environmental hazards and vulnerability.
- Human environment impacts.

These are the basis for addressing various topical foci (including urban environments, technologies and their consequences, landscapes, institutions and health and the environment).

The concentration in urbanism will leverage the varied interests in urbanism and help emerging scholars as they attempt to compare, contrast and take stock of urbanism. Working with faculty from across a range of departments and programs at ASU, doctoral students will be able to capture the creative tensions that scholarship on urbanism has inspired in order to stimulate a provocative, constructive kind of inquiry. Academic units the students might engage with to fulfill the requirements of the urbanism concentration include:

- Herberger Institute for Design and the Arts.
- School of Community Resources and Development.
- School of Geographical Sciences and Urban Planning.
- School of Government, Politics and Global Studies.
- School of Historical, Philosophical and Religious Studies.
- School of Human Evolution and Social Change.
- School of Sustainability.

The environmental social science program will train students to move into teaching and research positions, or to assume leadership roles in nongovernmental organizations, government or industry.

Course work for the degree is focused on developing real-world skills and a solid grasp of complex social science approaches to environmental issues. Students work closely with their committee to develop a curriculum appropriate to their chosen interests and career goals.

*Program Requirement:* All students entering the doctoral program in environmental social science must complete 84 credit hours. A suite of classes totaling 30 credit hours includes 18 hours of core classes in conceptual domains and topical foci. Additional hours come from one course each in research design and technical expertise and six hours of electives. Students may select from a substantial range of courses to satisfy noncore requirements.
For the concentration in urbanism, 15 of these credit hours will be selected from an approved list of applicable courses related to urbanism. These courses will include the core urbanism course, GCU 516, as well as one course from each of the four urbanism clusters:

1. Natural environment.
2. Built form.
3. Institutions and governance.
4. Culture and society.

Some of the environmental social science core courses also count toward the concentration in urbanism.

Students entering with a master’s will be granted up to 30 credit hours toward the 84-hour total required for the doctorate. Students without a master’s must earn an additional 30 hours of graduate credit, selecting courses from a number of appropriate programs on campus.

A written comprehensive examination and a dissertation prospectus with a defense are required of all doctoral students.

All students must earn 12 (and only 12) dissertation hours and may earn up to 12 research hours for a total of 24 hours to achieve the 84 hour total.

Admission Requirements: Applicants are required to have a bachelor’s degree from a regionally accredited institution with a GPA of 3.20 or higher (on a 4.00 scale) in the last two years of course work.

A master's degree in any relevant field is advantageous for environmental social science students, or students can earn an master's-in-passing as part of the environmental social science graduate program.

In addition to general requirements for admission to the Graduate College, the environmental social science doctoral program requires students to provide:

1. A statement of their interests and goals as a professional.
2. Three letters of recommendations.
3. A sample of their written work.
4. GRE scores.

While undergraduate work in one of the social sciences (e.g. geography, political science, sociology, anthropology, planning or history) is not required, some course work in the social sciences is advantageous for admission. Students may be required to take additional courses as noted at the time of admission if they lack an adequate background in the social sciences.

Contact:
School of Human Evolution & Social Change
Family and Human Development (MS) LAFAMHDMS
College of Liberal Arts and Sciences

Official Degree Awarded: MS Family and Human Development

Program Description: The program in family and human development is devoted to the study of families, children and youth. The program’s research, teaching and service have direct meaning for the lives of children and adults and the families and communities in which they live.

The faculty share a common commitment to high-quality research that both increases the basic understanding of human and family development and has the potential to contribute to the improvement of the lives of children and families.

Program Requirement: Courses are selected by the student along guidelines of the specific areas, after consultation with the supervisory committee. The program of study should be completed and approved by the supervisory committee by the end of the second semester of full-time graduate study upon completion of 12 credit hours.

While a minimum of 33 credit hours is required, an individual plan of study may include more than 33 hours with the exact number determined by program requirements and the student’s supervisory committee. Acceptance of the proposed plan of study must be verified by signature of the student and committee members. After approval within the program or college, the plan of study is submitted to the Graduate College for final approval.

The following requirements must be met for the tracks in child development or family studies. All students must take the following courses: FAS 500, FAS 531, CDE 531, CDE 534 and PSY 530 (or equivalent with the approval of the graduate committee).

Child Development

The required courses are CDE 533 and six credit hours of CDE elective selected (with approval of the student’s advisor). Six credit hours of thesis work are also required.

Family Relationships

The required courses are FAS 539 and six credit hours of FAS electives (selected
with approval of the student's advisor). Six credit hours of thesis work are also required.

Admission Requirements: Admission to the M.S. in family and human development program is determined by the following criteria:

1. Official transcripts of all undergraduate and graduate course work.
2. Verbal, quantitative and analytical GRE scores.
3. Statement of goals relevant to the M.S. program.
4. Three letters of recommendation.
5. Application to the Graduate College.
6. A Test of English as a Foreign Language (TOEFL) score of at least 600 is required of all applicants whose native language is not English.

Applications, which are due Jan. 15, should be sent to:

Graduate Secretary
Family and Human Development
P.O. Box 873701
Arizona State University
Tempe, AZ 85287-3701

Contact:
School of Social/Family Dynamics
http://ssfd.clas.asu.edu/
SSFD@asu.edu
SS 144
480/965-6978

Family and Human Development (PhD) LAFAMSCPHD
College of Liberal Arts and Sciences

Official Degree Awarded: PHD Family and Human Development

Program Description: The program in family and human development is devoted to the study of families, children and youth. The program's research, teaching and service have direct meaning for the lives of children and adults and the families and communities in which they live.

The faculty share a common commitment to high quality research that both increases the basic understanding of human and family development and has the potential to contribute to the improvement of the lives of children and families.

Program Requirement: Each student must prepare and submit a plan of study in conjunction with the chair and members of his or her supervisory committee during the first year in the program. The plan of study consists of a minimum of:

1. Eighty-seven credit hours for students entering after the bachelor's degree.
Of the 87 credit hours for a postbaccalaureate program, 6 hours are thesis and 12 hours are dissertation credit.

Postbaccalaureate students complete a master’s-in-passing before advancing to their doctoral studies.

2. Fifty-seven credit hours for students entering after the master’s degree.
   Of the 57 credit hours of the post-master’s program include 12 credit hours of dissertation.

3. The additional hours in both the postbaccalaureate and post-master’s tracks involve courses in:
   - Family and human development.
   - Statistics and research methods.
   - A collateral area of study relating to family and human development.

**Admission Requirements:** Admission to the Ph.D. in family and human development is determined by the following criteria:

1. Official transcripts of all undergraduate and graduate coursework.
2. Verbal, quantitative, and analytical GRE scores.
3. Statement of goals relevant to the Ph.D. program.
4. Three letters of recommendation.
5. Application to the Graduate College.

A Test of English as a Foreign Language (TOEFL) score of at least 600 is required of all applicants whose native language is not English.

Applications, which are due Jan. 15, should be sent to:

**Graduate Secretary**
Family and Human Development
P.O. Box 873701
Arizona State University
Tempe, AZ 85287-3701

**Contact:**
School of Social/Family Dynamics
http://ssfd.clas.asu.edu/
ssfd@asu.edu
SS 144
480/965-6978

**French Comparative Literature (MA) LAFRECLMA**
College of Liberal Arts and Sciences

**Official Degree Awarded:** MA French (Comparative Literature)
Program Description: The faculty in the School of International Letters and Cultures offer a graduate program leading to the M.A. in French with a concentration in comparative literature.

Program Requirement: A total of 30 credit hours of graduate work is required. Graduate students may take only 500-level courses for graduate credit. At least nine hours must be selected from those courses listed exclusively for graduate students. The program must include FRE 500 Bibliography and Research Methods (it is recommended that the candidate enroll in this course as early as possible); two courses in linguistics, civilization or translation (of which one must be in linguistics); and one course in critical or cultural theory.

For core courses, a minimum of four courses offered by the French section must be selected from any combination of the following categories: period courses, genre courses and Francophone studies courses. When approved by the graduate committee, up to six hours of related course work may be taken outside of French.

A student must achieve a GPA of "B" (3.00) or higher in all work specifically included in the program of study. Grades below a “C” (2.00) cannot be used to meet the requirements of a graduate degree. No student may accumulate more than one incomplete at any one time.

Independent study courses will be given only under exceptional circumstances and will not duplicate courses which are available. The French graduate committee is responsible for authorizing such work in cooperation with the individual professor. No more than six hours of independent study will be permitted.

The student must write a thesis dealing with a clearly defined literary topic bearing some relation to work done in the student’s classes. Students planning to teacher at the secondary school level, may choose to complete an applied project.

The written examination for the concentration in comparative literature will be administered by the interdepartmental committee for comparative literature and will consist of two essay-based components: general concepts of comparative literature and problems of comparative literature.

Admission Requirements: Applicants must submit a Graduate College online application. Prerequisites for admission into the literature program include:

1. FRE 321 Introduction to French Literature: Medieval through the 18th century.
2. FRE 322 Introduction to French Literature: 19th and 20th centuries.
3. Two 400-level French classes, of which at least one must be a literature course.

Contact:
School of International Letters and Cultures
French Linguistics (MA) LAFRELINMA
College of Liberal Arts and Sciences

Official Degree Awarded: MA French (Linguistics)

Program Description: The School of International Letters and Cultures offers a graduate program in French leading to the degree of M.A. French with concentrations in literature, linguistics or comparative literature. There is also an M.A. program in secondary education with a major in French.

Program Requirement: The program of study for the M.A. includes:

- A minimum of 30 credit hours of graduate-level work, as approved by the candidate’s supervisory committee.
- It has a thesis and an applied project option.
- The program must include a 500-level bibliography and research methods course offered by the department.
- When approved by the candidate’s supervisory committee, in some programs, nine hours in another language or in closely related courses may be included in the program.

Comprehensive Examination: All candidates are required to pass a comprehensive written examination designed to evaluate the candidate's knowledge in the area of specialization. A reading list, as agreed upon, serves as a guide to prepare for this examination.

Admission Requirements: Candidates for the M.A. should, upon entrance, present the equivalent of an undergraduate major in the language in which the degree is sought. Those who lack this background but who show strong potential and meet Graduate College admissions requirements may be admitted to a graduate program on a provisional basis, pending removal of specified deficiencies. These deficiencies must be completed in addition to the regular program of study for the master's degree.

Contact:
School of International Letters and Cultures
http://silc.asu.edu/graduate
silc@asu.edu
LL 440
480/965-6281

French Literature (MA) LAFRELITMA
College of Liberal Arts and Sciences
Official Degree Awarded: MA French (Literature)

Program Description: The School of International Letters and Cultures offers a graduate program in French leading to the degree of M.A. French with concentrations in literature, linguistics or comparative literature. There is also an M.A. program in secondary education with a major in French.

Program Requirement: The program of study for the M.A. includes:

- A minimum of 30 credit hours of graduate-level work, as approved by the candidate's supervisory committee.
- It has a thesis and an applied project option.
- The program must include a 500-level bibliography and research methods course offered by the department.
- When approved by the candidate's supervisory committee, in some programs, nine hours in another language or in closely related courses may be included in the program.

Comprehensive Examination: All candidates are required to pass a comprehensive written examination designed to evaluate the candidate's knowledge in the area of specialization. A reading list, as agreed upon, serves as a guide to prepare for this examination.

Admission Requirements: Candidates for the M.A. should, upon entrance, present the equivalent of an undergraduate major in the language in which the degree is sought. Those who lack this background but who show strong potential and meet Graduate College admissions requirements may be admitted to a graduate program on a provisional basis, pending removal of specified deficiencies. These deficiencies must be completed in addition to the regular program of study for the master's degree.

Contact:
School of International Letters and Cultures
http://silc.asu.edu/graduate
silc@asu.edu
LL 440
480/965-6281

Geographic Education (MAS) LAGEOEDMAS
College of Liberal Arts and Sciences

Official Degree Awarded: MAS Geographic Education

Program Description: The M.A.S. in geographic education is an online nonthesis degree program that provides teachers with the opportunity to obtain a highly qualified status in geographic education. The degree program is intended for K-12 teachers and is appropriate for elementary and secondary school teachers. Although the courses are completed online, there are two in-person meetings, including an orientation and a graduation event, where capstone projects are presented.
Program Requirement: The M.A.S. in geographic education program consists of:

1. Thirty credit hours taken completely online, with two one-day sessions required at the Tempe campus (orientation session and presentation of an applied project).
2. Students complete 24 credit hours in geography, a three-credit-hour course in educational research (COE 501 Introduction to Research and Evaluation in Education) and a three-credit-hour course on the applied project related to geographic education (SED 593 Applied Project or DCI 593 Applied Project). This culminating experience is required in place of a thesis.
3. A sample program of study for a full-time student is located at http://geography.asu.edu/masge-sampleprogram.
4. Students are required to have access to a computer with an internet connection and the capability to view video and animated files with sound (e.g. Flash, shockwave, mpeg, avi, etc.), access to e-mail and access to a word processing program (e.g. Microsoft Word).

Admission Requirements: In addition to the Graduate College admission requirements, prospective students must have a bachelor’s degree from a regionally accredited institution (or equivalent) in education, geography or related area with a minimum GPA of 3.00 (4.00 scale) or demonstrate a minimum of one year of related professional experience and successful completion of a bachelor’s degree from a regionally accredited institution (or equivalent) with a minimum GPA of 3.00 (4.00 scale). Applicants with a GPA below 3.00 can apply and may be accepted if they show substantial promise of success based on the candidate’s statement and letters of recommendation. Applicants to the degree program are accepted year-round for fall admission.

Contact:
School of Geographical Sciences and Urban Planning
http://geography.asu.edu/masge
geographyadvising@asu.edu
COOR 5673
480/965-7533

Geographic Information Science (Grad Certificate) LAGEOGISCE
Official Degree Awarded: CERT Geographic Information Science (certificate)

Program Description: Under the auspices of the School of Geographical Sciences, the interdisciplinary certificate program in geographic information science (GIS) is administered by an executive committee. The objective of this program is to enable ASU graduate students and GIS professionals to learn how to apply GIS concepts and technology for the purpose of spatial analysis.

Program Requirement: A minimum of 16 credit hours consisting of three required and two elective courses (three credit hours each) plus a capstone seminar (one-credit-hour) is required to complete the GIS certificate.
Admission Requirements: All applicants to the certificate program must submit the Graduate College online application. Current graduate students receive priority admission to the certificate program. Students qualify for admission to the certificate program by maintaining good standing in a cooperating department and completing an application specific to the GIS certificate. Practicing professionals who already hold a graduate degree furnish proof of an advanced degree by a formal transcript to the Graduate College. Prospective students must complete prerequisites listed for the level-one required course or pass a proficiency test.

Contact:
School of Geographical Sciences and Urban Planning
http://geography.asu.edu/
geographyadvising@asu.edu
COOR 5673
480/965-7533

Geographic Information Systems (MAS) LAGISMAS
College of Liberal Arts and Sciences

Official Degree Awarded: MAS Geographic Information Systems

Program Description: The M.A.S. in geographic information systems (GIS) program is a compact one-year nonthesis degree fostering advanced study in management and the use of GIS technology in public and corporate environments. The degree meets important educational needs of working professionals and recent college graduates seeking to improve their career standing.

The program provides a comprehensive professional degree that balances work in the theoretical aspects of GIS, the technical side of the discipline, and the applications domain. Students are exposed to cutting edge technology, management theory and practice, and several societal dimensions associated with the application of GIS technology.

Courses are held in the evenings and on weekends, the curriculum is highly adaptable to the work environment, and thus the M.A.S. degree is achievable in a one-year time period.

Program Requirement: This degree program requires 30 credit hours and an applied project. Enrolling students must complete three sequential semesters of course work totaling 30 graduate credit hours.

- The first semester, offered during the fall, is composed of six two-credit-hour modules, which are not transferable.
- Students in the spring semester must complete four three-credit-hour courses.
During the final semester, offered through the eight-week summer sessions, students must complete three semester hours of GIS internship and a three-credit-hour capstone course.

Admission Requirements: In addition to Graduate College admission standards, prospective students seeking the degree must have successfully completed a bachelor’s degree in a related area with a minimum GPA of 3.00 (4.00 scale); or demonstrate a minimum of three years of related professional experience and the successful completion of a bachelor’s degree in an unrelated area as determined by the M.A.S.-GIS steering committee.

- Applicants must submit two letters indicating support from any combination of current/former instructors, supervisors or professionals currently employed within GIS or a related discipline.
- Applicants must prepare a formal, written statement regarding relevant academic experience, professional experience and overall interest in GIS.

Application materials for the coming academic year are accepted and reviewed on a rolling basis until June 30. Applicants are notified of their status within six weeks of receipt of their application materials.

Contact:
School of Geographical Sciences and Urban Planning
http://geography.asu.edu
geographyadvising@asu.edu
COOR 5673
480/965-7533

Geography (MA) LAGEOGMA
College of Liberal Arts and Sciences

Official Degree Awarded: MA Geography

Program Description: The M.A. in geography program is designed to offer specialized academic and professional training in geography so that the student may secure a sound graduate background for further specialization or for immediate employment. The program has sufficient flexibility to allow for individual needs and the interests of the student. A minimum of 30 credit hours beyond the bachelor’s degree is required. At least 24 credit hours must be in geography.

Program Requirement: The School of Geographical Sciences may consider a student for a traditional master’s degree that includes the successful defense of a thesis. Master’s students must complete 30 credit hours including 24 credit hours of combined course work and research hours at ASU and a 6-credit-hour thesis. The master’s program includes two required courses (GCU 529 Geographic Thought and GCU 585 Advanced Research Methods) and additional course work or research hours as selected by the student in consultation with an advisory committee.
Admission Requirements: Applicants must submit the Graduate College online application. Applications for the M.A. program must be accompanied by the applicant’s scores on the GRE (verbal and quantitative) and three letters of recommendation from professors. All applications are reviewed by the graduate recruiting and admissions committee and the director of the School of Geographical Sciences.

It is presumed that all students entering the master’s program have an adequate background in geography, including course work that is the equivalent of GPH 371 Introduction to Cartography and Georepresentation and GCU 495 Quantitative Methods in Geography. Additional prerequisite course work is required of students insufficiently prepared in geography.

Contact:
School of Geographical Sciences and Urban Planning
http://geography.asu.edu
geographyadvising@asu.edu
COOR 5673
480/965-7533

Geography (PhD) LAGEOGPHD
College of Liberal Arts and Sciences

Official Degree Awarded: PHD Geography

Program Description: The Ph.D. program provides specialized academic and professional training in geographical sciences so that the student can secure a sound background for further research and teaching and for immediate employment.

Program Requirement: This degree program requires 84 credit hours, a dissertation, a written comprehensive examination and an oral comprehensive examination.

Ph.D. students entering with a bachelor’s degree must complete 84 credit hours. These hours include 72 credit hours of course work and research at ASU and 12 dissertation hours. Entering students without a master’s degree can earn a master’s-in-passing upon the completion of 30 credit hours at ASU, including GCU 529 Geographic Thought, GCU 585 Advanced Research Methods and one seminar (GCU/GPH 591), and passing the School’s Research and Field Examination.

Ph.D. students entering with a master’s degree must complete 54 credit hours. These include 42 credit hours of combined course work and research hours at ASU and 12 dissertation hours. The Ph.D. program includes two required courses (GCU 529 Geographic Thought, GCU 585 Advanced Research Methods), two seminars (GCU/GPH 591) and additional course work or research hours as selected by the student in consultation with an advisory committee.
Admission Requirements: Applicants must submit the Graduate College online application.

The School of Geographical Sciences admits students to its Ph.D. program with either a master's or a bachelor's degree in geography or a related field. We welcome applicants without geography degrees. Incoming students must demonstrate or attain competence in cartography and quantitative methods and complete other basic coursework that will enable them to pursue graduate studies in their area of specialization.

Applications for the Ph.D. program must be accompanied by the applicant's scores on the GRE (verbal and quantitative) and three letters of recommendations from professors. All applications are reviewed by the graduate recruiting and admissions committee and the director of geographical sciences.

Contact:
School of Geographical Sciences and Urban Planning
http://geography.asu.edu
geographyadvising@asu.edu
COOR 5673
480/965-7533

Geological Sciences (MNS) LANATSCIMN
College of Liberal Arts and Sciences

Official Degree Awarded: MNS Natural Science (Geological Sciences)

Program Description: The School of Earth and Space Exploration participates in the program leading to the M.N.S. in geological sciences. This interdisciplinary degree is designed to meet the needs of professionals seeking a graduate level degree. The program offers the opportunity for interdisciplinary graduate training in the natural sciences (biological sciences, mathematics and physical sciences) and cognate areas.

The degree program is especially suited for individuals who desire professional training rather than research training. Because of designed flexibility, the degree also offers the opportunity for individualized professional graduate programs depending upon the backgrounds and goals of the students. Students are expected to emphasize course work in two or more areas of concentration. The program must be interdisciplinary.

Program Requirement: The M.N.S. in geological sciences requires 30 credit hours and an applied project. The supervisory committee, consisting of three faculty members, is appointed by the dean of the Graduate College upon the recommendation of the chair of the academic unit in which the graduate advisor serves as a faculty member. The supervisory committee is formed soon after the student has been admitted to the degree program. The graduate advisor and student suggest names of persons to serve on the supervisory committee. The composition
of the supervisory committee must reflect the interdisciplinary nature of the program.

A program of study is recommended by the supervisory committee after conferring with the student. While the minimum number of credit hours required for the degree is 30, more may be required by the supervisory committee depending upon the background of the student and the nature of the proposed program. In some cases undergraduate courses may be required to remove deficiencies. A thesis is optional. A final written or oral examination, or both, is required. Each examination is administered by the supervisory committee.

Admission Requirements: See admission to the Graduate College. A prerequisite for admission is the availability of resources in the School of Earth and Space Exploration and having a faculty member in the school serve as a graduate advisor. The submission of scores on the GRE (verbal, quantitative and analytical) is required of all applicants.

Contact:
Department of Geological Sciences
http://sese.asu.edu/
seseinfo@asu.edu
PSF 686
480/965-5081

Geological Sciences (MS) LAGEO
College of Liberal Arts and Sciences

Official Degree Awarded: MS Geological Sciences

Program Description: The M.S. in geological sciences program is administered by the School of Earth and Space Exploration. The program is designed to provide fundamental graduate training in geology and to prepare the student for certain careers in geology, geophysics, geochemistry, planetary geology and related fields, or for further graduate study.

Program Requirement: The M.S. consists of a minimum of 30 credit hours of work beyond the bachelor’s degree; 20 or more credit hours consist of course work other than research and thesis. The student, with the approval of the advisor and supervisory committee (formed upon enrollment), selects courses that make a coherent program of study.

Each M.S. candidate must include on the program of study one hour of GLG 500 RM: Geology Colloquium and six hours of GLG 592 Research and GLG 599 Thesis, at least three of which must be GLG 599 Thesis. A maximum of six credit hours of thesis may appear on a program of study. One-half of the credit hours applicable toward the degree must be in geological sciences courses; the remainder may include work either in geological sciences or in related fields.
**Thesis Requirements:** A research-based thesis is required. The final examination is an oral defense of that thesis.

**Admission Requirements:** Applicants must submit the Graduate College online application.

Students applying for admission to the geological sciences M.S. program must submit:

1. GRE scores (verbal, quantitative and analytical).
2. Official transcripts.
3. Three letters of recommendation.

The deadline for applications for the fall term is Jan. 5.

**Contact:**
Department of Geological Sciences  
http://sse.sese.asu.edu  
sese@asu.edu  
PSF 686  
480/965-5081

**Geological Sciences (PhD) LAGEOSCPHD**  
College of Liberal Arts and Sciences

**Official Degree Awarded:** PHD Geological Sciences

**Program Description:** The Ph.D. in geological sciences program is administered by the School of Earth and Space Exploration. The program is designed to develop creative scholarship and to prepare the student for a professional career in the geological sciences including geology, geophysics, geochemistry, planetary geology and related fields.

**Program Requirement:** This degree program requires 84 credit hours, a dissertation, a written comprehensive examination and an oral exam. The program of study for the Ph.D. is selected with the recommendation of the student’s supervisory committee. Each program of study must include 24 credit hours of research and dissertation. ASU Graduate College policies and procedures must also be met for admission into the program and for fulfilling the degree requirements.

**Foreign Language Requirements:** None.

**Comprehensive Examination:** Ph.D. candidacy is earned on the basis of a written component and an oral component. The written examination is in the form of two written research projects. The oral exam consists of an oral defense of the two projects.
Dissertation Requirements: A dissertation is required that is based on original work demonstrating creativity in research and scholarly proficiency in the subject area.

Final Examination: A final oral examination in defense of the dissertation is required.

Admission Requirements: Applicants must submit a Graduate College online application. Students applying for admission to the Ph.D. in geological sciences program must also submit scores on the GRE (verbal, quantitative and analytical) in addition to transcripts, three letters of recommendation and a statement of purpose. The deadline for applications for fall semester is Jan. 5.

Students may be admitted to the program with a bachelor’s or master’s degree in a related field. Up to 30 credit hours of master’s-level course work in a related field can be accepted toward fulfillment of the Ph.D. requirements.

Contact:
Department of Geological Sciences
http://sese.asu.edu
seseinfo@asu.edu
PSF 686
480/965-5081

German (MA) LAGERMMA
College of Liberal Arts and Sciences

Official Degree Awarded: MA German

Program Description: The faculty in the School of International Letters and Cultures offers graduate programs leading to the M.A. degree with a major in German. Students admitted to the M.A. program with a major in secondary education may elect German as their subject matter field.

Program Requirement: The program of study for the M.A. includes a minimum of 30 credit hours of graduate-level work and a thesis, as approved by the candidate’s supervisory committee. The program must include a 500-level bibliography and research methods course offered by the department. When approved by the candidate’s supervisory committee, nine hours in another language or in closely related courses may be included in the program.

Comprehensive Examination: All candidates are required to pass a comprehensive written or oral examination designed to evaluate the candidate’s knowledge in the area of specialization. In lieu of a traditional thesis for an M.A. in German, a student may opt for a nonthesis project. Candidates for the M.A. in German will be provided with a current graduate student handbook.
Admission Requirements: Students interested in applying for this program must submit a Graduate College online application. Candidates for the M.A. should, upon entrance, present the equivalent of an undergraduate major in the language in which the degree is sought. Those who lack this background, but who show strong potential and meet Graduate College admissions requirements, may be admitted to a graduate program on a provisional basis, pending removal of specified deficiencies. These deficiencies must be completed in addition to the regular program of study for the master’s degree.

Contact:
School of International Letters and Cultures
http://silc.asu.edu/graduate
silc@asu.edu
LL 440
480/965-6281

History (MA) LAHISTMA
College of Liberal Arts and Sciences

Official Degree Awarded: MA History

Program Description: The faculty in the Department of History offer a graduate program leading to the M.A. in history. Candidates are offered an opportunity to develop knowledge of a specific historical field, to study comparative history and to learn research techniques.

Program Requirement: A minimum of 30 credit hours of graduate studies are required for a master’s degree in history: 24 credit hours of course work, plus six hours of thesis research credits (HST 599). With the approval of the supervisory committee, candidates may take up to six credit hours of closely related course work in another academic unit.

Master’s students select a primary field and a research specialization. Available primary fields include:

- North America.
- Europe.
- East/Southeast Asia.
- Latin America.
- Public history. Note: public history students pursue a double concentration, e.g. public history and North American history, or public history and European history. For public history information and requirements see http://history.clas.asu.edu/publichistory.

Advising: At the beginning of the first semester of study, the student, in consultation with the graduate director, selects a faculty advisor who will help direct the student to the completion of the required course work. Normally, the
advisor is selected, at least tentatively, prior to enrollment or within the first six weeks of the fall semester. The faculty advisor helps the student select the other two members of the supervisory committee and together they develop the program of study. The advisor, with the candidate, is primarily responsible for determining the program of study, selecting the topic of the thesis or of the thesis equivalent, and guiding the student’s research. The second and third committee members must be selected by the time the program of study is submitted at the end of the first year.

**Thesis:** The culminating experience of the master’s degree program is the writing, presentation and defense of a thesis based on an original research project. The thesis, an extended essay of approximately 100 pages, addresses a topic chosen by the student in consultation with the faculty advisor who serves as chair of the supervisory committee. The thesis explores a limited subject in depth, analyzing, explaining and drawing conclusions from the information gleaned from primary and secondary sources. The thesis thereby demonstrates the student’s ability to do research in the primary sources of the field, survey and synthesize the relevant secondary literature on the topic, organize and develop a topic, analyze and argue points cogently and write proficiently.

**Admission Requirements:**

1. Graduate College online electronic application: Students applying to a degree program such as the master’s program and the scholarly publishing certificate program are required to submit two separate applications (an application for the degree program and one for the certificate program).
2. Transcripts: Submit official transcripts to the Graduate College. The Department of History will accept unofficial copies.
3. GRE scores: A report of the scores received on the GRE must be submitted to the Graduate College. Scores should be no more than five years old.
4. Letter of application: Address a letter of about 500 words in length to the history department explaining the applicant’s interest in graduate study at ASU, the geographic and thematic areas of emphasis the student is planning to pursue and a statement of career goals. Upload the letter into the online application.
5. Résumé: The applicant must upload a resume into the online application.
6. Data form: The applicant must upload a data form into the online application.
7. Writing sample: The applicant must submit a sample of written work. The writing sample may be an article (published or unpublished), a research paper or any other extended sample of the applicant’s expository skill no longer than 35 pages in length. Longer writing samples should not be submitted without first consulting the graduate director. Large files should be submitted as .txt files.
8. Assistantship application: The application form for a graduate assistantship is optional.
9. Reference letters: The applicant must submit at least three letters of reference from faculty or others qualified to speak to the suitability for graduate study.

10. Students applying from outside the United States whose native language is not English must follow Graduate College guidelines demonstrating English language proficiency. See http://graduate.asu.edu/admissions/international.html#credentials.

Contact:
School of Historical and Critical Inquiry
http://history.clas.asu.edu
graduate.history@asu.edu
COOR 4481
480/965-3226

**Immigration Studies (Grad Certificate) LAIMMSTUCE**

**Official Degree Awarded:** CERT Immigration Studies (Certificate)

**Program Description:** The immigration studies graduate certificate program provides students with an understanding of the causes and consequences of international migration as well as relevant professional and research training opportunities. The program prepares graduates for future study in graduate and professional schools or for careers as immigration practitioners and advocates in non-governmental organizations, local and federal government agencies, as well as other private and public institutions serving immigrant and refugee communities. The objective of the certificate program is to offer both traditional academic training through course work and research and practical experience working with local immigrant/refugee communities.

**Program Requirement:** The certificate consists of 15 total credit hours, of which 12 hours will be course work and three hours will be either an internship or a research project. All students will be required to take either ASB 570 Immigration to the United States, JUS 555 Immigration and Justice or SOC 591 Sociology of Immigration as a core course. Students will also take three approved elective courses on immigration. For a list of approved electives, please contact the school.

Students will be required to complete a three-credit culminating experience, which can be an internship or a research paper.

**Internship:** Students may do an internship with Phoenix-based, nongovernmental organizations or government agencies that provide services to immigrants and refugees. Such internships will give them professional training and actual experience working with immigrant/refugee communities. They can be arranged for academic credit through CLASWorks Internship Program (ABS 584). Students will be required to write a 10- to 15-page report describing the organization and its specific internship work, as well as assessing the effectiveness and impact of the organization and/or
their own work on immigrants. Students can also use their internship experience in order describe and analyze an issue facing immigrants and their communities.

Research: Students may enroll in three credits of research with a faculty member in order to do an independent research project. They must write a substantial research paper based on field research in a local immigrant community, library/archival research or readings on an immigration topic.

Certificate students may choose to specialize in the social sciences, the humanities, or Mexican and Latino immigrants in the U.S. Although the program emphasizes Latino immigration, given the nature of the immigration courses offered at ASU and the preponderance of Latino immigrant communities in the Phoenix area. Students will have the opportunity to take broader courses focusing on global migration and other immigrant groups, as well as work with local Asian/Southeast Asian immigrants and refugee communities.

All requirements for the certificate program should be completed within a three-year time limit with a cumulative grade point average of at least 3.00. Students who require more time to finish the program (because of their part-time status or lack of desirable/available courses) must obtain approval from the executive committee.

For students currently enrolled in an ASU graduate degree program, applicable certificate courses may count towards their degree program with the approval and consent of the degree granting program. For certificate students who are later admitted to an ASU graduate degree program, up to 12 credit hours from the certificate program may count towards their doctoral degree or up to nine credit hours may count towards their master’s degree with the approval and consent of the degree-granting program.

Admission Requirements: All applicants must complete the Graduate College online application form and meet the following criteria:

1. Earned a bachelor’s degree from a regionally accredited institution or an international equivalent credential.
2. Have achieved a minimum GPA of 3.00 in the last 60 hours of their bachelor’s degree.
3. Meet all Graduate College admission criteria.

Contact:
School of Human Evolution & Social Change
http://shesc.asu.edu/immigration_studies_certificate
shescgrad@asu.edu
SHESC 233
480/965-6213
Infant - Family Practice (MAS) LACDEMAS
College of Liberal Arts & Sciences

Official Degree Awarded: MAS Infant Family Practice

Program Description: This self-contained accelerated program provides high-quality course work and supervised internship experiences designed to train professionals to work in prevention and intervention programs serving families with infants, toddlers and preschool-age children.

The program prepares individuals for positions in a variety of professional capacities including child abuse prevention, infant mental health, early intervention, family support and child care and early childhood administration.

Course work prepares students for professional endorsement by the Infant-Toddler Mental Health Coalition of Arizona’s Endorsement for Culturally Sensitive, Relationship-Based Practice Promoting Infant Mental Health.

Program Requirement: The M.A.S. in infant-family practice requires the successful completion of a minimum of 30 credit hours, and an applied project, including required course work and an internship in a community placement approved by the M.A.S. in infant-family practice faculty. Internships are expected to last approximately 12 months. Students must maintain a GPA of 3.00 in all course work and satisfactorily meet the expectations of the agency supervising their internship.

Foreign Language Requirements: None

Thesis Requirements: None

GRE Scores: GRE scores are waived for this program.

Admission Requirements: Applicants must submit the Graduate College online application.

Admission to the program is determined by the following criteria:

1. Admission to the ASU Graduate College.
2. Three letters of recommendation from individuals familiar with the applicant’s academic background.
3. Official transcripts of the student’s academic record.
4. A personal statement.

In addition, selected candidates will be contacted for an interview.

Contact:
School of Social/Family Dynamics
Justice Studies (MS) LAJUSSTMS
College of Liberal Arts and Sciences

Official Degree Awarded: MS Justice Studies

Program Description: The M.S. in justice studies is designed to prepare students for professional positions in justice-related organizations, for teaching in community colleges and for further study and research in the justice field.

Areas of Study
Students use elective courses to develop a specialization in an area relevant to their own interests and consistent with the school's focus on the following areas:

- Citizenship, migration and human rights.
- Globalization, sustainability and economic justice.
- Law, policy and social change.
- Media, technology and culture.
- Social identities and communities.

Program Requirement: The M.S. program has two options: a thesis or an applied project.

Thesis option
The thesis option requires the completion of 36 credit hours, six of which are JUS 599 Thesis. To satisfy the thesis requirement for the degree, candidates must write a thesis and defend it in an oral examination conducted by the student's advisory committee.

Applied project option
The applied project option requires the completion of 36 credit hours, six of which are JUS 593 Applied Project. Candidates pursuing the applied project option must present their applied project and defend it in an oral examination conducted by the faculty member who supervises the project and the graduate programs director or designated representative. The applied project typically includes a brief literature review to identify the nature of the issue or problem and a description of the methodology used and, if relevant, of the program studied, followed by an analysis.

Each student's program is developed in concert with the advisory committee. The program of study has three major categories: foundation courses, elective courses and thesis and applied project requirements. The required foundation courses provide students with a fundamental understanding of the theories, methods and analytic techniques associated with the study of justice. The foundation courses
include:

JUS 500 Justice Research Methods (3)
JUS 501 Justice Theory (3)
JUS 509 Statistical Problems in Justice Research (3)
JUS 521 Qualitative Data Analysis and Evaluation (3)

Admission Requirements: In addition to the general admission requirements of the Graduate College, applicants must submit all of the following materials by Dec. 14 for fall admissions:

1. GRE scores or LSAT score taken within the last five years.
2. Transcripts.

Send these materials to:

Graduate College
Arizona State University
P.O. Box 871003
Tempe, AZ 85287-1003

Applicants must submit these items directly to the School of Justice and Social Inquiry by the same deadline:

1. Personal statement (800 to 1000 words) outlining areas of interest, educational and career goals.
2. Three letters of recommendation (academic, if possible).
3. A writing sample.

Send these materials to:

School of Justice and Social Inquiry Graduate Programs
Arizona State University
P.O. Box 870403
Tempe, AZ 85287-0403

Contact:
School of Social Transformation
http://sjsi.clas.asu.edu
graduate.justice@asu.edu
WILSN 217
480/965-6008

Justice Studies (PhD) LAJUSSTPHD
College of Liberal Arts and Sciences

Official Degree Awarded: PHD Justice Studies
**Program Description:** The doctoral program in justice studies is an interdisciplinary degree program offered through the auspices of the School of Justice and Social Inquiry. The program integrates philosophical, legal and ethical approaches with social science and humanities perspectives to study five areas of interest:

- Citizenship, migration and human rights.
- Globalization, sustainability and economic justice.
- Law, policy and social change.
- Media, technology and culture.
- Social identities and communities.

The School of Justice and Social Inquiry is recognized as a leader in the interdisciplinary study of justice and a pioneer in the establishment of a full-fledged program in the field.

**Program Requirement:** This degree program requires 84 credit hours, a dissertation and a written comprehensive examination. The doctoral program requires that students complete three foundation courses as a part of their course work for the Ph.D. in justice studies. Students must earn a grade of “B” (3.00) or higher in each of the foundation courses:

- JUS 620 Justice Research Methodology (3)
- JUS 630 Data Analysis for Justice Research (3) or JUS 650 Advanced Qualitative Data Analysis (3)
- JUS 640 Theoretical Perspectives on Justice (3)

Students entering the doctoral program with a master's or J.D. degree are required to complete 54 credit hours:

1. Twelve credit hours are earned as dissertation research.
2. Nine hours as Ph.D. core courses.
3. Fifteen credit hours as elective course work.
4. Eighteen credit hours are comprised of any combination of additional elective courses, reading or conference hours, or research hours.

Students entering the doctoral program without a master's or JD degree are required to complete 84 credit hours:

1. Twelve credit hours are earned as dissertation research credit.
2. Twelve credit hours as 500-level foundation courses.
3. Nine credit hours as required Ph.D. courses.
4. Twenty-four credit hours as elective credit.
5. Twenty-seven credit hours are comprised of any combination of additional elective courses, reading and conference hours or research hours.

Academic Catalog Archive 2009-10 496
Admission Requirements: In addition to the general admission requirements of the Graduate College, applicants must submit the following materials by Dec. 14 for fall admissions:

1. GRE scores or LSAT score taken within the last five years
2. Transcripts

Send these materials to:
Graduate College
Arizona State University
P.O. Box 871003
Tempe, AZ 85287-1003

Applicants must submit these items directly to the School of Justice and Social Inquiry by the same deadline:

1. A personal statement (800-1000 words) outlining areas of interest, educational and career goals.
2. Three letters of recommendation (academic, if possible).
3. A writing sample.

Send these materials to:
School of Justice and Social Inquiry Graduate Programs
Arizona State University
P.O. Box 870403
Tempe, AZ 85287-0403

Contact:
School of Social Transformation
http://sjsi.clas.asu.edu
graduate.justice@asu.edu
WILSN 217
480/965-6008

Kinesiology (PHD) LAKINEPHD
College of Liberal Arts and Sciences

Official Degree Awarded: PHD Kinesiology

Program Description: The Ph.D. in kinesiology is an individualized, interdisciplinary program that integrates graduate courses from a variety of academic units to provide a sound foundation for research leading to a dissertation. Topics for these dissertations come from one of five research areas:

- Biomechanics.
- Motor behavior.
- Physiology of exercise.
- Exercise/health psychology.
Human physiology.

Program Requirement: The program of study consists of a minimum of 84 credit hours of graduate credit for applicants holding a bachelor's degree (54 credit hours of graduate work beyond the master's degree). Of the 84 credit hours, at least 42 credit hours (which may include research credit) of the approved Ph.D. program, and 12 dissertation credit hours must be completed after admission to a Ph.D. program at ASU. An individual program of study is selected in consultation with the student’s supervisory committee. The program of study reflects the interdisciplinary nature of the degree program.

Admission Requirements: In addition to meeting Graduate College requirements, students must submit to the Department of Kinesiology director, in care of the graduate studies committee:

1. A letter designating a potential area of interest, the name of a potential mentor or mentors (from the list of faculty) and a statement of career goals.
2. GRE scores (verbal, quantitative and writing).
3. A professional résumé.
4. Three letters of recommendation.
5. A Test of English as a Foreign Language (TOEFL) score for all applicants whose native language is not English.

Admission decisions are based on the compatibility of the applicant’s career goals with the purpose of the degree program, previous academic training and performance, GRE scores, recommendations, and match of research interests to those of available mentors.

To be considered for research or teaching assistantships, all application materials should be received before Dec. 1. Application materials are due before Aug. 1 for admission in the spring.

Contact:
Department of Kinesiology
http://kinesiology.clas.asu.edu/
kinesgraduate@asu.edu
PEBW 218
480/965-3875

Liberal Studies (MLSt) LAMLSMLS
College of Liberal Arts and Sciences

Official Degree Awarded: MLSt Liberal Studies

Program Description: The M.L.St. offers students interested in a multidisciplinary approach to human ideas and values an opportunity to expand their liberal arts background. The program is intended for students seeking a graduate degree that explores the integration of the humanities with political, religious, social and
scientific questions within their cultural contexts. The program connects students to the entire College of Liberal Arts and Sciences and integrates the disciplines.

**Program Requirement:** This program requires 30 credit hours and an applied project. Students are required to take three core classes, six electives and an applied project. We offer four core classes and students select any three of the four offered.

**Core Courses (three hours each):**

- MLS 501 Writing About Social Issues
- MLS 502 Religion, Health and Culture
- MLS 503 Ethics, Science and Culture
- MLS 504 Film and Media Studies

**Electives:**

18 hours of electives, no more than nine in the same department.

**Emphasis areas available:**

- Science, nature and creative nonfiction writing
- Gender, religion and culture
- Borders: migration, health and cultural identity

**Admission Requirements:** Applicants must submit the Graduate College online application.

**Contact:**

Dean, College of Liberal Arts and Sciences  
http://clas.asu.edu/liberalstudies/mls  
SS 214  
480/727-0819

**Liberal Studies - Film and Media Studies (MLSt) LAFMSMLS**  
College of Liberal Arts and Sciences

**Official Degree Awarded:** MLSt Liberal Studies (Film and Media Studies)

**Program Description:** The M.L.St. in film and media studies offers students interested in a multidisciplinary approach to human ideas and values an opportunity to expand their liberal arts background through the study of film and media in society. The program is intended for students seeking a graduate degree that explores the integration of the humanities with political, religious, social and scientific questions within their cultural contexts. Studies focus on the aesthetics and theory of film and media. The program connects students to the entire College of Liberal Arts and Sciences and integrates the disciplines.
Program Requirement: This degree program requires 30 credit hours and an applied project. Students are required to take three core classes, six electives and an applied project. We offer four core classes and students select any three of the four offered.

Core Courses (three hours each):

- MLS 501 Writing About Social Issues
- MLS 502 Religion, Health and Culture
- MLS 503 Ethics, Science and Culture
- MLS 504 Film and Media Studies

Electives:

18 hours of electives

Admission Requirements: Applicants must submit a Graduate College online application.

Contact:
Dean, College of Liberal Arts and Sciences
http://clas.asu.edu/liberalstudies/mls
SS 214
480/727-0819

Linguistics (Grad Certificate) LALINGUICE
Official Degree Awarded: CERT Linguistics (certificate)

Program Description: This interdisciplinary graduate certificate in linguistics offers students in several fields the opportunity to gain an understanding of the way in which languages are structured, how they are acquired and how they vary over time, space, social distance and situational contexts.

The skills acquired through the completion of the core courses for this certificate include analytical abilities, critical thinking, problem solving and communication skills. In addition, the knowledge acquired in the areas of discourse analysis and pragmatics makes students aware of the necessity to use appropriate registers and styles when creating written documents or oral presentations to different audiences.

Program Requirement: This certificate program requires 18 credit hours of course work. The required nine credit-hour core of the certificate consists of courses in phonology, syntax and discourse analysis/pragmatics. The other three courses (nine credit hours) may be chosen from fields such as second language acquisition, applied linguistics, sociolinguistics, computer science, education, language and culture.

Prerequisite: Introductory course in linguistics (taken at the upper-division or
graduate level, e.g., FLA 400/598, LIN 510, ASB 480/598 or equivalent). All
certificate course work must be completed with an average grade of “B” (3.00) or
higher.

**Admission Requirements:** Applicants must submit the Graduate College online
application and also apply to the English department by submitting:

1. A one- to two-page, a well-considered statement of purpose detailing the
   student’s background and reasons for wanting to complete the linguistics
certificate and photocopies of transcripts. Once the application is complete,
certificate program staff will contact the applicant to arrange an appointment
with the certificate faculty advisor.
2. Students must submit a copy of official transcripts from an undergraduate
degree institution attesting to the completion of the bachelor's degree from a
U.S. accredited institution or equivalent and/or showing any courses to meet
the language requirement and any core and/or elective courses already
taken toward the certificate. Proof of a complete bachelor's degree is only
required of students admitted to the certificate program while being
nondegree graduate students. Students who apply to the graduate certificate
in linguistics and are admitted to ASU as nondegree graduate students will be
denied admission to the certificate program if they do not hold a bachelor's
degree (or equivalent) from a regionally accredited institution or equivalent.
3. Graduate students who have already been admitted to an ASU degree
program will have already had their undergraduate credentials verified and
no additional verification will be required.

**Contact:**
Department of English
http://english.clas.asu.edu/gradstudies-lingcert
enggrad@asu.edu
LL 543B
480/965-3194

**Marriage and Family Therapy (MAS) LAMFTMAS**
College of Liberal Arts and Sciences

**Official Degree Awarded:** MAS Marriage and Family Therapy

**Program Description:** The purpose of this self-contained accelerated program is to
provide high quality course work and supervised internship experiences that meet
the degree requirements for licensure in the State of Arizona to practice marriage
and family therapy as determined and laid out by the Arizona Board of Behavioral
Health Examiners. The degree requirements are specified by the board and the
program a designed to train practitioners who wish to practice marriage and family
therapy.

**Program Requirement:** The M.A.S. in marriage and family therapy program requires
the successful completion of a minimum of 39 credit hours, and applied project,
including required course work and completion of 300 client-contact hours in a community internship placement approved by the M.A.S. in marriage and family therapy faculty. Internships are expected to last approximately 12 months. Students must maintain a GPA of 3.00 in all course work and satisfactorily meet the expectations of the agency supervising their internship.

**Foreign Language Requirements:** None

**Thesis Requirements:** None

**GRE Scores:** GRE scores are waived for this program.

**Transportation:** Students are required to have a vehicle and a valid Arizona driver’s license for internship placement.

**Oral Internship Examination:** An internship entrance examination to demonstrate readiness for internship placement will be held at the end of the first eight-week semester.

**Admission Requirements:** Applicants must submit the Graduate College online application.

Admission to the program is determined by the following criteria:

1. Admission to the ASU Graduate College.
2. Three letters of recommendation from individuals familiar with the applicant's academic background.
3. Official transcripts of the applicant's academic record.
4. A personal statement.

**Contact:**
School of Social/Family Dynamics  
http://ssfd.clas.asu.edu/  
ssfd@asu.edu  
SS 144  
480/965-6978

**Mathematics (MA) LAMATHMA**
College of Liberal Arts and Sciences

**Official Degree Awarded:** MA Mathematics

**Program Description:** The M.A. is designed to increase mathematical knowledge beyond the traditional bachelor’s degree in order to prepare students for careers requiring sophisticated mathematical skills. Students may choose to specialize in core mathematics areas, applied mathematics, statistics or mathematics education.

**Program Requirement:** The degree program requires:
1. Thirty credit hours of math or math related graduate course work.
2. Six of the 30 credit hours must consist of thesis (599).
3. The student must also complete a qualifying examination (MAT or STP prefix) or complete two sequences of qualifying courses (APM, MAT or STP prefix) with a minimum of 3.25 GPA.
4. A final oral examination in defense of the thesis. See the department Web site for examination information.

**Nonthesis Option**

The degree program requires:

1. Thirty credit hours of math or math related graduate course work.
2. Students must pass two qualifying examinations (MAT or STP prefix), or one qualifying examination (MAT or STP prefix).
3. Pass three APM courses with a minimum 3.0 GPA, or pass five APM core courses with a minimum 3.00 GPA. See the department Web site for examination information.

**Admission Requirements:** Applicants must submit the Graduate College online application. Minimum background for consideration of admission to the master’s program includes:

- A bachelor’s degree in mathematics or a closely related area with a 3.00 GPA (4.00 scale).
- Course work in linear algebra (equivalent to ASU course MAT 342).
- Advanced calculus (equivalent to ASU course MAT 371).

**Contact:**
School of Mathematical and Statistical Sciences
http://math.la.asu.edu/
grad@math.la.asu.edu
PSA 216
480/965-3951

**Mathematics (MNS) LAMATHMNS**
College of Liberal Arts and Sciences

**Official Degree Awarded:** MNS Natural Science (Mathematics)

**Program Description:** The M.N.S. offered by the Department of Mathematics and Statistics is for students interested in an interdisciplinary program with a major emphasis in mathematics and a minor emphasis in a related subject such as biology, engineering, education or economics.

**Program Requirement:** The degree program requires:
1. Thirty-six credit hours of graduate course work. Twelve of those credit hours must consist of coordinated graduate study outside the Department of Mathematics and Statistics.

2. Students must either pass one qualifying examination (MAT or STP prefix) or receive a minimum GPA of 3.00 in four courses of two qualifying sequences (APM, MAT, to STP prefix).

3. Under special circumstances a student may instead pass a written comprehensive examination. See the department Web site for examination information.

**Admission Requirements:** Applicants must submit the Graduate College online application. Minimum background for consideration of admission to the M.N.S. program includes:

- A bachelor's degree in mathematics or a closely related area with a 3.00 GPA (4.00 scale).
- Course work in linear algebra (equivalent to ASU course MAT 342).
- Advanced calculus (equivalent to ASU course MAT 371).

**Contact:**
School of Mathematical and Statistical Sciences
http://math.la.asu.edu/
grad@math.la.asu.edu
PSA 216
480/965-3951

**Mathematics (PhD) LAMATHPHD**
College of Liberal Arts and Sciences

**Official Degree Awarded:** PHD Mathematics

**Program Description:** The Ph.D. is intended for students with superior mathematical ability. It emphasizes a solid mathematical foundation and promotes creative scholarship in mathematics and its many related disciplines.

**Program Requirement:** Ph.D. students must complete 84 credit hours of course work which must include:

1. Twelve credit hours of dissertation (799).
2. Students must pass two qualifier examinations, a written comprehensive examination and an oral comprehensive examination.
3. Each student must write a dissertation and defend it orally in front of five dissertation committee members. See the department Web site for examination information.

**Admission Requirements:** Applicants must submit the Graduate College online application. Minimum background for consideration of admission to a graduate program in mathematics includes a bachelor's degree in mathematics or a closely
related area with a 3.00 GPA and course work in linear algebra (MAT 342) and advanced calculus (MAT 371).

Contact:
School of Mathematical and Statistical Sciences
http://math.la.asu.edu/
grad@math.la.asu.edu
PSA 216
480/965-3951

Mathematics Education (PhD) (Mathematics and Statistics Dept - Grades 9-20)
LAMTEPHD
College of Liberal Arts and Sciences

Official Degree Awarded: PHD Mathematics Education

Program Description: This interdisciplinary program accommodates students from a variety of academic backgrounds. It provides students with a solid foundation in graduate level mathematics as well as research skills and perspectives that will allow them to deal broadly with problems of mathematics teaching, learning, curriculum, technology, equity and policy. Conducting individual and collaborative research in the learning and teaching of mathematics is an integral part of the program.

Program Requirement: Ph.D. students must complete 84 credit hours of course work including:

1. Twelve credit hours of core mathematics education course work.
2. Twelve credit hours of core mathematics course work.
3. Six credit hours of research (792).
4. Twelve credit hours of dissertation (799).
5. Two qualifying examinations
6. A written comprehensive examination.
7. An oral prospectus defense.
8. Each student must write a dissertation and defend it orally in front of five dissertation committee members.

See the department Web site for examination information.

Admission Requirements: Applicants must submit the Graduate College online application. Minimum background for consideration of admission to the graduate program in mathematics education includes a M.A. in mathematics or closely related area with a 3.00 GPA (4.00 scale) or a B.S. in mathematics or closely related area with exceptionally high grades and advanced course work in mathematics.

Students must be competitive in an applicant pool as evidenced by:

1. Two faculty letters of recommendation.
2. A statement of educational and career goals.
3. GRE scores of 700 quantitative and 500 verbal.

Contact:
School of Mathematical and Statistical Sciences
http://math.la.asu.edu/graduate/mathed.html
grad@math.la.asu.edu
PSA 216
480/965-3951

Medieval Studies (Grad Certificate) LAMEDSTCE
Official Degree Awarded: CERT Medieval Studies (certificate)

Program Description: The certificate program prepares students for advanced study or for academic positions by augmenting their skills and knowledge, thereby making them more equipped to handle the demands of their fields.

Program Requirement:

Medieval Latin: one semester (3-4 credit hours) for M.A. students, two semesters (6-8 credit hours) for Ph.D. students, with proficiency attested either by achieving a grade of “B” (3.00) or better in the medieval Latin course(s) or by satisfactory performance on the medieval/Renaissance Latin examinations offered by the Centre for Medieval Studies at the University of Toronto. (This requirement presupposes two years or 12 to 16 credit hours or equivalent of undergraduate training in Latin.)

Medieval vernacular language (e.g., Old English, Old Norse, Old French): two semesters (six credit hours) for M.A. students, three semesters (nine credit hours) for Ph.D. students.

Paleography: one semester (three credit hours).

Course work outside the major discipline: two semesters (six credit hours) for M.A. students, three semesters (nine credit hours) for Ph.D. students.

Thesis or dissertation in the area of medieval studies (three to six credit hours): for students not concentrating in the area for their degree. Students in the area fulfill the thesis requirement by writing a thesis or dissertation in the field.

Admission Requirements: All applicants to any certificate program must submit the Graduate College online application. Graduate students admitted to a degree program in any field may earn one of two M.A.- or Ph.D.-level certificates: the certificate in medieval studies or the certificate in Renaissance studies.

Contact:
School of Historical and Critical Inquiry
http://www.asu.edu/clas/acmrs
acmrs@asu.edu
Microbiology (MS) LAMICROMS
College of Liberal Arts and Sciences

Official Degree Awarded: MS Microbiology

Program Description: The graduate programs are designed to prepare students for careers in teaching and in research on various aspects of microbiology in educational institutions, industry or government agencies.

Program Requirement: A minimum of 30 credit hours of graduate credit are required, of which at least six hours must be thesis and research credit. The program is planned by the student in consultation with the supervisory committee. Students are expected to achieve, through 18 credit hours of course work, a fundamental understanding of the following subdisciplines:

- Bacterial genetics.
- Immunology.
- Molecular biology.
- Physiology and metabolism.
- Virology.

If these course requirements are completed, no comprehensive examination is required. Alternatively, the student may demonstrate this fundamental understanding through the combination of a comprehensive examination, prepared by the student’s supervisory committee, and 12 credit hours of formal course work.

A thesis is required along with a final oral examination covering the thesis and related to subject matter.

Admission Requirements: Applicants must submit the Graduate College online application. Applicants should have:

1. Completed the requirements for an undergraduate major in biology, microbiology, chemistry or related discipline, with an adequate background in related courses in plant biology or mathematical and physical sciences.
2. A 3.00 minimum GPA during the student’s last two years or last 60 credit hours.
3. Minimum GRE scores in verbal (50th percentile), quantitative (70th percentile) and writing (5).
4. Test of English as a Foreign Language (TOEFL) scores of 250 computer-based, 600 paper-based or 100 Internet-based, for non-native English speakers.
Microbiology (PhD) LAMICROPHD
College of Liberal Arts and Sciences

Official Degree Awarded: PHD Microbiology

Program Description: The graduate programs are designed to prepare students for careers in teaching and in research on various aspects of microbiology in educational institutions, industry or government agencies.

Program Requirement: The plan of study is designed by the student and the supervisory committee, consisting of a major professor and three additional faculty members. The program is tailored to the needs of the individual student.

1. Eighty-four credit hours are required.
2. Twelve hours of dissertation are required.
3. The remainder hours are comprised of coursework showing breadth in microbiology and related disciplines, seminars and research.
4. Written and oral comprehensive examinations are required in order to advance to candidacy.
5. A formal defense of the final written dissertation is required prior to graduation.

Admission Requirements: Applicants must submit the Graduate College online application. Admission criteria are as follows. Applicants should have:

1. Completed the requirements for an undergraduate major in biology, microbiology, chemistry or related discipline, with an adequate background in related courses in plant biology or mathematical and physical sciences.
2. A 3.00 minimum GPA during the student’s last two years or last 60 credit hours.
3. Minimum GRE scores in verbal (50th percentile), quantitative (70th percentile) and writing (5).
4. Test of English as a Foreign Language (TOEFL) scores of 250 computer-based, 600 paper-based or 100 Internet-based for non-native English speakers.

Contact:
School of Life Sciences
http://sols.asu.edu/grad/
sols.grad@asu.edu
Molecular/Cellular Biology (MS) LACELLMS
College of Liberal Arts and Sciences

Official Degree Awarded: MS Molecular and Cellular Biology

Program Description: The M.S. in molecular and cellular biology degree prepares students for careers that span traditional disciplinary boundaries. The broad-based training provides the necessary skills for professional careers in academic institutions, governmental institutions and industry, particularly those related to health and chemical sciences.

The participating faculty in this interdisciplinary degree program are drawn primarily from the Department of Chemistry and Biochemistry and the School of Life Sciences, with additional faculty from the departments of:

- Bioengineering.
- Chemical and materials engineering.
- Kinesiology.
- Physics.
- Psychology.
- The School of Human Evolution and Social Change.

One striking aspect of studies in this broad area of biological science is the interdisciplinary nature of the field. Similar approaches and techniques are used for studies of biological systems whether they are viral, bacterial, plant or animal.

Program Requirement: Thirty credit hours are required. A minimum of 10 designated credit hours of MCB courses and six hours of research and thesis are required. The remaining courses are selected by the student in consultation with the supervisory committee.

Admission Requirements: All applicants must submit the Graduate College online application. Admission criteria are as follows:

1. A 3.00 minimum GPA during the student's last two years or last 60 credit hours.
2. Minimum GRE scores in verbal (50th percentile), quantitative (70th percentile) and writing (5).
3. Test of English as a Foreign Language (TOEFL) scores of 267 computer-based, 600 paper-based or 100 Internet-based for non-native English speakers.

Contact:
School of Life Sciences
Molecular/Cellular Biology (PhD) LACELLPHD
College of Liberal Arts and Sciences

Official Degree Awarded: PHD Molecular and Cellular Biology

Program Description: The Ph.D. in molecular and cellular biology degree prepares students for careers that span traditional disciplinary boundaries. The broad-based training provides the necessary skills for professional careers in academic institutions, governmental institutions, and industry, particularly those related to health and chemical sciences. This interdisciplinary degree program includes a doctoral concentration in computational biosciences. The participating faculty in this interdisciplinary degree program are drawn primarily from the Department of Chemistry and Biochemistry and the School of Life Sciences, with additional faculty from the departments of bioengineering, chemical and materials engineering, kinesiology, physics, psychology and the School of Human Evolution and Social Change. One striking aspect of studies in this broad area of biological science is the interdisciplinary nature of the field. Similar approaches and techniques are used for studies of biological systems whether they are viral, bacterial, plant or animal.

Program Requirement: The plan of study is designed by the student and the supervisory committee, consisting of a major professor and three additional faculty members; major professor and one other must be from MCB core faculty.

1. Eighty-four credit hours are required.
2. Twelve credit hours of dissertation are required and the remaining hours are comprised of core course work, seminars and research.
3. An oral and written comprehensive examination are required in order to advance to candidacy.
4. A formal defense of the final written dissertation is required prior to graduation.

Admission Requirements: All applicants must submit the Graduate College online application. Admission criteria are as follows:

1. A 3.00 minimum GPA during the student’s last two years or last 60 credit hours.
2. Minimum GRE scores in verbal (50th percentile), quantitative (70th percentile), and writing (5).
3. Test of English as a Foreign Language (TOEFL) scores of 267 computer-based, 600 paper-based or 100 Internet-based for non-native English speakers.

A GRE subject examination is strongly recommended.
Museum Studies (Grad Certificate) LAMUSEUMCE
Official Degree Awarded: CERT Museum Studies (certificate)

Program Description: The certificate may be taken independently or in conjunction with the M.A. in anthropology with a concentration in museum anthropology.

Program Requirement: Eighteen credit hours are required, which include 12 hours of required course work and a six-credit-hour internship at an approved museum.

Admission Requirements: In addition to the general requirements for admission to the Graduate College, the School of Human Evolution and Social Change requires applicants to provide:

1. A statement of their interests and professional goals.
2. Three letters of recommendation.

The certificate may be taken independently or in conjunction with the M.A. in Anthropology with a concentration in museum anthropology. Applicants who received their B.A. during the past ten years must also submit scores on the GRE. Undergraduate course work in anthropology is not a prerequisite for admission, but is generally advisable. Students may be admitted without such a background and may be required to acquire knowledge of general anthropology in a manner to be specified at the time of admission.

Contact:
School of Human Evolution & Social Change
http://shesc.asu.edu/graduate_studies
shescgrad@asu.edu
SHESC 233
480/965-6215

Nanoscience (PSM) LANANPSM
College of Liberal Arts and Sciences

Official Degree Awarded: PSM Nanoscience

Program Description: The P.S.M. in nanoscience is a cohesive program of interdisciplinary courses that provide the knowledge base required for research and innovation in nanoscience. The program incorporates courses in physics, chemistry and biochemistry, materials science and electrical engineering.
Commercial innovation is a particular target goal of the degree, including applications in optics, semiconductor electronics and optoelectronics, sensors, nano-medicine and healthcare. The P.S.M. in nanoscience program is suitable for working professionals as well as for students who have obtained traditional B.S. or M.S. in related fields.

Program Requirement: To be awarded the P.S.M. in nanoscience, students must complete 30 credit hours of coursework including an applied project. Core courses account for 15 of the 30 credits, including society- and intellectual-property-based courses in addition to core science courses. Many of the requisite elective courses are currently offered within the Departments of Physics and Chemistry and Biochemistry. Most are cross-listed with other units.

The program includes a two-semester, student-centered professional seminar where the central role of the program as a vehicle for innovation emerges. During the spring semester and summer session, students conduct an individual applied project in association with a research group. The degree does not require a thesis. Rather, the applied project forms the basis of the final capstone presentation.

Core Courses (two-three credit hours each)

- NAN 571 Quantum Physics for Nanoscience (three credits, initial summer session)
- NAN 593 Applied Project (three credits each, spring and final summer session)
- NAN 598 Nanoscience and Society (two credits, final summer session)
- NAN 598 Innovation and IP Management (two credits, final summer session)
- NAN 591 Professional Seminar (two credits each fall and spring)

The NAN 505 and 506 courses are designated as alternate core courses, which in some years will be given within the professional seminar. Three alternate program options may be found on the Web site.

Throughout the program, students interact with research faculty and other students in a variety of disciplines related to nanoscience. Students also meet with visiting speakers and industrialists in the Professional Seminar, as well as other seminars.

If taken full-time, the P.S.M. in nanoscience can be completed in twelve months (fall semester, spring semester and two summer sessions). Another option is our two-year, part-time program, which allows prospective students and their employers flexibility in scheduling their program of study.

Admission Requirements:
• Applicants who hold a bachelor’s degree from a regionally accredited institution in physics, chemistry or a related field are eligible to apply to the program.
• This program also seeks to attract students already employed in related areas, and who wish to become knowledgeable and skilled in nanoscience.
• GRE scores are not required for application, but will be taken into consideration if submitted.
• A Test of English as a Foreign Language (TOEFL), or equivalent, score for non-native English speakers will be required when applicable.
• Applications must be submitted online with accompanying materials as specified on the Graduate College Web site.

Contact:
Department of Physics
http://physics.asu.edu/graduate/psm/overview
nanoscience@asu.edu
PSF 470
480/965-3561

Philosophy (History and Philosophy of Science) MA LAHPSMA
College of Liberal Arts and Sciences

Official Degree Awarded: MA Philosophy (History and Philosophy of Science)

Program Description: Nationally, there is great interest in science and in understanding the nature of science and the forces that change scientific research. The job market in philosophy is strong for philosophers of science (and especially in the life sciences) with some positions remaining unfilled even when the market is intensely competitive in other areas. In addition, the history and philosophy of science is becoming a strong disciplinary emphasis within growing professional societies.

Some programs elsewhere focus primarily on philosophy or primarily on history, but those that bring the two together are regarded among the strongest in each area. The objective here is to provide a program for students who come to history and philosophy of science from the humanities, and who seek a career based in philosophical analysis of the sciences. We have the research strength competitive with any international program.

Program Requirement: Students will complete 30 hours of graduate course work for the M.S., which include:

- History of Science (3)
- Philosophy of Science (3)
- Topics in the History of Science (3)
- Topics in the Philosophy of Science (3)
- Research Methods in the History and Philosophy of Science (3)
Prospectus Writing (3)
Research and Thesis (12)

Admission Requirements: All applicants must submit the Graduate College online application. Applicants must possess a bachelor’s degree from a regionally accredited university or the equivalent and have attained a cumulative GPA in their last 60 credit hours of their bachelor’s degree of at least 3.00 (4.00 scale).

Contact:
School of Historical and Critical Inquiry
http://sols.asu.edu/grad
Sols@asu.edu
LSC 284
480/965-8927

Philosophy (History and Philosophy of Science) PHD LAHPS PHD
College of Liberal Arts and Sciences

Official Degree Awarded: PHD Philosophy (History and Philosophy of Science)

Program Description: This concentration combines solid training in the core areas of philosophy with an emphasis on interdisciplinary studies of the sciences, their history, epistemology, conceptual structure and impacts on society. This degree program is especially appropriate for students with a background in philosophy or those who wish to pursue a degree in philosophy, and who seek to broaden their disciplinary studies with an historical perspective. Applicants will typically come from undergraduate programs that have included philosophical training or with a master’s degree in philosophy. Science students are eligible as well, and will make up the core courses during their first years. Application is through the Department of Philosophy.

Nationally, there is great interest in science and in understanding the nature of science and the forces that change scientific research. The job market in philosophy is strong for philosophers of science (and especially in the life sciences) with some positions remaining unfilled even when the market is intensely competitive in other areas. In addition, the history and philosophy of science is becoming a strong disciplinary emphasis within growing professional societies. Some programs elsewhere focus primarily on philosophy or primarily on history, but those that bring the two together are regarded among the strongest in each area. The objective here is to provide a program for students who come to the history of philosophy and science from the humanities and who seek a career based in philosophical analysis of the sciences. We have the research strength competitive with any program internationally.

Program Requirement: Students will complete 84 hours of graduate course work for the Ph.D., which includes:
History of Science (3)
Philosophy of Science (3)
Topics in the History of Science (3)
Topics in Philosophy of Science (3)
Research Methods in History and Philosophy of Science (3)
Prospectus Writing (3)

Additional courses required for the degree include:

- A course in history of philosophy (3)
- A course in value theory (3)
- Advanced Logic or approved equivalent (3)
- Approved philosophy or other relevant courses (9)
- HPS 600 Lab (3 hours, one credit each)
- Research or elective courses approved by dissertation chair (33)

_Admission Requirements:_ All applicants must submit the Graduate College online application. Applicants must possess a bachelor's degree from a regionally accredited university or the equivalent and have attained a cumulative GPA in their last 60 credit hours of their bachelor’s degree of at least 3.00 (4.00 scale).

(Contact:
School of Historical and Critical Inquiry
http://sols.asu.edu/grad
sols@asu.edu
LSC 284
480/965-8927

_Philosophy (MA) LAPHILMA_
College of Liberal Arts and Sciences

_Official Degree Awarded:_ MA Philosophy

_Program Description:_ The M.A. in philosophy program is designed to prepare students either to teach philosophy at the community college level, to enter doctoral programs in philosophy at other institutions, or to be employed in any areas that require critical and analytical thinking (such as medicine, law, government or publishing).

_Program Requirement:_ There are two tracks of study for the M.A. in philosophy:

_Thesis Option_

1. Each student must take at least 24 credit hours of approved graduate-level courses, not including PHI 599 Thesis.
2. An additional six credit hours of PHI 599 Thesis is required (see Thesis Requirements below.)
3. Each student is required to take an approved graduate-level course of three credit hours or more in each of the following four major areas and to obtain at least a "B" (3.00) in each course: epistemology, history, metaphysics and value theory.

4. Each semester’s program of study must be approved by the Director of Graduate Studies.

5. Students must maintain a "B" (3.00) average or better in their graduate course work and at least a "B" (3.00) in the courses specified above.

Thesis Requirements

1. This written work must demonstrate the ability to carry out independent research in philosophy.

2. Each student must complete six credit hours of PHI 599 Thesis; no more than six credit hours of PHI 599 may count toward the 30 credit hour requirement.

3. At the end of the third semester of graduate work, each student shall form, with the approval of the Director of Graduate Studies, a thesis committee. One member, the “director,” shall chair the thesis committee. At least three members of the thesis committee, including the director, shall be members of the philosophy department.

4. After the thesis committee is formed, the student shall, within a reasonable time, present a thesis prospectus to that committee for approval.

5. Once the thesis committee has certified that the student’s thesis is sufficiently complete, the student shall present an oral defense of the thesis. The committee may still require changes in the thesis after the oral defense.

Nonthesis Option

1. Each student must take at least 27 credit hours of approved graduate-level courses, not including PHI 592 Research.

2. An additional three hours of PHI 592 Research is required to prepare the portfolio.

3. Each student is required to take an approved graduate-level course of three credit hours or more in each of the following four major areas and to obtain at least a “B” (3.00) in each course: epistemology, history, metaphysics, and value theory. An overall GPA of “B” (3.00) is required.

4. Each semester’s program of study must be approved by the director of graduate studies.

Portfolio Requirements

A portfolio is required. This written work must consist of two papers from one of the major areas and must demonstrate the ability to carry out independent research in philosophy. A final oral examination in defense of the portfolio is required.
Admission Requirements: Applicants must submit the Graduate College online application. All applications for admission to the M.A. in philosophy must be accompanied by:

Complete transcripts.

1. The applicant’s score in the GRE.
2. Three letters of recommendation from persons qualified to judge the applicant’s potential for graduate work in philosophy.
3. A sample of philosophical writing.
5. A T.A. application.

The graduate application, transcripts, GRE and Test of English as a Foreign Language (TOEFL) scores should be sent to:

Admissions Office
Graduate College
Arizona State University
P.O. Box 871003
Tempe, AZ 85287-1003

The letters of recommendation, philosophical writing sample, statement of purpose and T.A. application should be mailed to:

Director of Graduate Studies
Department of Philosophy
Arizona State University
P.O. Box 874102
Tempe, AZ 85287-4102

The application deadline is Feb. 15.

Contact:
School of Historical and Critical Inquiry
http://www.asu.edu/clas/philosophy/
philosophy@asu.edu
COOR 3309
480/965-5778

Philosophy (PhD) LAPHILPHD
College of Liberal Arts and Sciences

Official Degree Awarded: PHD Philosophy

Program Description: The Ph.D. in philosophy is designed to prepare students for careers as philosophers and teachers of philosophy, and in areas that may benefit from advanced training in philosophy, such as law, civil service and publishing.
Program Requirement: This degree program requires:

1. Eighty-four credit hours.
3. A written comprehensive examination.
4. An oral comprehensive examination.

The student’s program of study is selected by the student in consultation with the graduate director and the supervisory committee and is approved by the supervisory committee.

Course requirements

To insure breadth in the traditional areas of philosophy, students must pass with a grade of “B” (3.00) or better:

- Two graduate courses in history of philosophy.
- Two graduate courses in value theory.
- Four graduate courses in metaphysics and epistemology, including areas such as philosophy of language, of science and of mind.
- One advanced course in symbolic logic (400 or 500 level); students may satisfy the logic requirement by examination.

Foreign Language Requirement

None.

Comprehensive Examination

Students will be examined in their area of specialization and competence. The written and oral examinations are based on a bibliography compiled by the student and approved by the student’s advisory committee. Normally these examinations are taken after the student has completed at least 60 credit hours of graduate course work.

Dissertation Prospectus

Each doctoral candidate will prepare a prospectus of four to seven pages for the dissertation. The format and design of the prospectus will be determined by the candidate and committee chair. The prospectus should include the following:

2. Discussion of relevant literature.
3. Discussion of the approach to the project.
Ph.D. students achieve candidacy status in a letter from the dean of the Graduate College upon passing the comprehensive examinations and successfully defending the dissertation prospectus.

**Dissertation**

A dissertation based on original research is required. Research for the dissertation is supervised by a committee of at least three faculty members, appointed by the graduate director in consultation with the student. Students must enroll for a minimum of 12 credit hours of research or dissertation credit after admission to candidacy.

**Final examination**

An oral examination in defense of the dissertation is required.

*Admission Requirements:* All applicants must submit the Graduate College online application.

**Contact:**
School of Historical and Critical Inquiry  
http://www.asu.edu/clas/philosophy/  
philosophy@asu.edu  
COOR 3309  
480/965-5778

**Physics (MNS) LAPHYSMNS**
College of Liberal Arts and Sciences

*Official Degree Awarded:* MNS Natural Science (Physics)

*Program Description:* The M.N.S. curriculum provides interdisciplinary graduate training in physics, physical science or physics education. The degree is especially suited for individuals who desire professional training rather than research training. Designed for flexibility, the curriculum also features individualized professional graduate programs. These programs are well-suited to the backgrounds and goals of students. Students are expected to emphasize course work in two or more areas of concentration. The program must be interdisciplinary.

*Program Requirement:* A minimum of 30 credit hours is required for the degree. A thesis is optional. A final written or oral examination, or both, is required. Each examination is administered by the supervisory committee.

**Supervisory Committee**
• The supervisory committee, consisting of three faculty members, is appointed by the dean of the Graduate College upon the recommendation of the chair of the Department of Physics.
• The supervisory committee is formed soon after the student has been admitted to the degree program and must reflect the interdisciplinary nature of the program.
• The graduate advisor and the student suggest names of persons to serve on the supervisory committee. The supervisory committee recommends the plan of study, after conferring with the student.
• The supervisory committee may require more courses, depending upon the background of the student and the nature of the proposed program. In some cases undergraduate courses may be required to overcome deficiencies.

Teachers may enroll in these courses in order to earn credit towards recertification, or to pursue an M.N.S. For some courses, the prerequisites are two semesters of trigonometry-based college physics and an introductory calculus course. These courses are held during the summer. Depending on teacher interest, they may be offered at other times. Additional information about the M.N.S. for high school physics teachers is available at http://physics.asu.edu.

**Admission Requirements:**

- Requirements for admission are the availability of resources for the proposed program and a Department of Physics faculty member designated to serve as a graduate advisor.
- The submission of scores on the GRE (verbal, quantitative, and analytical) is required of all applicants.
- A Test of English as a Foreign Language (TOEFL) (or equivalent) score for non-native English speakers will be required when applicable.
- Applications must be submitted online with accompanying materials as specified on the Graduate College Web site. To obtain application forms, access http://physics.asu.edu.

**Contact:**
Department of Physics
http://physics.asu.edu
physics.grad@asu.edu
PSF 470
4809653561

**Physics (MS) LAPHYSIMS**
College of Liberal Arts and Sciences

**Official Degree Awarded:** MS Physics

**Program Description:** The M.S. in physics program provides graduate instruction and research experience appropriate to many physics-related careers. The structure of
the program is flexible enough to allow a wide range of programs of study and a wide range of student backgrounds. It is also suitable for part-time study.

Completion of the program requires a minimum of two years, with students typically taking courses for the first three semesters and completing a research project in their final semester. The student defends a master's thesis at the end of the program.

**Program Requirement:** This program requires 30 credit hours and a thesis. The M.S. in physics can emphasize either physics alone or physics in combination with other fields.

**Admission Requirements:** To be admitted to the M.S. in physics program without deficiencies, applicants should have adequate undergraduate preparation equivalent to an undergraduate major of 30 credit hours in physics and 20 credit hours in mathematics. Courses in analytic mechanics, electromagnetism and modern physics, including quantum mechanics, are particularly important.

Students applying for admission must submit:

1. Test scores for the verbal, quantitative and analytical sections of the GRE. Submission of scores for the physics GRE subject test is recommended although not mandatory.
2. A Test of English as a Foreign Language (TOEFL) (or equivalent) score for non-native English speakers will be required when applicable.
3. Applications must be submitted online with accompanying materials as specified on the Graduate College Web site.

Financial support in the form of teaching or research assistantships is contingent upon satisfactory performance in course work, timely completion of the final examination for the M.S. degree, and need and availability of such support. Students on probation are offered financial support only under exceptional circumstances.

**Contact:**
Department of Physics
http://physics.asu.edu/
physics.grad@asu.edu
PSF 470
480/965-3561

**Physics (PhD) LAPHYSIPHD**
College of Liberal Arts and Sciences

**Official Degree Awarded:** PHD Physics

**Program Description:** The Ph.D. in physics offered by the Department of Physics is intended for highly capable students having the interest and ability to pursue a career in independent research. The degree marks the transition from student of
physics to independent physicist. Ph.D. in physics graduate students are the heart and soul of research activities in any physics department.

The ASU graduate program in physics has over 100 Ph.D. students working with members of the physics graduate faculty, which extends beyond the departmental faculty to include Ph.D. faculty members from related disciplines, which currently include chemistry and biochemistry, biology, electrical engineering and materials science.

*Program Requirement:* This degree program requires:

1. Eighty-four credit hours.
3. A written comprehensive examination.
4. An oral comprehensive examination.

Ph.D. physicists enter careers ranging from academic faculty to industrial research to administration and management.

*Admission Requirements:* Applicants to the Department of Physics Ph.D. program must hold at least a baccalaureate degree from a recognized institution and must have had adequate undergraduate preparation equivalent to an undergraduate major of 30 credit hours in physics and 20 credit hours in mathematics.

Students applying for admission must submit:

1. Test scores for the verbal, quantitative, and analytical sections of the GRE. Submission of scores for the physics GRE subject test is also required.  
2. A Test of English as a Foreign Language (TOEFL) (or equivalent) score for non-native English speakers will be required when applicable.  
3. Applications must be submitted online with accompanying materials as specified on the Graduate College Web site.

Financial support in the form of teaching or research assistantships is contingent upon satisfactory performance in course work, timely completion of the final examination for the degree, and need and availability of such support.

*Contact:*
Department of Physics  
http://physics.asu.edu/physics.grad@asu.edu  
PSF 470  
480/965-3561

**Plant Biology (MS) LAPLBIOMS**  
College of Liberal Arts and Sciences

*Official Degree Awarded:* MS Plant Biology
Program Description: The plant biology graduate program is a multidisciplinary program that offers interdisciplinary training at the forefront of plant biology at levels of organization ranging from molecules to communities and landscapes. The M.S. program offers a broad range of research areas, from cell and molecular biology, biochemistry and biotechnology, to ecology, floristic and systematics. Although research training is focused primarily on acquiring basic knowledge, we offer opportunities for exposure to and participation in research with applied goals.

Program Requirement: This degree program requires 30 credit hours and a thesis. The program must include:

1. A minimum of three semester hours of research.
2. Three credit hours of thesis.
3. One hour of participatory seminar (PLB 591).

The program is planned by the student in consultation with the supervisory committee.

Admission Requirements: Applicants must submit the Graduate College online application. Applicants should have completed the following:

1. An undergraduate major in the plant sciences, biology or related discipline.
2. A 3.00 minimum GPA during the student’s last two years or last 60 credit hours.
3. Minimum GRE scores in verbal (50th percentile), quantitative (70th percentile) and writing (five).
4. Test of English as a Foreign Language (TOEFL) scores of 250 computer-based, 600 paper-based or 100 Internet-based, for non-native English speakers.

Contact:
School of Life Sciences
http://sols.asu.edu/grad/
sols.grad@asu.edu
LSC 226
480/965-1768

Plant Biology (PhD) LAPLBIOPHD
College of Liberal Arts and Sciences

Official Degree Awarded: PHD Plant Biology

Program Description: The plant biology graduate program is a multidisciplinary program that offers interdisciplinary training at the forefront of plant biology at levels of organization ranging from molecules to communities and landscapes.

The doctoral program offers a broad range of research areas:
• Cell and molecular biology.
• Biochemistry and biotechnology.
• Ecology.
• Floristics.
• Systematics.

Although research training is focused primarily on acquiring basic knowledge, we offer opportunities for exposure to and participation in research with applied goals.

*Program Requirement:* The Ph.D. in plant biology program requires:

1. Eighty‐four credit hours.
3. A written comprehensive examination.
4. An oral comprehensive examination.

The program must include a maximum of 12 hours dissertation credit and at least 30 hours of formal graduate course work. Two hours of PLB 591 participatory seminar are included in the required course work.

Courses numbered 590 or 790 (reading and conference) are not considered formal courses. The program is planned by the student in consultation with a supervisory committee, consisting of a major professor and three additional faculty members.

*Admission Requirements:* Applicants must submit the Graduate College online application.

Applicants should have completed:

1. An undergraduate major in the plant sciences, biology, or related discipline, with an adequate background in related courses in chemistry, mathematical and physical sciences.
2. A 3.00 minimum GPA during the student’s last two years or last 60 credit hours.
3. Minimum GRE scores in verbal (50th percentile), quantitative (70th percentile) and writing (five).
4. Test of English as a Foreign Language (TOEFL) scores of 250 computer-based, 600 paper-based or 100 Internet-based.
5. A GRE subject examination is strongly recommended.

*Contact:*
School of Life Sciences
http://sols.asu.edu/grad/
sols.grad@asu.edu
LS C226
480/965-1768
Political Science (MA) LAPOLSCMA
College of Liberal Arts and Sciences

Official Degree Awarded: MA Political Science

Program Description: The M.A. in political science program provides advanced education for students preparing for teaching, research or applied careers in political science. It may be taken as a terminal program or as a step toward eventual fulfillment of the requirements for the Ph.D. Students may apply directly to the doctoral program or master's program.

Program Requirement:

1. A minimum of 30 credit hours is required for the M.A. in political science.
2. This program includes both a thesis and nonthesis option. If the thesis option is followed, the program must include a combination of at least six credit hours of research (POS 592) and thesis (POS 599) credit.
3. All candidates must take POS 503 and the core course in the student's major and minor fields.
4. Each student must take a pass/fail one-credit-hour workshop course each semester.
5. In the spring of the first year, the student is required to take POS 598 ST: Teaching and Writing Workshop.
6. Additional hours must be taken in graduate-level courses and seminars. Each student is expected to take seminars each semester in his/her major field, minor field and an elective until course work is completed.
7. A maximum of six credit hours in approved courses taken outside the department and six hours of reading and conference (POS 590) courses may count toward the 30-hour requirement.

Admission Requirements: Applicants must submit the Graduate College online application.

The following items should be submitted to the Department of Political Science by February 1 in order to ensure recommendations for admission to the M.A. program beginning the following fall:

1. Scores from the verbal, quantitative and analytical sections of the GRE.
2. Three letters of recommendation from persons who can evaluate the applicant's academic performance and potential.
3. A career overview statement which describes the applicant's educational objectives.
4. A writing sample that best represents the applicant's thinking and writing skills.

Departmental application materials should be mailed to:

Graduate Coordinator
Department of Political Science
P.O. Box 873902
Tempe, AZ 85287-3902

Applicants for financial aid should submit these items and complete the application form for graduate assistantships by February 1.

Undergraduate course work in political science is not a prerequisite for admission. However, M.A. students should have a basic understanding of elementary statistics and the undergraduate content of the political science fields of concentration that they wish to study. Students should allow sufficient time to acquire such a background.

Contact:
School of Government, Politics and Global Studies
http://www.asu.edu/clas/polisci/
polsci@asu.edu
COOR
480/965-6551

Political Science (PhD) LAPOLSCPHD
College of Liberal Arts and Sciences

Official Degree Awarded: PHD Political Science

Program Description: The Ph.D. program is intended to develop scholars who demonstrate a high level of excellence in teaching and research as professional political scientists. It is distinguished by a wide variety of areas of specialization, including American politics, comparative politics, international relations, political theory and public policy.

Program Requirement: This degree program requires:

1. Eighty-four credit hours.
3. A written comprehensive examination.
4. An oral comprehensive examination.
5. A minimum of 60 credit hours of graduate courses beyond the bachelor's degree and approved by the student's supervisory committee shall constitute the formal course preparation, followed by a minimum of 24 credit hours of research and dissertation work.
6. The student's plan of study must include 12, and only 12, dissertation hours.
7. The supervisory committee has three members, including the committee chair from the student's major field, and two members from a minor field.
8. As part of the 60 credit hours, the student must take POS 503 and POS 603.
9. Each student must take a pass/fail one-credit-hour workshop course each semester.
10. In the spring of the first year, the student is required to take POS 598 ST: Teaching and Writing Workshop.

11. A maximum of 12 credit hours of approved course work outside the department, and 12 credit hours of approved reading and conference courses (POS 590 and 790) may count toward the 60 credit hours.

Admission Requirements: Applicants must submit the Graduate College online application.

In addition to meeting Graduate College requirements, an applicant for the Ph.D. program must:

1. Take the verbal, quantitative and analytical sections of the GRE.
2. Supply a career overview statement that describes the applicant's educational objectives.
3. Submit three letters of recommendation from persons who can evaluate the applicant's undergraduate and graduate work.
4. Provide a sample of writing.

These items should be submitted before Feb. 1 to:

Graduate Coordinator
Department of Political Science
P.O. Box 873902
Tempe, AZ 85287-3902

Applicants for financial aid should also complete and submit the application form for graduate assistantships by Feb. 1.

Ph.D. students should have a basic understanding of elementary statistics and the content of the areas of concentration that they wish to study. Students should allow sufficient time to acquire such a background.

Contact:
School of Government, Politics and Global Studies
http://www.asu.edu/clas/polisci/
polsci@asu.edu
COOR
480/965-6551

Psychology (PhD) LAPSYPCHPHD
College of Liberal Arts and Sciences

Official Degree Awarded: PHD Psychology

Program Description: The Department of Psychology offers doctoral programs designed to provide outstanding training in innovative research, methodology and
the application of psychological principles to a wide variety of human conditions. The department is organized into six major areas of interest:

1. Behavioral neuroscience.
2. Clinical.
4. Developmental.
5. Quantitative.
6. Social psychology.

Students pursue their graduate studies within one of these six areas, and each area determines the basic curriculum for their graduate program. There is, however, substantial opportunity to integrate courses of study across areas in the department.

Further, specialized emphases are available that integrate across programs in the university (e.g., cognition, action and perception studies; arts, law and psychology; media and engineering).

At the core of doctoral training in psychology is an emphasis on the development of skill in research and quantitative methods. Faculty in all six areas are actively engaged in major research programs. These theoretically grounded research programs address the breadth of psychological processes:

- Neurobiological processes that underlie behavior and health (e.g., drug abuse, stress, heart disease).
- Cognitive processes involving human memory and perception, personality and issues of stigma and prejudice.
- Developmental aspects of emotion and cognition.
- Prevention of child mental health problems.
- Individual resilience.
- Cultural influences on psychological processes.
- Women’s issues.

A particularly unique strength of the department of psychology is the wealth of outstanding faculty whose specialization is quantitative methods. A breadth of courses and experiences in quantitative methods are available that are well integrated into the areas of research that characterize the department, and offer students a rare opportunity to develop expertise in this critical domain.

Program Requirement: A minimum of 84 credit hours are required, which includes 12 credit hours of dissertation beyond the bachelor's degree.

In addition to a core curriculum, students take courses related to their area of interest as determined in consultation with their supervisory committees. Requirements vary across training areas.
Admission Requirements: Completed applications, including all letters and supporting documents, must be received by Dec. 15 for applicants to the clinical program, and by Jan. 5 for all other applicants (behavioral neuroscience, cognitive, developmental, quantitative, social psychology).

All applicants are required to submit:

1. Scores on the GRE.
2. An advanced test in psychology is required for clinical psychology.
3. Transcripts.
5. A statement of purpose.
6. Test of English as a Foreign Language (TOEFL) for international students.

The application and all materials, except for letters of recommendation, should be submitted to the Graduate College. The letters of recommendation, copies of the statement of purpose, transcripts and GRE scores (unofficial copies are acceptable) should be sent directly to:

Coordinator of Graduate Admissions
Psychology Department
P.O. Box 871104
Arizona State University
Tempe, AZ 85287-1104

Contact:
Department of Psychology
http://psychology.clas.asu.edu/
psygrad@asu.edu
PSY 296
480/965-7606

Psychology - Cogn, Act, & Perc (Arts, Media, & Engr) (PHD) LAPSYPHD
College of Liberal Arts and Sciences

Official Degree Awarded: PHD Psychology (Cognition, Action & Perception in Arts, Media & Engineering)

Program Description: This specialized degree program is available for graduate students who wish to blend the study of cognition in psychology with the arts, media and engineering program.

Program Requirement: Doctoral students are required to complete a master’s-in-passing as part of their doctoral training.

Program of Study: A minimum of 30 credit hours is required for the master’s degree.

Foreign Language Requirements: None.
Thesis Requirements: A thesis is required.

Final Examinations: A final oral examination in defense of the thesis is required.

Plan of Study: A minimum of 60 credit hours of course credit beyond the bachelor’s degree is required, plus 24 hours of credit in research and dissertation. In addition to a core curriculum, students take courses related to their area of interest as determined in consultation with their supervisory committees.

First-year Evaluation: At the end of the first year of study, each student receives a comprehensive evaluation by the faculty based upon performance in courses and in professional or laboratory assignments and upon the evidence of professional responsibility and ethical behavior.

Comprehensive Examinations: Written and oral examinations are required near the end or upon completion of all course work. After passing the comprehensive examinations and meeting other requirements, the student is eligible to apply for candidacy.

Dissertation Requirements: The dissertation must be an original contribution to knowledge, demonstrating the student’s proficiency as an independent investigator.

Research in cognition, action and perception, (arts, media and engineering):

- Educational interventions for reading comprehension.
- Embodied cognition.
- Language comprehension and second-language learning.
- Neural processes of perception, action, and emotion.
- Perception and motor skills in real-world activities.
- Robotics.

Admission Requirements: All applicants are required to submit the Graduate College online application, transcripts, three letters of reference and a statement of purpose. The Department of Psychology requires all applicants to provide scores from the GRE. A score from the psychology GRE subject test is strongly encouraged for applicants to this program. These scores are not used exclusively to determine admission but are viewed in the context of other supporting materials, such as GPA and letters of recommendation.

Application Deadline: Completed applications for admission in the fall semester, including all letters and supporting documents, should be received by Jan. 5.

Contact:
Department of Psychology
http://psychology.clas.asu.edu/cognitive
psygrad@asu.edu
PSY 296
480/965-7606
Quantitative Research Methods (PhD) LAPSYQUPHD
College of Liberal Arts and Sciences

Official Degree Awarded: PHD Psychology (Quantitative Research Methods)

Program Description: The quantitative concentration of the Ph.D. in psychology focuses on the broad class of quantitative and methodological issues that arise in the conduct of both basic and applied psychological research. There are seven core faculty members in the quantitative concentration, of whom five are also affiliated with a substantive area. This dual affiliation supports the training of students of quantitative methods against a backdrop of methodological issues associated with the development of the substance of psychological science. The quantitative concentration is committed to training the next generation of psychological methodologists, who will make contributions in developing methods in the areas of measurement, design and analysis and evaluating the utility of new and existing methods for use in psychological research.

Program Requirement: The program total is 84 credit hours. The quantitative curriculum is structured into a series of progressively more advanced courses. New quantitative/methodological courses may be implemented under an omnibus number (PSY 591) at the interest of the faculty. The current requirements are as follows:

- PSY 530 Analysis of Variance
- PSY 531 Multiple Regression Analysis
- PSY 532 Analysis of Multivariate Data
- PSY 533 Structural Equation Modeling
- PSY 534 Psychometric Methods
- PSY 555 Experimental and Quasi-Experimental Designs
- PSY 591 Quantitative Seminar
- Three psychological methodology electives
- Six credits of substantive course work
- Six credits in additional substantive or methodological electives
- Six credits of PSY 592 (master's thesis)
- 12 credits of PSY 792 (post-master's research)
- 12 credits of PSY 799 (dissertation)

Admission Requirements: Students are admitted directly to the Ph.D. program, with the expectation that the student will progress through a master’s degree to the Ph.D. All applicants must submit the Graduate College online application. Other required materials include:

1. GRE scores.
2. Three letters of recommendation, preferably at least two from individuals within the academic community.
3. A brief statement of purpose (900 words or less).
5. Official transcripts of all previous undergraduate and graduate study.
6. Application form.
7. Application fee.

Contact:
Department of Psychology
http://psychology.clas.asu.edu/
psygrad@asu.edu
PSY 296
480/965-7606

Religious Studies (MA) LARELIGMA
College of Liberal Arts and Sciences

Official Degree Awarded: MA Religious Studies

Program Description: The M.A. in religious studies emphasizes the comparative study of religions. The program seeks to understand the phenomena of religion across a wide spectrum of cultural contexts and historical periods. Reflecting the different interests and areas of expertise of the faculty, the curriculum incorporates a variety of approaches to the subject, including the cultural, historical, literary, sociological and theological.

Primary areas of emphasis include:

- Modern Western theological and ethical thought.
- Buddhism.
- Christianity.
- East and Southeast Asian religions.
- Hinduism.
- Islam.
- Judaism.

Comparative themes and issues are central to the curriculum. These include:

- Religion and gender.
- Religion, nationalism and ethnicity.
- Religion and science.
- Religion and modernity.
- Mysticism.
- Popular religion.
- Ritual studies.
- Symbolism.
Although students often concentrate upon a single religious tradition for their thesis work, the program seeks to provide a broadly comparative understanding of religions, not simply a specialist’s training in a single tradition.

**Program Requirement:** This degree program requires:

1. Thirty credit hours.
3. An applied project.
4. A foreign language examination.

**Thesis Option**
This option is recommended for students intending to seek admission to a doctoral program upon completion of the M.A. or planning to teach in the discipline at community colleges. For the thesis option, the student must satisfy the following requirements:

1. Reading knowledge of French, German or another language relevant to the proposed thesis topic.
2. Twenty-four hours of course work, including six hours in methods and theory (REL 501, 502), six hours of graduate seminar (REL 591), offered each semester on varying topics within the academic study of religion and three hours of research (REL 592) to prepare the thesis proposal.
3. A thesis that earns six credit hours of 599 thesis credit.

**Portfolio Option**
This option is recommended for students intending to augment their primary area of expertise and professional training in fields such as journalism, law, teaching K-12, counseling, social work and the ministry. For the portfolio option, the student must satisfy the following requirements:

1. Reading knowledge of a foreign language relevant to the proposed area of concentration.
2. Thirty hours of course work, including six hours in methods and theory (REL 501, 502), six hours of graduate seminar (REL 591), four courses in a major area of concentration and two courses in a minor area.
3. A portfolio consisting of three publishable papers: one on theory and method, one on the student’s minor area of study, and one on the major area of study.
4. An oral defense of the portfolio.

**Admission Requirements:** Applicants must submit the Graduate College online application. To be eligible for admission to the graduate program in religious studies, an applicant must submit the following:

1. Test scores from the GRE.
2. Evidence of having completed the equivalent of 15 hours of undergraduate work in the study of religions, including advanced courses in both Western and Asian or other non-Western religions. Students without the necessary background in religious studies may remove deficiencies by taking additional specified courses (which may or may not count toward the fulfillment of degree requirements) at the beginning of their program of study.

3. Three academic letters of reference to be sent to the graduate coordinator of the department.

4. A statement of purpose of approximately 1,000 words outlining the academic background, career goals and specific area of interest in religious studies in relation to fields offered by the faculty, to be sent to the graduate coordinator of the department.

Complete applications are due by Jan. 15.

Contact:
School of Historical and Critical Inquiry
http://www.asu.edu/clas/religious_studies/
Religious.Studies@asu.edu
ECA 377
480/965-5778

Religious Studies (PhD) LARELIGPHD
College of Liberal Arts and Sciences

Official Degree Awarded: PHD Religious Studies

Program Description: The academic study of religion is a central component of the humanities and has become increasingly recognized as a critical tool in understanding society and politics in a globalized world. The Ph.D. program has two main goals:

1. To train graduate students for careers as scholars and teachers in the academic study of religion.
2. To provide supplementary training for graduate students in a range of related programs (including history, anthropology, political science, journalism, secondary education and justice studies) who would benefit from greater expertise regarding the nature and role of religion around the world.

Program Requirement:

Course Work
The plan of study must contain a minimum of 84 credit hours, including 12 hours of dissertation. Courses and research hours are approved by the student’s supervisory committee.

Admission Requirements: In addition to the general requirements for admission to the Graduate College, applicants must also submit:
1. GRE scores.
2. Test of English as a Foreign Language (TOEFL) for international non-native English speakers.
3. A statement of purpose of approximately 1,000 words.
4. Three letters of recommendation from faculty members or others who are qualified to judge the applicant.

Contact:
School of Historical and Critical Inquiry
http://www.asu.edu/clas/religious_studies/
gradrs@asu.edu
ECA 377
480/965-5778

Renaissance Studies (Grad Certificate) LARENAISCE
Official Degree Awarded: CERT Renaissance Studies (certificate)

Program Description: The certificate program prepares students for advanced study or for academic positions by augmenting their skills and knowledge, thereby making them more equipped to handle the demands of their fields.

Program Requirement: Renaissance studies is interdisciplinary and requires the following:

Medieval Latin: one semester (three to four credit hours) for M.A. students, two semesters (six to eight credit hours) for Ph.D. students, with proficiency attested either by achieving a grade of “B” (3.00) or better in the medieval Latin course(s) or by satisfactory performance on the medieval/Renaissance Latin examinations offered by the Centre for Medieval Studies, University of Toronto. This requirement presupposes two years or 12 to 16 credit hours or equivalent of undergraduate training in Latin.

Modern language at the upper division level: two semesters (six credit hours) for M.A. students; three semesters (nine credit hours) for Ph.D. students.

Paleography: one semester (three credit hours).

Coursework outside the major discipline: two semesters (six credit hours): for M.A. students, three semesters (nine credit hours) for Ph.D. students.

Thesis or dissertation in the area of Renaissance studies (three to six credit hours): for students not concentrating in the area for their degree. Students in the area fulfill the thesis requirement by writing a thesis or dissertation in the field.

Admission Requirements: All applicants to graduate certificate programs must submit the Graduate College online application. Graduate students admitted to a
degree program in any field may earn one of two M.A.- or Ph.D.-level certificates: the certificate in medieval studies or the certificate in Renaissance studies.

Contact:
School of Historical and Critical Inquiry
http://www.asu.edu/clas/acmrs
acmrs@asu.edu
COOR 4426
480/965-5900

Rhetoric/Composition/Linguistics (PhD) LAENRHTPHD
College of Liberal Arts and Sciences

Official Degree Awarded: PHD English (Rhetoric, Composition and Linguistics)

Program Description: The Ph.D. in rhetoric/composition and linguistics promotes the study of the production, distribution and interpretation of oral and written texts. It focuses on rhetorical and linguistic structures and functions within the texts and on the internal and external factors involved in the creation of these texts.

Requirements are designed to encourage a full understanding of theoretical and applied aspects of both rhetoric/composition and linguistics and their intersection. Flexibility in requirements makes it possible for students to pursue those aspects of the disciplines which interest them the most.

Courses explore both historical and current theoretical approaches. The program prepares students for entrance into the field as teachers, scholars and professionals.

Program Requirement: The Ph.D. program requires:

1. Eighty-four credit hours.
3. A written or oral examination.
4. A foreign language examination.

In general, a student with an appropriate master’s degree must complete a minimum of 54 credit hours of approved graduate work, which includes 12 credit hours of dissertation. Research hours may be used towards course work in consultation with the advisor.

A student without an appropriate master’s degree usually must complete 84 credit hours of work at ASU. At the advisor’s discretion, students may include up to 12 credit hours of appropriate, graduate-level course work undertaken at another university and not previously counted toward any other degree.

Admission Requirements: Applicants must submit a Graduate College online application. Applicants for the Ph.D. in English must also submit:
1. Three letters of recommendation.
2. A statement of purpose.
3. An academic writing sample.
4. A curriculum vitae.
5. GRE general scores.

Deadline for admission applications and requests for financial aid, including teaching assistantships, is Feb. 1. Incomplete files are not considered.

Materials should be sent to:

Graduate Coordinator
Department of English
Arizona State University
P.O. Box 870302
Tempe, AZ 85287-0302

Contact:
Department of English
http://www.asu.edu/clas/english/gradstudies/
enggrad@asu.edu
LL 543B
480/965-3194

Science and Technology Policy (PSM) LAHSDPSM
College of Liberal Arts and Sciences

Official Degree Awarded: PSM Science and Technology Policy

Program Description: The ASU Professional Science Master's in science and technology policy provides professional education for students seeking advanced public, nonprofit or private sector careers in science and technology policy and related fields in the United States or abroad. Students will learn essential skills, knowledge and methods for analyzing innovation, expertise and large-scale technological systems. Particular emphasis is placed on the political and societal contexts and impacts of science and technology policy. The program is a one-year, 30-credit cohort-based program designed to attract students of the highest caliber in their early to mid-careers.

Students will acquire the following knowledge and skills:

- Understanding of the theoretical foundations of the interactions among science, technology and society.
- Understanding of U.S. and, where appropriate to a student's career interests, international science and technology policies and the policy processes that generate them.
- Analysis of knowledge systems supporting policy decisions.
• Analysis of the social and policy dimensions and implications of large-scale technological systems.
• Analysis of scientific and technological innovation systems.
• Skills in collaborative, team-based analysis of science and technology policy problems.
• Skills in effective professional communication.

Program Requirement: The program requires 30 credits of course work, including:

• 12 credits of required core courses:
  Theories of Science and Democracy (3 credits)
  Analysis of Knowledge and Expertise in Policy Advice (3 credits)
  Analysis of Scientific and Technological Innovation (3 credits)
  Analysis of Large-scale Sociotechnological Systems (3 credits)

• 6 credits of applied policy analysis courses:
  Science and Technology Policy Workshop
  Capstone Science and Technology Policy Project

• Three credits of Science and Technology Policy internship.
• Nine credits of electives.

Admission Requirements: To be eligible for admission, students are required to hold a minimum of a bachelor’s degree (or equivalent) or a graduate degree from a regionally accredited college or university or of recognized standing. Students are also strongly encouraged to have prior relevant education, training or experience in science and technology policy. Students must also hold a minimum of a 3.00 cumulative GPA (on a 4.00 scale) in the last 60 hours of a student’s first bachelor’s degree program. The GRE test is required for admissions. Students may enroll only in the fall semester of each year.

Contact:
Dean, College of Liberal Arts and Sciences
http://www.cspo.org/outreach/psmstp/
sciencepolicy@asu.edu
INTDS B 366
480/727-8787

Social Science and Health (PhD) LASSHPHD
College of Liberal Arts and Sciences

Official Degree Awarded: PHD Social Science and Health

Program Description: The Ph.D. in social science and health draws on the premise that sustainable and satisfying solutions to our most pressing global health
challenges requires a sophisticated understanding of how cultural context, social and ecological processes and disease are really related.

The transdisciplinary graduate program trains students broadly in cutting-edge health social science research theory and methods. While it leverages the strength in medical anthropology at ASU (including the 15 medical anthropologists on campus), it also takes advantage of a much wider set of skills offered by such fields as medical sociology, demography, human geography and epidemiology. It is designed to train those who anticipate either working in transdisciplinary academic settings, medical schools or nonacademic health settings, such as governmental agencies, NGOs and the commercial sector.

Some particular thematic foci of the program are:

- Culture and health.
- Social justice and vulnerable populations.
- Health in the Americas.
- Nutritional anthropology.
- Urban and environmental health.
- Indigenous and minority health.
- Biocultural approaches to human coping.
- Mathematical epidemiology.
- Computer-based complexity modeling.
- Social networks.

The programs draw some 80 faculty from all across the university to consider how cutting-edge social science can be applied to not only understand but also to substantively improve the health of populations. The program favors community-based research and runs collaborative projects in which students are encouraged to gain experience and conduct research, from large U.S. cities to hunter-gatherer communities. Students generally enter the program with an M.A. in a relevant field.

**Program Requirement**: The Ph.D. program consists of:

1. Eighty-four hours of course work post-B.A.
2. Fifty-four (30 course work, 24 research and dissertation) hours post-M.A.

Students are admitted to candidacy on the basis of a written and oral examination. Students entering the Ph.D. in social science and health do so with diverse backgrounds and with varied career goals.

Curricular tracks will tend to be individualized and final determination of the most appropriate course of study or how each requirement should most appropriately be met is made by a student in collaboration with a faculty advisor.
Admission Requirements: In addition to the general requirements for admission to the Graduate College, the School of Human Evolution and Social Change requires applicants to provide:

1. A statement of their interests and professional goals.
2. A list those faculty with whom they are interested in working.
3. Three letters of recommendation.
4. Applicants who received their B.A. within the last 10 years must also submit scores on the GRE.

Suitable backgrounds for admission include an M.A. in the social sciences (such as anthropology or sociology), public health, human biology or related fields. Students entering directly from a B.A. should already have completed at least 15 hours of social science and six hours of human biology (or equivalent) at the senior level, and should also have some background in statistics and/or epidemiology.

Contact:
School of Human Evolution & Social Change
http://shesc.asu.edu/graduate_studies
shescgrad@asu.edu
SHESC 233
480/965-6215

Social Science and Health (Urbanism) PhD LASSHURPHD
College of Liberal Arts and Sciences

Official Degree Awarded: PHD Social Science and Health (Urbanism)

Program Description: The Doctor of Philosophy in social science and health focuses on the premise that sustainable and satisfying solutions to our most pressing global health challenges requires a sophisticated understanding of how cultural context, social and ecological processes and disease are related. The transdisciplinary graduate program trains students broadly in cutting-edge health social science research theory and methods. While it leverages the strength in medical anthropology at ASU (including the 15 medical anthropologists on campus), it also takes advantage of a much wider set of skills offered by such fields as medical sociology, demography, human geography and epidemiology. It is designed to train those who anticipate either working in transdisciplinary academic settings, medical schools or nonacademic health settings, such as governmental agencies, nongovernmental organizations and the commercial sector.

Some particular thematic foci of the program are:

- Culture and health.
- Social justice and vulnerable populations.
- Health in the Americas.
- Nutritional anthropology.
- Urban and environmental health.
• Indigenous and minority health.
• Biocultural approaches to human coping.
• Mathematical epidemiology.
• Computer-based complexity modeling.
• Social networks.

The concentration in urbanism will leverage the varied interests in urbanism and help emerging scholars as they attempt to compare, contrast and take stock of urbanism as they pertain to the thematic foci of the program. Working with faculty from across a range of departments and programs at ASU, doctoral students will be able to capture the creative tensions that scholarship on urbanism has inspired in order to stimulate a provocative, constructive kind of inquiry.

The programs draw some 80 faculty from all across the university to consider how cutting-edge social science can be applied to not only understand but also to substantively improve the health of populations. The program favors community-based research and runs collaborative projects in which students are encouraged to gain experience and conduct research into societies from large U.S. cities to hunter-gatherer communities. Students generally enter the program with a master’s degree in a relevant field.

**Program Requirement:** This program consists of:

1. Eighty-four hours of course work post-bachelor’s.
2. Fifty-four (30 course work, 24 research and dissertation) hours post-master’s.
3. A written comprehensive examination.

Students are admitted to candidacy on the basis of a written and oral examination. Students entering the Doctor of Philosophy in social science and health do so with diverse backgrounds and with varied career goals.

Curricular tracks will tend to be individualized and final determination of the most appropriate course of study or how each requirement should most appropriately be met is made by a student in collaboration with a faculty advisor. For the concentration in urbanism, 15 credit hours will be selected from an approved list of applicable courses related to urbanism. These courses will include the core urbanism course, GCU 516, as well as one course from each of the four urbanism clusters. These clusters are:

1. Natural environment.
2. Built form.
3. Institutions and governance.
4. Culture and society.
Admission Requirements: In addition to the general requirements for admission to the Graduate College, the School of Human Evolution and Social Change requires applicants to provide:

1. A statement of their interests and professional goals.
2. A list those faculty with whom they are interested in working.
3. Three letters of recommendation.
4. Applicants who received their bachelor's within the last 10 years must also submit scores on the GRE.

Suitable backgrounds for admission include a master's degree in the social sciences (such as anthropology or sociology), public health, human biology or related fields. Students entering directly from a bachelor's program should already have completed at least 15 hours of social science and six hours of human biology (or equivalent) at the senior level, and should also have some background in statistics and/or epidemiology.

Contact:
School of Human Evolution & Social Change
http://shesc.asu.edu/node/214
shescgrad@asu.edu
SHESC 233
480/965-6215

Sociology (MA) LASOCMA
College of Liberal Arts and Sciences

Official Degree Awarded: MA Sociology

Program Description: This degree program provides advanced training for those preparing for teaching, research or applied careers in sociology, and may be taken either as a terminal program or as a step toward eventual fulfillment of requirements for the Ph.D.

Program Requirement: An M.A. in sociology program requires the successful completion of a minimum of 32 credit hours, including:

- An 11-hour core curriculum.
- Three hours of theory (SOC 585).
- Six hours of research methods and statistics (SOC 500 and 505).
- One hour of sociology as a profession (SOC 503).
- Six hours earned through a thesis (SOC 599).
- The balance taken from substantive courses.

Admission Requirements: All applicants must submit a Graduate College online application.

Admission to the program is determined by the following criteria:
1. GRE scores (verbal, quantitative and writing).
2. Three letters of appraisal from persons familiar with the applicant's academic background.
3. Valid transcripts of the student's academic record.
4. A writing sample.
5. A statement of purpose provided by the applicant.

The application deadline is Jan. 15.

Contact:
School of Social/Family Dynamics
http://ssfdclas.asu.edu/
ssfd@asu.edu
SS 144
480/965-6978

Sociology (PhD) LASOCPHD
College of Liberal Arts and Sciences

Official Degree Awarded: PHD Sociology

Program Description: This degree provides advanced training in theory, research methodology and substantive fields to prepare sociologists for teaching and research with special emphasis on family, demography and health issues.

Program Requirement: This degree program requires:

1. Eighty-four credit hours.
3. A written comprehensive examination.
4. An oral comprehensive examination.

Thirty credit hours from a previously awarded master's degree can be applied to the 84-credit-hour requirement.

The Ph.D. requires 54 credit hours beyond the master's degree. Three credit hours of each, theory, methods and statistics are required, and 24 credit hours are earned through dissertation and research. The remaining 21 credit hours are in substantive courses reflecting the student's specialization.

First-year Ph.D. students are required to take SOC 503 Sociology as a Profession. A minimum of 30 credit hours of the approved Ph.D. program, exclusive of dissertation and research hours, must be completed after admission to the Ph.D. program.

Admission Requirements: Applicants must submit the Graduate College online application. Admission to the program is determined by the following criteria:
1. GRE scores (verbal, quantitative and writing).
2. Three letters of appraisal from persons familiar with the applicant’s academic background.
3. Valid transcripts of the applicant’s academic record.
4. A writing sample and a statement of purpose provided by each applicant.

Applicants should have an M.A. or its equivalent in sociology or a related field. The option is available for a few outstanding undergraduates to apply directly to the Ph.D. program. These students must obtain an M.A.-in-passing. The application deadline is Jan. 15.

Contact:
School of Social/Family Dynamics
http://ssfd.asu.edu/
ssfd@asu.edu
SS 144
480/965-6978

Spanish (MA) LASPANMA
College of Liberal Arts and Sciences

Official Degree Awarded: MA Spanish

Program Description: M.A. in Spanish programs combine Spanish, Spanish American and Mexican American literature, linguistics and culture. All programs have a research component: candidates for the M.A. in Spanish write a thesis.

The M.A. has two concentrations: literature and culture, and linguistics. It is possible to concentrate courses in one of two subconcentrations within the linguistics track: sociolinguistics and second language acquisition/applied linguistics. Students admitted to the M.A. program with a major in secondary education may elect Spanish as the subject matter field.

Program Requirement: The program of study for the M.A. includes a minimum of 30 credit hours of graduate-level work and a thesis, as approved by the candidate’s supervisory committee. Students seeking an M.A. in Spanish should consult with the respective director of graduate studies.

Comprehensive Examination: all candidates are required to pass a comprehensive written or oral examination designed to evaluate the candidate’s knowledge in the area of specialization. A reading list is provided as a guide to preparation for this examination.

Admission Requirements: Students interested in applying to this program must submit a Graduate College online application.

Candidates for the M.A. should, upon entrance, present the equivalent of an undergraduate major in the language in which the degree is sought. Those who lack
against this background, but who show strong potential and meet Graduate College admissions requirements, may be admitted to a graduate program on a provisional basis, pending removal of specified deficiencies. These deficiencies must be completed in addition to the regular program of study for the master’s degree.

Contact:
School of International Letters and Cultures
http://silc.asu.edu/graduate
silc@asu.edu
LL 440
480/965-6281

Spanish (PhD) LASPANPHD
College of Liberal Arts and Sciences

Official Degree Awarded: PHD Spanish

Program Description: The School of International Letters and Cultures offers a graduate program in Spanish leading to the Ph.D. in Spanish with concentrations in literature or culture studies.

Program Requirement: The Ph.D. in Spanish consists of:

1. Eighty-four credit hours of graduate-level work.
2. Twelve (and only 12) credit hours of dissertation (SPA 799).
3. Thirty hours of credit for the M.A. in Spanish will count toward the 84 credit hours.
4. Each candidate is expected to demonstrate a reading knowledge of two languages other than English and Spanish. The language requirements must be satisfied before the candidate is eligible to take the comprehensive examination.
5. A written and oral comprehensive examination, designed to ascertain the candidate's knowledge and orientation in the field of study and competency to proceed with the dissertation, is required at or near the end of course work.
6. The candidate must present an acceptable dissertation based on original investigation. The dissertation must represent a significant contribution to knowledge and demonstrate the candidate’s ability to do independent, scholarly research.
7. A final oral examination is required. This examination covers the subject matter of the dissertation and appropriate field.

Admission Requirements: All candidates for the Ph.D. in Spanish must fulfill the general requirements of the Graduate College concerning admission and residence.

Candidates for the doctorate in Spanish will be required to demonstrate a near-native oral proficiency in Spanish and to show that they have developed a high order of expository prose in English and Spanish by presenting a term paper or a
The Spanish graduate program requires a 3.75 overall GPA (on a 4.00 scale).

Admission to the Spanish doctoral program requires the candidate to present an M.A. in Spanish or equivalent from an accredited institution.

The committee may request letters of recommendation regarding the applicant’s command of Spanish and potential for doctoral work. A personal interview may also be appropriate.

It is recommended, but not required, that students applying for admission to the M.A. or Ph.D. program submit scores on the GRE; this is especially advisable for the applicants for Spanish Graduate Fellowship Award.

Contact:
School of International Letters and Cultures
http://silc.asu.edu/graduate
silc@asu.edu
LL 440
480/965-6281

Statistics (PHD) LASTPPH
College of Liberal Arts and Sciences

Official Degree Awarded: PHD Statistics

Program Description: Statistics has been described as the science of learning from data. Statisticians are involved with collecting data, analyzing it, interpreting it and helping to make decisions based on it.

The Ph.D. program in statistics will train statisticians for positions locally and nationally in business, industry, government and academia. Graduates of the program will be able to not only use advanced statistical methods but also to develop new methods to meet the fast growing need for analysis of data arising in many areas.

The statistics Ph.D. program faculty consists of the committee on statistics which also offers a program leading to the degree M.S. in statistics. The program is interdisciplinary in that it draws upon faculty research and teaching interests from various academic units so that programs of study can be tailored to reflect individual needs and goals. The committee, which sets program requirements and supervises programs of study, is composed of faculty from departments in the Ira A. Fulton School of Engineering, the College of Liberal Arts and Sciences, the W.P. Carey School of Business and the New College of Interdisciplinary Arts and Sciences.
**Program Requirement:** Ph.D. students must complete 84 credit hours of course work including:

1. 15 credit hours of core course work (mathematical statistics, probability, STP 526, STP 530 or IEE 578, STP 531 or IEE 572).
2. 45 credit hours of elective statistics or related area courses approved by the student's supervisory committee.
3. 12 credit hours of research (792).
4. 12 credit hours of dissertation (799).

Students must pass:

1. One qualifier examination.
2. A written comprehensive examination.
3. An oral comprehensive examination.

Each student must write a dissertation and defend it orally in front of five dissertation committee members. See the department Web site for examination information.

**Admission Requirements:** Applicants must satisfy the general requirements for admission to the Graduate College. Applicants must submit the Graduate College online application.

Minimum background for consideration of admission to the graduate program in statistics includes:

1. A bachelor’s degree in statistics, mathematics or a closely related area with a 3.00 GPA.
2. Applicants should have completed the following courses (equivalents at ASU are given in parentheses): calculus (MAT 270, 271 and 272), advanced calculus (MAT 371), linear algebra (MAT 342), computer programming (CSE 100), and introductory applied statistics (QBA 221 or STP 420).
3. Applicants who lack any of these prerequisite courses must complete the prerequisites before being considered for admission.
4. The submission of GRE scores is strongly encouraged, but not required.

**Contact:**
School of Mathematical and Statistical Sciences
http://math.asu.edu/graduate/statistics.html
grad@math.la.asu.edu
PSA 216
480/965-3951

**Teaching English to Speakers of Other Languages (MTESOL) LAENGMTESL**
College of Liberal Arts and Sciences
Official Degree Awarded: MTE Speake Teaching English as a Second Language

Program Description: The faculty in the Department of English offer a professional program leading to the Master of Teaching English to Speakers of Other Languages (MTESOL). This specialized degree program provides students with the knowledge and the skills necessary to teach English as a second language.

Program Requirement: The program requires a minimum of 30 credit hours of approved graduate course work and must include:

1. LIN 500 Research Methods
2. LIN 510 Linguistics.
3. LIN 520 Second-Language Acquisition Theories.
4. LIN 521 Methods of Teaching English to Speakers of Other Languages.
5. A three-hour applied project (LIN 593) overseen by the supervisory committee.
6. An internship is recommended if a student has no teaching experience.

Foreign Language Requirements: a foreign language is required, to be completed during the program. International students whose native language is not English may fulfill the foreign language requirement by:

1. Providing evidence that English is not the medium of instruction at their native-language universities.
2. Satisfactorily completing the Test of Spoken English (TSE).

Applied Project: a three-hour applied project (LIN 593) that is overseen by the director, chosen from the English department linguistics/TESOL faculty, is required. Two additional faculty members serve with the director to form a committee for the final oral examination on the project.

Final Examination: an oral examination on the applied project is required.

Admission Requirements: Applicants for the MTESOL may have undergraduate majors in fields such as, but not limited to:

- Anthropology.
- Applied linguistics.
- Cognitive science.
- Communication.
- Comparative languages and literatures.
- Education.
- English literature.
- History.
- Law.
- Linguistics.
- Modern languages.
• Philosophy.
• Political science.
• Psychology.
• Religion.
• Rhetoric/composition.
• Sociology.
• Speech and hearing science.

Students should consult with an advisor to determine whether their preparation is deficient in any area. Applicants must submit three letters of recommendation and a statement of purpose.

The deadline is Feb. 1.

All applicants must meet the general requirements for admission to the Graduate College.

International students must submit a Test of English as a Foreign Language (TOEFL) score of at least 600, or 250 computer-based.

Contact:
Department of English
http://english.clas.asu.edu/gradstudies-mtesol
enggrad@asu.edu
LL 543B
4809653194

Urban & Environmental Planning (MUEP) ARURBMEUP
College of Design

Official Degree Awarded: MU/EP Urban and Environmental Planning

Program Description: The M.U.E.P. is an interdisciplinary professional degree designed to prepare students for leadership roles in planning in both the public and private sectors, within organizations ranging in scope from local to international. The M.U.E.P. is accredited by the Planning Accreditation Board. The curriculum includes a common core of required courses that provides linkage between knowledge and practice, and fundamental theories and skills.

The four specializations offered are community and urban development, environmental planning, international planning and transportation planning.

The community and urban development specialization provides students with knowledge and skills in areas such as housing, economic and community development, public policy analysis, transportation, land use planning, urban design and historic preservation.
The environmental planning specialization provides students with knowledge and skills in such areas as sustainable design, environmental resources, growth management, environmental policy analysis, open space design, and conservation.

The international planning specialization prepares planners to work in the diverse and changing urban fabric of developing nations and in U.S. cities, with their growing multinational and multicultural populations.

The transportation planning specialization focuses on nonmotorized transportation, economic development, border issues and the environment.

Specializations provide connections between the School of Planning and the other disciplines in the university. Students have a unique opportunity to integrate urban and environmental aspects of planning in rapidly developing metropolitan areas in the demographic and climatic context of the southwest region of the United States.

**Program Requirement:** An approved program of study for the M.U.E.P. is 47 credit hours. The program has the typical distribution as follows:

- Required core courses, including either the capstone studio, thesis or professional project (26 credit hours).
- Specialization courses (12 credit hours).
- Electives (9 credit hours).

Students must complete the required core courses and select an area of specialization. Students must also select a capstone studio, a professional project or a thesis option. Successful completion of an approved statistics course, if not achieved by the student as an undergraduate, will be required as a deficiency.

**Admission Requirements:** To be considered for the program, the applicant must fulfill all admission requirements of the Graduate College, in addition to meeting admission requirements of the School of Planning. The following materials are required by the School of Planning:

1. An application to the Graduate College.
2. Official transcripts from all other colleges and universities attended.
3. A statement of intent (maximum 600 words) explaining:
   - The applicant’s interest in planning.
   - The applicant’s academic and professional background and, if appropriate, preparation for the selected area of specialty (this may include written samples or a portfolio, but they are not required).
   - The applicant’s educational objectives.
4. Test of English as a Foreign Language (TOEFL) scores from international students whose native language is not English.
5. Three letters of recommendation from references who are qualified to comment on the applicant’s potential in the selected area of study.
6. A current résumé.
Women & Gender Studies (Grad Certificate) LAWSTGRCT
Official Degree Awarded: CERT Gender Studies (certificate)

Program Description: The academic study of gender is increasingly recognized as central across academic fields, from literature to psychology to biology and law. The graduate certificate in women and gender studies provides a solid background in this field and supplements students’ work in their majors.

Program Requirement: This graduate certificate program requires 15 credit hours of course work.

Admission Requirements: Applicants must submit an online Graduate College application.

Contact:
School of Social Transformation
http://wgs.asu.edu/
wgs.asutempe@asu.edu
WHALL 205
480/965-2358

New College of Interdisciplinary Arts and Sciences
Communication Studies (MA) ASCOMSTMA
New College of Interdisciplinary Arts and Sciences

Official Degree Awarded: MA Communication Studies

Program Description: The M.A. in communication studies prepares students for communication-intensive roles in such fields as:

- Community relations.
- Employee communication.
- Grass-roots advocacy.
- Health communication.
- Media campaigns.
- Political communication.
- Public affairs.
- Technology-mediated communication systems.
A substantive number of graduates pursue the Ph.D. and careers in teaching and research.

Within the M.A. in communication studies, the notion of advocacy is explored. This is achieved by examining advocacy across the discipline’s traditional classifications and within a variety of contexts. This approach allows faculty to journey with students to discover and attend to advocacy in new and unique ways, to collectively theorize and practice advocacy. People who come to our program join the faculty in this endeavor.

The advocacy occurs at the intersection of public and private lives, in the space where the two overlap and mutually inform one another, often in complex and challenging ways. It is here that we seek to uncover the ways in which symbols, messages and meaning are constructed and arranged to establish, facilitate, enhance or detract from the social status, social support and/or social identity of particular and often marginalized groups. Although the faculty recognize fully that one can advocate on one’s own behalf, the faculty believe that the true work of advocacy involves attending to the other. Advocacy, though, is not limited simply to speaking directly on another’s behalf. Rather, advocacy involves working diligently and ethically to create a space, whether it is public or private, in which the other can speak for himself or herself. The advocate uses communication theory and practice to reclaim space for and to provide voice to the other. Advocacy is a calling to the responsibility we have for others in the global age. The M.A. in communication studies seeks to provide those interested in advocacy the opportunity to develop the intellectual and conceptual skills necessary to follow that calling.

**Program Requirement:** The degree consists of 36 credit hours of course work at the 500-level or above, including these courses:

- W CMN 502 Theory and Practice in Communication and Persuasion (3) or W CMN 522 Argumentation and Advocacy (3)
- W CMN 505 Methods in Applied Communication Research (3)
- W CMN 506 Humanistic Inquiry and Field Research in Communication (3)
- Electives* (21)
- Thesis or applied project (6) or written comprehensive examination plus six credit hours of course work (6)

* At least 21 credit hours of electives are selected in consultation with the student’s program advisor. When appropriate, students may take up to six credit hours outside the department.

**Additional Requirements**
COM 502 or 522, 505, and 506 must be completed with a grade of “B” (3.00) or higher. In addition, the student must earn a cumulative GPA of 3.00 or higher in all courses numbered 500 or above that appear on the transcript and all courses that appear on the program of study.
The determination of requirements for each student’s program of study is the mutual responsibility of the student and his or her advisor. Students are permitted to take comprehensive examinations only concurrent with, or subsequent to, completion of their 36th credit hour of course work. Students who choose to complete the thesis or applied project option are permitted to register for thesis or applied project credit hours only concurrent with, or subsequent to, completion of their 24th credit hour of course work.

**Thesis or Applied Project**
The thesis or applied project must demonstrate intellectual, academic, and/or professional growth and ability. The thesis or applied project are supervised and approved by the student’s advisor and committee. An oral defense is required for the thesis or applied project.

Descriptions of current program options and requirements are available from the Department of Communication Studies office in FAB N301G.

*Admission Requirements:* Admission to the program is competitive, based on an applicant’s undergraduate scholarly activities, research abilities and professional experience. All applicants must submit the following:

1. A completed Graduate College application and official transcripts of all undergraduate and graduate work.
2. A 500-word personal statement indicating professional goals and addressing how the program will aid in the achievement of those goals.
3. Three letters of recommendation, up to two of which may come from appropriate professional, nonacademic sources.
4. A writing sample of scholarly work or an example of professional activities (i.e., technical reports, grants, creative campaign).
5. If the undergraduate cumulative GPA is below 3.00 for the last 60 credit hours, official GRE scores are required.

Students whose native language is not English must also achieve a minimum test score of 550 paper-based, 213 computer-based or 83 Internet-based on the Test of English as a Foreign Language (TOEFL) or a minimum overall score of 6.5 on the International English Language Testing System (IELTS).

*Contact:*
Division of Social and Behavioral Sciences – W
http://newcollege.asu.edu/programs/comm_studies_ma/
comm_studies@asu.edu
FABN301G
602/543-6266

*Interdisciplinary Studies (MA) ASINTERMA*
New College of Interdisciplinary Arts and Sciences
Official Degree Awarded: MA Interdisciplinary Studies

Program Description: The M.A. in interdisciplinary studies is a graduate program designed to fulfill the needs of postbaccalaureate students who wish to pursue an advanced degree for:

- Job advancement or redirection.
- Personal development and intellectual growth.
- Preparation for further graduate study.

Prospective students include those working in the public educational system, particularly community college and secondary education teachers who intend to increase and integrate their knowledge in content areas, those employed in the corporate sector and social service system and professionals who wish to return to the university and pursue enrichment in liberal arts areas.

The degree is composed of 30 credit hours of course work. Three required core courses develop advanced critical thinking skills and knowledge of current research tools, technologies and methodologies in a variety of fields. Working with a faculty mentor, each student plans a set of emphasis courses to meet their educational goals. Emphasis courses may be selected from graduate course offerings from departments throughout the New College of Interdisciplinary Arts and Sciences, as well as from other Arizona State University colleges and schools with approval from the director. Examples include a plan to study ethics and environment, media and ethnicity, urban studies and applied arts. The program concludes with a capstone experience requiring a written or applied project.

Program Requirement: This 30-credit-hour degree program requires a capstone course and the following courses:

**Required courses**

- MAS 501 Models of Inquiry for Contemporary Issues (3)
- MAS 502 Perspectives in Interdisciplinary Studies (3)
- MAS 505 20th-Century Thought: Concepts of Change, Culture and Mind (3)
- MAS 585 Capstone Course (3)
- Emphasis area (15-18)
- Elective (0-3)

**Emphasis Area**

Working with a faculty mentor, students select 15 to 18 credit hours of graduate-level course work that reflects a particular area of specialty or interest.

Admission Requirements: Applicants must submit the Graduate College online application. Admission to the master's program is open to individuals who have:

1. A bachelor's degree from institutions with regional accreditation.
2. Demonstrated promise of success through previous schooling and experience.
3. Academic and career goals that are compatible with the educational objectives of the program.
4. A GRE score may be required dependent upon the applicant’s prior academic record.

Contact:
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu
mais@asu.edu
FAB N 301F
602/543-6241

Social Justice and Human Rights (MA) ASJHRMA
New College of Interdisciplinary Arts and Sciences

Official Degree Awarded: MA Social Justice and Human Rights

Program Description: The M.A. in social justice and human rights offers justice and human rights approaches to specific issues such as health, education, work, migration, child and family issues and the environment. These issues are approached in a context influenced by the intersection of gender, race, ethnicity, sexuality, location and/or nationality. The program provides a theoretically and methodologically rigorous program that will offer opportunities for skill specialization in research and/or in the management of advocacy-oriented organizations in the nongovernmental sector, both domestically and transnationally. Students choose one of two tracks: social justice and human rights research or NGO management.

The program is structured so that current practitioners in NGOs and other nontraditional students are able to complete their degree requirements by spending two semesters on campus and completing the remainder of their degree requirements back at their place of work in whatever location or country that may be. The remaining course work can be completed via a summer internship and a semester off campus to complete the capstone experience in the field. Many students will remain on campus for their entire program of study.

Program Requirement: The 33-credit-hour program includes:

1. Core requirements, 21 credits.
2. Career-oriented tracks, six credits.
3. Electives, six credits.

Core Requirements (21)

JHR 500 Research Design (3)
JHR 501 Proseminar in Social Justice and Human Rights (3)
JHR 506 Grant Writing and Development for Social Justice and Human Rights (3)  
JHR 510 Problem-Based Seminar in Social Justice and Human Rights (3)  
JHR 511 Community-Embedded Seminar in Social Justice and Human Rights (3)  
JHR 584 Internship (3)  
JHR 593 Applied Project (3)  
JHR 599 Thesis (6)  

Career-oriented Tracks (6)  
In consultation with the program director, each student will either select either two management courses or two research courses.  

Elective Courses (6)  
In consultation with the program director, each student is required to complete two additional courses that fit their program.  

Admission Requirements: Admission is granted on a competitive basis. To be admitted to the M.A. in social justice and human rights program, candidates must have a four-year bachelor's degree from a regionally accredited institution and must submit the following:  

1. A completed Graduate College application.  
2. Official transcripts of all undergraduate and graduate course work.  
3. Official GRE scores.  
4. A personal statement.  
5. Two letters of recommendation.  
6. Resume.  

Completion of an undergraduate research methods or statistics course is recommended but not required.  

The GRE requirement may be waived if the applicant has successfully completed graduate level course work.  

Deadlines  
Fall Semester  
Priority: Feb. 1  
Final: July 1  

Spring Semester  
Priority: Oct. 1  
Final: Nov. 1
Nursing and Health Innovation, College of

Adult Nurse Practitioner (DNP) NUANPADDNP
College of Nursing & Health Innovation

Official Degree Awarded: DNP Advanced Nursing Practice (Adult Nurse Practitioner)

Program Description: The faculty in the College of Nursing and Health Innovation offer a graduate program leading to the D.N.P. with a concentration in advanced practice nursing of adults. Designed for nurses seeking to become an advanced practice nurse as an adult nurse practitioner. Graduate courses in application of theory to advanced practice, application of evidence to advanced practice, advanced pathophysiology, and advanced health assessment, advanced practice nursing role provide a foundation for this specialty.

Graduates of the D.N.P. program of the adult health concentration are prepared to provide primary care to adults who are in various states of health in a variety of settings. Health promotion and illness prevention are among the essential threads integrated throughout the program of study. Approximately one-third of the curriculum in each course is delivered in a traditional classroom setting, and two-thirds is completed in a Web-based format. Several different modalities are used to enhance the student’s learning, including multimedia presentations, asynchronous discussion boards and live chats.

Focused clinical experiences are arranged with preceptors and administrators in the student’s local healthcare setting. Rural health and experiences with disadvantaged and multicultural populations are encouraged.

Program Requirement: The program requires completion of 84 credit hours of course work and research. The Association of Nursing for Critical Care (ANCC) has recommended a minimum of 1,000 post-baccalaureate hours for all students completing a D.N.P. The College of Nursing and Health Innovation's program allows post-baccalaureate entry students to complete 630 hours of supervised clinical in their chosen specialty before receiving their M.S. This will allow students to then meet the requirements for certification and licensure in their specialty.

The additional 450 hours are completed after certification and licensure while practicing as an advanced practice nurse and completing the final D.N.P. courses.
The culminating document needed for completion of the D.N.P. is an evidence-based mentoring applied project. Each student will have a primary mentor and at least one committee member working with them on the project. Clinical practice residency hours will be used to carry out the project in a practice setting (work settings may be included, but specific objectives will be developed individually with each student, that may be different from the student’s job). Each project will be developed individually with each student.

Admission Requirements: All applicants must submit the Graduate College online application. Admission to graduate status in the College of Nursing and Health Innovation is based upon meeting the following requirements:

1. An undergraduate junior or senior GPA equal to 3.00, or a cumulative GPA equal to 3.00 (4.00=A) or higher for any bachelor's or graduate degree attained.
2. A bachelor’s degree in nursing (or another field) accredited by a nationally recognized and regionally accredited agency.
3. A current unencumbered license in the state where clinical practice will be concluded and/or an unencumbered Arizona license to practice as a registered nurse to enroll in nursing practicum courses.
4. Satisfactory completion of the analytical writing section of the GRE.
5. Three professional recommendations from individuals knowledgeable about the applicant.

Contact:
College of Nursing & Health Innovation
http://nursing.asu.edu/index.htm
gponursing@asu.edu
NHI 358B
602/496-0857

Adult Psychiatric Mental Health Nurse Practitioner (DNP) NUANPPMDNP
College of Nursing & Health Innovation

Official Degree Awarded: DNP Advanced Nursing Practice (Adult Psychiatric Mental Health Nurse Practitioner)

Program Description: Designed for nurses seeking to become an advanced practice nurse as a psychiatric mental health nurse practitioner. Graduate courses in application of theory to advanced practice, application of evidence to advanced practice, advanced pathophysiology, and advanced health assessment, advanced practice nursing role provide a foundation for this specialty. Graduate education in psychiatric/mental health nursing gives opportunities for greater autonomy in practice, diverse employment opportunities, research and teaching capabilities, and advanced assessment and intervention skills. Approximately one-third of the curriculum in each course is delivered in a traditional classroom setting, and two-thirds is completed in a Web-based format. Several different modalities are used to
enhance the student’s learning, including multimedia presentations, asynchronous discussion boards, and live chats.

Focused clinical experiences are arranged with preceptors and administrators in the student’s local healthcare setting. Rural health and experiences with disadvantaged and multicultural populations are encouraged.

**Program Requirement:** The D.N.P. requires 84 credit hours of course work. The American Nurses Credentialing Center (ANCC) has recommended a minimum of 1,000 post-baccalaureate practicum hours for all students completing a D.N.P. The College of Nursing and Health Innovation’s program allows post-baccalaureate entry students to complete 630 hours of the 1,000 required clinical practice hours and then receive their M.S. while continuing in the D.N.P. program. This will allow students to then meet the requirements for certification and licensure in their specialty. The additional 540 hours are completed after certification and licensure while practicing as an advance practice nurse and completing the final D.N.P. courses.

Post-master's entry applicants should have an idea for a project developed before entry and will complete 540 hours of clinical practice residency hours and the D.N.P. courses. The culminating document needed for completion of the D.N.P. is an evidence-based mentoring applied project. Each student will have a primary mentor and at least one committee member working with them on the project. Clinical practice residency hours will be used to carry out the project in a practice setting (work settings may be included, but specific objectives will be developed individually with each student, that may be different from the student’s job). Each project will be developed individually with each student.

**Admission Requirements:** Admission to graduate status in the College of Nursing and Health Innovation is based upon meeting the following requirements:

1. An undergraduate junior or senior GPA equal to 3.00, or a cumulative GPA equal to 3.00 (4.00=A) or higher for any bachelor’s or graduate degree attained.
2. Completion of a bachelor’s degree in nursing accredited by a nationally recognized and regionally accredited agency.
3. A current unencumbered license in the state where clinical practice will be concluded and/or an unencumbered Arizona license to practice as a registered nurse to enroll in nursing practicum courses.
4. Satisfactory completion of the analytical writing section of the GRE.
5. Three professional recommendations from individuals knowledgeable about the applicant’s academic and nursing leadership potential and one self-evaluation.
6. An interview with a representative of the specialty area.
7. Eligibility for admission to the Graduate College.
8. Completion of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS), if considered an international student.

Contact:
College of Nursing & Health Innovation
http://nursing.asu.edu/index.htm
gponursing@asu.edu
NH 158A
602/496-0857

Advanced Nursing Practice - DNP NUANPDNP
College of Nursing & Health Innovation

Official Degree Awarded: DNP Advanced Nursing Practice

Program Description: The D.N.P. program is focused on improving healthcare through facilitating a culture of best practice, and providing the additional skills necessary to develop the advanced practice nursing leader for the future. For information about the concentrations offered under this degree, see http://nursing.asu.edu/programs/graduate.

Program Requirement: The D.N.P. requires 84 credit hours of course work. The American Nurses Credentialing Center (ANCC) has recommended a minimum of 1,000 post-baccalaureate practicum hours for all students completing a D.N.P. The College of Nursing and Health Innovation's program allows post-baccalaureate entry students to complete 630 hours of the 1,000 required clinical practice hours and receive their M.S. while continuing in the D.N.P. program. This will allow students to then meet the requirements for certification and licensure in their specialty. The additional 540 hours are completed after certification and licensure while practicing as an advance practice nurse and completing the final D.N.P. courses.

Post-master's entry applicants should have an idea for a project developed before entry and will complete 540 hours of clinical practice residency hours and the D.N.P. courses. The culminating document needed for completion of the D.N.P. is an evidence-based mentoring applied project. Each student will have a primary mentor and at least one committee member working with them on the project. Clinical practice residency hours will be used to complete the project in a practice setting (work settings may be included, but specific objectives will be developed individually with each student, that may be different from the student’s job). Each project will be developed individually with each student.

Admission Requirements: Admission to graduate status in the College of Nursing and Health Innovation is based upon meeting the following requirements:

1. An undergraduate junior or senior GPA equal to 3.00, or a cumulative GPA equal to 3.00 (4.00=A) or higher for any bachelor’s or graduate degree attained.
2. Completion of a bachelor’s degree in nursing accredited by a nationally recognized and regionally accredited agency.
3. A current unencumbered license in the state where clinical practice will be concluded and/or an unencumbered Arizona license to practice as a registered nurse to enroll in nursing practicum courses.
4. Satisfactory completion of the analytical writing section of the GRE.
5. Three professional recommendations from individuals knowledgeable about the applicant’s academic and nursing leadership potential and one self-evaluation.
6. An interview with a representative of the specialty area.
7. Eligibility for admission to the Graduate College.
8. Completion of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS), if considered an international student.

While all interested applicants are encouraged to apply, applicants who reside and work, or plan to reside or work, in rural or medically underserved areas are especially encouraged to apply for admission. Applications to the program are due as follows:

- Post-baccalaureate applications due Jan. 1.
- Post-master’s applications due Sept. 1.

Contact:
College of Nursing & Health Innovation
http://nursing.asu.edu
gponursing@asu.edu
NHI 158A
602/496-0857

Child and Adolescent Mental Health Intervention Specialist (Grad Certificate)
NUCAMHICE

Official Degree Awarded: CERT Child and Adolescent Mental Health Intervention (certificate)

Program Description: The College of Nursing and Health Innovation at ASU offers the nation’s first child and adolescent mental health intervention specialist graduate certificate program. This innovative program is designed specifically for pediatric and family nurse practitioners, physicians and other interdisciplinary healthcare providers who desire to enhance their knowledge and skills in the assessment and management of common mental and behavioral health problems in children and adolescents.

Program Requirement: This 15-credit-hour graduate certificate curriculum is predominantly an online distance education program with two, two-day visits to the ASU Downtown Phoenix campus for orientation and intensive learning. Nine credit hours of this program can be transferred into the college’s online post-master’s child/family psychiatric mental health nurse practitioner program for those
students desiring more depth in assessing and treating child and adolescent mental health problems as a child/family psychiatric mental health nurse practitioner.

Admission Requirements: All applicants must submit the Graduate College online application. Applicants must either have a M.S. in nursing and work as a pediatric/family nurse practitioner or pediatric clinical nurse specialist, or be a health-related professional (e.g., physician, social worker, physician assistant) with experience in child and adolescent behavioral and mental health. Current healthcare licensure in the applicant’s state of residence is needed for admission to the certificate program.

Contact:
College of Nursing & Health Innovation
http://nursing.asu.edu
gponursing@asu.edu
NHI 472
602/496-0869

Child/Family Mental Health Nurse Practitioner (Grad Certificate) NUPMNUPRCE

Official Degree Awarded: CERT Child/Family Mental Health Nurse Practitioner (certificate)

Program Description: Designed for nurses seeking to become an advanced practice nurse as a child/family psychiatric mental health nurse practitioner. Graduate courses in application of theory to advanced practice, application of evidence to advanced practice, advanced pathophysiology and advanced health assessment provide a foundation for this specialty. Graduate education in psychiatric/mental health nursing gives opportunities for greater autonomy in practice, diverse employment opportunities, research and teaching capabilities and advanced assessment and intervention skills. Focused clinical experiences are arranged with preceptors and administrators in the student’s local healthcare setting. Rural health and experiences with disadvantaged and multicultural populations are encouraged.

Courses are taught in a hybrid online format. Approximately one-third of the curriculum in each course is delivered in a traditional classroom setting, and two-thirds is completed in a Web-based format. Several different modalities are used to enhance the student’s learning, including multimedia presentations, asynchronous discussion boards and live chats.

Program Requirement: A 28-credit-hour graduate certificate program (including 585 clinical hours) to prepare nurses with a master’s degree to become child/family psychiatric nurse practitioners.

Prerequisites required:

- DNP 604 and 630 Human Pathophysiology (3)
- DNP 608 Pharmacology (2)
- DNP 605 and DNP 631 Advanced Health Assessment (3)
DNP 609 and 610 Advanced Practice Nursing Role (3); or equivalent courses taken in master's degree program.

Students will have an individual review of their transcripts and an individualized plan of study designed. Depending on how many of the prerequisite courses are completed in master’s degree, up to 1 1/2 years of additional study may need to be added to complete this specialty.

Admission Requirements:

1. Master of Science in nursing.
2. Official transcripts from all universities.
3. Unencumbered R.N. license in state where you plan to do your clinical practicum experience. Students who live out of state can complete their clinical practicums in their own state if suitable practicum sites are available and they agree to contract with the College of Nursing and Health Innovation. If suitable sites are not available, the student would need to complete practicum experiences in Arizona and become licensed in Arizona. Students may also be required to demonstrate skills in simulation labs at the College of Nursing and Health Innovation in addition to regular immersion sessions.
5. Three professional references.
6. Interview.

Contact:
College of Nursing & Health Innovation
http://nursing.asu.edu
NHI
602/496-0857

Child/Family Psychiatric Mental Health Nurse Practitioner - DNP NUANPCFDNP

Official Degree Awarded: DNP Advanced Nursing Practice (Child/Family Psychiatric Mental Health Nurse Practitioner)

Program Description: The child/family psychiatric mental health nurse practitioner program is designed for nurses seeking to become an advanced practice nurse as a psychiatric mental health nurse practitioner. Graduate courses in application of theory to advanced practice, application of evidence to advanced practice, advanced pathophysiology, advanced health assessment and advanced practice nursing provide a foundation for this specialty.

Graduate education in psychiatric mental health nursing gives opportunities for greater autonomy in practice, diverse employment opportunities, research and teaching capabilities, and advanced assessment and intervention skills. Approximately one-third of the curriculum in each course is delivered in a traditional classroom setting, and two-thirds is completed in a Web-based format.
Several different modalities are used to enhance the student’s learning, including multimedia presentations, asynchronous discussion boards and live chats.

Focused clinical experiences are arranged with preceptors and administrators in the student’s local healthcare setting. Rural health and experiences with disadvantaged and multicultural populations are encouraged.

**Program Requirement:** The D.N.P. requires 84 credit hours of course work. The American Nurses Credentialing Center (ANCC) has recommended a minimum of 1,000 post-baccalaureate practicum hours for all students completing a D.N.P. The College of Nursing and Health Innovation’s program allows post-baccalaureate entry students to complete 630 hours of the 1,000 required clinical practice hours and then receive their M.S. while continuing in the D.N.P. program. This will allow students to then meet the requirements for certification and licensure in their specialty. The additional 540 hours are completed after certification and licensure while practicing as an advance practice nurse and completing the final DNP courses.

Post-master entry applicants should have an idea for a project developed before entry and will complete 540 hours of clinical practice residency hours and the D.N.P. courses. The culminating document needed for completion of the D.N.P. is an evidence-based mentoring applied project. Each student will have a primary mentor and at least one committee member working with them on the project. Clinical practice residency hours will be used to carry out the project in a practice setting (work settings may be included, but specific objectives will be developed individually with each student, that may be different from the student’s job). Each project will be developed individually with each student.

**Admission Requirements:** Admission to graduate status in the College of Nursing and Health Innovation is based upon meeting the following requirements:

1. An undergraduate junior or senior GPA equal to 3.00, or a cumulative GPA equal to 3.00 (4.00=A) or higher for any bachelor’s or graduate degree attained.
2. Completion of a bachelor’s degree in nursing accredited by a nationally recognized and regionally accredited agency.
3. A current unencumbered license in the state where clinical practice will be concluded and/or an unencumbered Arizona license to practice as a registered nurse to enroll in nursing practicum courses.
4. Satisfactory completion of the analytical writing section of the GRE.
5. Three professional recommendations from individuals knowledgeable about the applicant’s academic and nursing leadership potential and one self-evaluation.
6. An interview with a representative of the specialty area.
7. Eligibility for admission to the Graduate College.
8. Completion of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS), if considered an international student.
Official Degree Awarded: MS Clinical Research Management

Program Description: The M.S. in clinical research management (CRM) attracts nurses and health care professionals throughout the nation and internationally for advanced education as clinical research professionals in the diversified and complex clinical research industry. The roles of clinical research managers are rapidly growing. The career field is particularly suited for nurses, physicians and other healthcare professionals. Healthcare professionals from fields outside of nursing may complete the curriculum to obtain an M.S. in CRM, with completion of stated prerequisites.

The CRM specialty takes a multidisciplinary approach in providing an education strong in clinical research, business and financial practices, ethical and regulatory aspects of research and overall management of clinical drug, biological and medical device trials. The program is designed to be flexible and conducive to the adult learner.

Program Requirement: The 33-credit-hour CRM M.S. program is offered online with an initial three- or four-day immersion/practicum program. A six-credit-hour, capstone clinical research project is required, and part-time study is available.

Admission Requirements: All applicants must be admitted to the ASU Graduate College.

To be considered for this program, the applicant must have either of the following:

- A bachelor’s degree in nursing or related field.
- A bachelor’s degree with healthcare-related experience and completion of all prerequisite courses. The following undergraduate three-credit prerequisite courses, or the equivalent, must be completed with a grade of “C” (2.00) or better:
  - Anatomy and physiology.
  - Health policy.
  - Healthcare system overview.
  - Medical terminology.
Official Degree Awarded: MS Nursing (Community Health Advanced Practice Nursing)

Program Description: The community health nursing graduate program provides theoretical and practical foundations for advanced practice in community/public health nursing in public or private sector health care settings. Graduate courses in nursing theory, research, epidemiology and biostatistics provide a foundation for practice in community/public health nursing. By combining public/community health theory with nursing theory and research, the community health nurse considers all influences on the population and community in decision making and outcome evaluation. The major focus in this specialty area is on utilizing public health sciences and skills in the assessment of communities and populations, policy development, program planning, effective communication and the impact of cultural influences on health. The graduate in community/public health is actively engaged in education (e.g., community, staff, students and colleagues), case management, expert clinical practice, consultation, research and administration.

Program Requirement: The Master of Science Community Health Nursing Program requires 45 credit hours of course work and an applied project. The practicum and internship requirements include 540 clock hours. At the completion of the program, students are eligible to take the American Nurses Credentialing Center exam for national certification as an Advanced Public Health Nurse (APHN-BC).

Admission Requirements: Admission to graduate status in the College of Nursing and Health Innovation is based upon meeting the following requirements:

1. An undergraduate junior/senior GPA equal to 3.00, or a cumulative GPA equal to 3.00 (4.00=A) or higher for any undergraduate or graduate degree attained.
2. Completion of a baccalaureate degree in nursing accredited by a regional accrediting agency.
3. A current unencumbered license in the state where clinical practice will be concluded and/or an unencumbered Arizona license to practice as a registered nurse to enroll in nursing practicum courses.
4. Satisfactory completion of only the analytical writing section of the GRE.
5. Three professional recommendations from individuals knowledgeable about the applicant's academic and nursing leadership potential and one self-evaluation.
6. An interview with a representative of the specialty area.
7. Eligibility for admission to the Graduate College.
8. Completion of English language proficiency per Graduate College requirements and of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS), if considered an international student.

Applications to the program are due each year by March 1 for fall semester enrollment.

Contact:
College of Nursing & Health Innovation
http://nursing.asu.edu/
gponursing@asu.edu
NHI 158B
6024960703

**Community and Public Health Practice (Grad Certificate) NUCHPGRCH**
Official Degree Awarded: CERT Community and Public Health Practice (certificate)

Program Description: The graduate certificate in community and public health practice is directed toward students with bachelor's degrees who currently work in community or public health or other relevant fields and who want to solve public health problems and apply a breadth of knowledge and expertise in the community.

Program Requirement: The curriculum consists of a minimum of 16 credit hours of graduate study that may be applied toward the M.S. if the student is concurrently enrolled in the M.S. program. Part-time study is available.

Admission Requirements: Admission to the certificate program requires a bachelor's degree (in nursing or a related field) and an interest in increasing knowledge in community/public health. Current students in master's or doctorate programs at ASU are also qualified. Applicants must meet admission criteria of the Graduate College for graduate certificates and must submit the Graduate College online application.

Contact:
College of Nursing & Health Innovation
http://nursing.asu.edu/
gponursing@asu.edu
NHI 158B
6024960703

**Evidence-Based Practice Nursing Science (Grad Certificate) NUEVIDNSCE**
Official Degree Awarded: CERT Evidence-Based Practice in Nursing and Healthcare (certificate)
Program Description: The graduate certificate in evidence-based practice in nursing and healthcare is an online graduate certificate program designed to prepare nurse clinicians, educators and other healthcare professionals as experts in evidence-based practice (EBP).

Program Requirement: This 17-credit-hour, 18-month graduate certificate program is user-friendly and constructed in a distance-learning, online format to facilitate involvement of participants throughout the U.S. and the world. Two on-site visits to ASU are required. The initial visit is a three-day orientation and the final visit is a three-day immersion residency fellowship that culminates the program.

Admission Requirements: Admission requirements include all Graduate College admission requirements; completion of an accredited master’s degree program with a 3.00 cumulative GPA; or current enrollment in an accredited master’s program with a cumulative 3.00 GPA and approval by program director.

Applicants must:

1. Complete graduate admission application and online survey.
2. Submit a letter of recommendation from an academic advisor or supervisor supporting the applicant's enrollment.
3. Submit official transcripts from a master's program.
4. Submit a curriculum vitae or resume.

Admission is granted once a year and classes begin in January. Application deadline is Oct. 1.

Contact:
College of Nursing & Health Innovation
http://nursing.asu.edu/
gponursing@asu.edu
NHI 158B
602/496-0703

Family Nurse Practitioner - DNP NUANPFNDNP
College of Nursing & Health Innovation

Official Degree Awarded: DNP Advanced Nursing Practice (Family Nurse Practitioner)

Program Description: Designed for nurses seeking to become an advanced practice nurse as a family health nurse practitioner. Graduate courses in application of theory to advanced practice, application of evidence to advanced practice, advanced pathophysiology and advanced health assessment, advanced practice nursing role provide a foundation for this specialty. The focus in courses is on development of expertise in providing primary care to individuals of all ages within traditional, nontraditional and culturally diverse families. Theory and practicum courses are designed to prepare the student for certification in advanced practice nursing as a
family nurse practitioner.

Approximately one-third of the curriculum in each course is delivered in a traditional classroom setting, and two-thirds is completed in a Web-based format. Several different modalities are used to enhance student learning, including multimedia presentations, asynchronous discussion boards and live chats.

Focused clinical experiences are arranged with preceptors and administrators in the student’s local healthcare setting. Rural health and experiences with disadvantaged and multicultural populations are encouraged.

**Program Requirement:** The D.N.P. requires 84 credit hours of course work. The American Nurses Credentialing Center (ANCC) has recommended a minimum of 1,000 post-baccalaureate practicum hours for all students completing a D.N.P. The College of Nursing and Health Innovation’s program allows post-baccalaureate entry students to complete 630 hours of the 1,000 required clinical practice hours and then receive their M.S. while continuing in the D.N.P. program. This will allow students to then meet the requirements for certification and licensure in their specialty. The additional 540 hours are completed after certification and licensure while practicing as an advance practice nurse and completing the final D.N.P. courses.

Post-master entry applicants should have an idea for a project developed before entry and will complete 540 hours of clinical practice residency hours and the D.N.P. courses. The culminating document needed for completion of the D.N.P. is an evidence-based mentoring applied project. Each student will have a primary mentor and at least one committee member working with them on the project. Clinical practice residency hours will be used to carry out the project in a practice setting (work settings may be included, but specific objectives will be developed individually with each student, that may be different from the student’s job). Each project will be developed individually with each student.

**Admission Requirements:** Admission to graduate status in the College of Nursing and Health Innovation is based upon meeting the following requirements:

1. An undergraduate junior or senior GPA equal to 3.00, or a cumulative GPA equal to 3.00 (4.00=A) or higher for any bachelor's or graduate degree attained.
2. Completion of a bachelor’s degree in nursing accredited by a nationally recognized and regionally accredited agency.
3. A current unencumbered license in the state where clinical practice will be concluded and/or an unencumbered Arizona license to practice as a registered nurse to enroll in nursing practicum courses.
4. Satisfactory completion of the analytical writing section of the GRE.
5. Three professional recommendations from individuals knowledgeable about
   the applicant’s academic and nursing leadership potential and one self-
   evaluation.
6. An interview with a representative of the specialty area.
7. Eligibility for admission to the Graduate College.
8. Completion of all requirements for the Commission on Foreign Graduate
   Nursing Schools (CFGNS), if considered an international student.

Contact:
College of Nursing & Health Innovation
http://nursing.asu.edu
gponursing@asu.edu
NHI 158A
602/496-0857

Healthcare Innovation (MHI) NUHCINNMHI
College of Nursing & Health Innovation

Official Degree Awarded: Mhealthin Healthcare Innovation

Program Description: The M.H.I. is a 33-credit (one-year full-time or two-year part-
   time) master’s degree program using a hybrid online format open to nursing and
   non-nursing students working and living at a distance. This program is an initiative
   led by the ASU College of Nursing and Health Innovation in collaboration with the
   Herberger Institute for Design and the Arts and the Hugh Downs School of Human
   Communications.

Program Requirement: The M.H.I. requires 33 credit hours. The curriculum also
   requires the completion of an applied project as the culminating experience. The
   curriculum uses a “hybrid online format” to distinguish it from a traditional distance
   learning program. This unique curriculum and hybrid online format allows students
   to have face-to-face contact with each other and healthcare leaders during four- to
   five-day immersion sessions. These sessions entail eight-hour days at the beginning
   of each semester and two days at mid-semester. The rest of the course work is held
   online, using both synchronous (i.e., everyone is online in class at the same time)
   and asynchronous formats, utilizing voiced-over lectures or discussion boards, such
   as the Blackboard course management system and other online learning tools.

Admission Requirements: Admission to graduate status in the College of Nursing and
Health Innovation is based upon meeting the following requirements:

1. An undergraduate junior or senior GPA equal to 3.00, or a cumulative GPA
   equal to 3.00 (4.00=A) or higher for any bachelor's or graduate degree
   attained.
2. A bachelor’s degree in nursing (or another field) accredited by a nationally
   recognized and regionally accredited university.
3. Three professional recommendations from individuals knowledgeable about
   the applicant’s academic and leadership potential and one self-evaluation.
4. An interview with a representative of the program faculty.
5. Eligibility for admission to the Graduate College.
6. Completion of the English language proficiency test per graduate college requirements, if considered an international student. Applications to the program are due each year by March 1 for fall semester enrollment.

Contact:
College of Nursing & Health Innovation
http://nursing.asu.edu/programs/graduate/mhi
gponursing@asu.edu
NHI 158B
6024960703

International Health for Healthcare Professionals (Grad Certificate) NUHCRGRCI

Official Degree Awarded: CERT International Health for Healthcare Professionals (certificate)

Program Description: The graduate certificate in international health for health professionals targets and prepares primary care providers and other healthcare professionals in Arizona and throughout the nation who provide care for an increasingly diverse clientele. The program provides an overview of transborder and international health issues in the presence and absence of natural and human made disasters that incorporate and cultural and health immersion experiences.

Program Requirement: The 16-credit-hour international health for health professionals graduate certificate is offered as a hybrid online distance program with immersion sessions.

Admission Requirements: Admission to graduate status in the College of Nursing and Health Innovation is based upon meeting the following requirements:

1. An undergraduate junior or senior GPA equal to 3.00, or a cumulative GPA equal to 3.00 (4.00=A) or higher for any bachelor's or graduate degree attained.
2. Undergraduate-prepared nurse or health related professional (e.g., social worker, physician, psychologist, dentist) with a bachelor's, master's or medical degree from a nationally recognized and regionally accredited university or equivalent.
3. Professional license in the state where the individual capstone project will be conducted, if required (e.g., R.N., N.P., M.S.W., P.A. or M.D.).
4. Resume or curriculum vitae.
5. Application questionnaire and self-assessment form.
6. Three professional recommendations from individuals knowledgeable about the applicant's academic potential.
8. Proof of a current, valid passport.
9. Eligibility for admission to the Graduate College.
10. Completion of the English language proficiency test per graduate college requirements, if considered an international student.

Applications to the program are due each year by March 1 for fall semester enrollment.

Contact:
College of Nursing & Health Innovation
http://nursing.asu.edu/international
gponursing@asu.edu
NHI 158B
602/496-0703

Neonatal Nurse Practitioner - DNP NUANPNDNP
College of Nursing & Health Innovation

Official Degree Awarded: DNP Advanced Nursing Practice (Neonatal Nurse Practitioner)

Program Description: Designed for nurses seeking to become an advanced practice nurse as a neonatal nurse practitioner. Graduate courses in application of theory to advanced practice, application of evidence to advanced practice, advanced pathophysiology, advanced health assessment provide a foundation for this specialty.

The program features individually designed plans of study for nurses seeking to become neonatal nurse practitioners. Advanced neonatal nursing theory and clinical courses focus on the development of a framework for developmentally supportive, family-centered, culturally appropriate, advanced nursing practice with infants, children and families. Approximately one third of the curriculum in each course is delivered in a traditional classroom setting, and two thirds is completed in a Web-based format. Several different modalities are used to enhance the student learning, including multimedia presentations, asynchronous discussion boards, and live chats.

Focused clinical experiences are arranged with preceptors and administrators in the student's local healthcare setting. Rural health and experiences with disadvantaged and multicultural populations are encouraged.

Program Requirement: The D.N.P. requires 84 credit hours of course work. The American Nurses Credentialing Center (ANCC) has recommended a minimum of 1,000 post-baccalaureate practicum hours for all students completing a D.N.P. The College of Nursing and Health Innovation's program allows post-baccalaureate entry students to complete 630 hours of the 1,000 required clinical practice hours and then receive their M.S. while continuing in the D.N.P. program. This will allow students to then meet the requirements for certification and licensure in their specialty. The additional 540 hours are completed after certification and licensure while practicing as an advance practice nurse and completing the final D.N.P.
courses.

Post-master’s entry applicants should have an idea for a project developed before entry and will complete 540 hours of clinical practice residency hours and the D.N.P. courses. The culminating document needed for completion of the D.N.P. is an evidence-based mentoring applied project. Each student will have a primary mentor and at least one committee member working with them on the project. Clinical practice residency hours will be used to carry out the project in a practice setting (work settings may be included, but specific objectives will be developed individually with each student, that may be different from the student’s job). Each project will be developed individually with each student.

Admission Requirements: Admission to graduate status in the College of Nursing and Health Innovation is based upon meeting the following requirements:

1. An undergraduate junior or senior GPA equal to 3.00, or a cumulative GPA equal to 3.00 (4.00=A) or higher for any bachelor’s or graduate degree attained.
2. Completion of a bachelor’s degree in nursing accredited by a nationally recognized and regionally accredited agency.
3. A current unencumbered license in the state where clinical practice will be concluded and/or an unencumbered Arizona license to practice as a registered nurse to enroll in nursing practicum courses.
4. Satisfactory completion of the analytical writing section of the GRE.
5. Three professional recommendations from individuals knowledgeable about the applicant's academic and nursing leadership potential and one self-evaluation.
6. An interview with a representative of the specialty area.
7. Eligibility for admission to the Graduate College.
8. Completion of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS), if considered an international student.

Contact:
College of Nursing & Health Innovation
http://nursing.asu.edu
gponursing@asu.edu
NHI 158A
602/496-0857

Nurse Education in Academic and Practice Settings (Grad Certificate) NUNURSEDCE
Official Degree Awarded: CERT Nurse Education in Academic and Practice Settings (certificate)

Program Description: The graduate certificate in nurse education in academic and practice settings is an innovative program that is offered mostly online for nurses who have at least a bachelor's degree and who are interested in teaching in academic or practice settings.
Program Requirement: The 15-credit-hour graduate certificate program includes courses covering curriculum development, teaching in the classroom, teaching online and producing and evaluating educational programs in academic and practice settings. A three-credit-hour teaching practicum (comprised of 135 clock hours) is also an integral part of the program. Most of the courses are offered online.

Admission Requirements: Admission to graduate status in the College of Nursing and Health Innovation is based upon meeting the following requirements:

1. An undergraduate junior or senior GPA equal to 3.00, or a cumulative GPA equal to 3.00 (4.00=A) or higher for any bachelor's or graduate degree attained.
2. Minimum of a bachelor's degree in nursing (or a related field) accredited by a nationally recognized and regionally accredited agency.
3. A current unencumbered license in the state where clinical practice will be concluded and/or an unencumbered Arizona license to practice as a registered nurse to enroll in nursing practicum courses.
4. Three professional recommendations from individuals knowledgeable about the applicant’s academic and nursing leadership potential.
5. Statement of profession goals.
6. An interview with program faculty.
7. Eligibility for admission to the Graduate College.
8. Completion of the English language proficiency test per graduate college requirements and of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS), if considered an international student.

Applications to the program are due each year by March 1 for fall semester enrollment.

Contact:
College of Nursing & Health Innovation
http://nursing.asu.edu/
gponursing@asu.edu
NHI 158B
6024960703

Nursing Education (MS) NUNURSEDMS
College of Nursing & Health Innovation

Official Degree Awarded: MS Nursing (Nursing Education)

Program Description: The faculty in the College of Nursing and Health Innovation offer a predominantly online graduate program leading to the M.S. in nursing with a concentration in nursing education. The purpose of the M.S. program is designed to foster scholarship, creativity and innovation that prepares the nurse educator for leadership roles in academic and practice settings. The M.S. program offers advanced-level courses that can be used to provide a seamless transition to the Ph.D. or the D.N.P. program depending on career goals.
Program Requirement: This degree program requires a minimum total of 38 credit hours culminating in a capstone project related to learner-centered education. The core of the program consists of 15 hours of courses and a practicum which focuses on the science and art of nursing education, theory and practice courses related to one of eight clinical specialties. Students who choose the nurse educator concentration pathway must have a bachelor's degree (or higher). At the completion of the program, graduates with two years teaching experience may be eligible to take the National League for Nursing certification examination.

Admission Requirements: Admission to graduate status in the College of Nursing and Health Innovation is based upon meeting the following requirements:

1. An undergraduate junior or senior GPA equal to 3.00, or a cumulative GPA equal to 3.00 (4.00=A) or higher for any bachelor's or graduate degree attained.
2. Undergraduate-prepared nurse or health related professional (e.g., social worker, physician, psychologist, dentist) with a bachelor's, master's, or medical degree from a nationally recognized and regionally accredited university or equivalent.
3. Professional license in the state where the individual capstone project will be conducted, if required (e.g., R.N., N.P., M.S.W., P.A. or M.D.).
4. Resume or curriculum vitae.
5. Application questionnaire and self-assessment form.
6. Three professional recommendations from individuals knowledgeable about the applicant’s academic potential.
8. Proof of a current, valid passport.
9. Eligibility for admission to the Graduate College.
10. Completion of the English language proficiency test per graduate college requirements, if considered an international student.

Applications to the program are due each year by March 1 for fall semester enrollment.

Contact:
College of Nursing & Health Innovation
http://nursing.asu.edu/
gponursing@asu.edu
NHI 158B
6024960703

Nursing and Healthcare Innovation (PHD) NUNHIPHD
College of Nursing & Health Innovation

Official Degree Awarded: PHD Nursing and Healthcare Innovation

Program Description: The College of Nursing and Health Innovation continues to offer this program in both traditional on-site delivery format and innovative real-
time collaborative virtual learning technology, designed to maintain our commitment to a highly mentored, interactive learning experience. Several different modalities are also used to enhance the student’s learning, including multimedia presentations, asynchronous discussion boards and live chats.

Program Requirement: The Ph.D. curriculum consists of a minimum of 84 credit hours. Up to 30 hours from a previously awarded master’s degree can count toward this requirement. Twelve credit hours are required in a substantive area of concentration and may be added to any semester, based on availability and student interest.

Students are required to enroll for a minimum of 9 credit hours per semester for years one and two of their program of study. Twenty-four hours are required with a research focus, including 12 hours of dissertation credit. The program of study can be as broad or as narrow as the student and the supervisory program committee deem necessary for the student’s career goals. The program may incorporate courses from other disciplines to further refine substantive areas of study. ASU offers a flexible menu of graduate courses in the various substantive areas of concentration.

Both written and comprehensive oral examinations are required. Students must also complete and successfully defend a written dissertation.

Admission Requirements: All applicants must submit the Graduate College online application. Admittance to the Ph.D. program requires a master’s or bachelor’s degree in nursing or a related field from an accredited program. A cumulative undergraduate GPA of at least 3.00 and a cumulative graduate GPA of at least 3.50. Students are admitted once a year to start the fall semester.

There is an inferential statistics prerequisite for post master’s applicants.

GRE scores are encouraged but not required.

International Applicants: Individuals from a country whose native language is not English must meet previous qualifications and provide evidence of English proficiency, as indicated by acceptable scores of the Test of English as a Foreign Language (TOEFL). Acceptable TOEFL scores are 550, paper-based, 213 computer-based or 80, Internet-based.

Contact:
College of Nursing & Health Innovation
http://nursing.asu.edu
phdnursing@asu.edu
CONHI
602/496-0930
**Nutrition (MS) ECHNUTMS**

College of Nursing & Health Innovation

**Official Degree Awarded:** MS Nutrition

**Program Description:** The M.S. in nutrition at Arizona State University's Polytechnic campus is based on the scientific foundations of nutrition, but also prepares students with strong writing skills, computer literacy, interpretive expertise, problem-solving skills and research experiences. The degree requires the completion of a minimum of 30 credit hours and a thesis. Graduate students who are currently in good academic standing in the program may elect to apply to the ASU Dietetic Internship once they have completed at least six graduate hours from the ASU Department of Nutrition.

The primary objective of the graduate program in nutrition is to provide advanced training in nutrition research. Graduate students are expected to develop competencies in research methods and in advanced practice knowledge relevant to their area of study. The skills and knowledge acquired during the course of training should enable each student to develop professional competencies that can be applied to significant problems and issues within the field of nutrition/dietetics.

**Program Requirement:** The plan of study must contain a minimum of 30 credit hours of approved graduate-level work, and a thesis is required. The following courses are required:

1. Research methods, NTR 500 and NTR 501 (6)
2. Statistics; three-six credit hours from EXW 501, EDP 552/554, STP 530/531/532/533, PSY 529/530 or other approved course
3. Seminars* in foods and nutrition (6 credit hours from NTR 521/523/525/527/529/598)
4. Thesis (6)

*Seminars reflect the changing nature of research and cover different subject areas each semester. Recent seminars include global nutrition, vegetarianism, public health, immunology, pediatric nutrition, energy balance and weight management and sports nutrition.

**Admission Requirements:** Applicants must submit a Graduate College online application.

The following are prerequisites for admission into the program:

- General Nutrition for majors (such as NTR 241 at ASU)
- Microbiology with Lab (such as MIC 205 and 206 at ASU)
- Anatomy and Physiology I and II with Labs (such as BIO 201 and 202 at ASU)
- General Chemistry I and II with Labs (such as CHM 113 and 116 at ASU)
- Organic Chemistry with Lab (one semester only is required, such as CHM 231 and 235 lab at ASU)
Biochemistry (one semester only is required, such as BCH 361 and 367 lab at ASU)
Statistics (any statistics course)

Contact:
College of Nursing & Health Innovation
http://www.poly.asu.edu/ecollege/nutrition
nutrition@asu.edu
HSC 1386
4807271728

Nutrition (Dietetics) MS ECNTRDMS
College of Nursing and Health Innovation

Official Degree Awarded: MS Nutrition (Dietetics)

Program Description: The dietetics concentration under the M.S. in nutrition is a non-thesis option geared specifically for registered dietitians (R.D.s) seeking to continue their education, advance their skills as practitioners and achieve their career goals. To facilitate the matriculation of working professionals, courses will be offered one evening a week or offered online, and students will have the option of enrolling part- or full-time.

The dietetics concentration under the M.S. in nutrition requires previous work experience as an R.D. to be admitted; however, prospective students will not have to be employed at the time they apply to the program, nor will students have to be employed to maintain in good standing with the program.

Program Requirement: All students will complete a minimum of 30 credit hours:

- Required courses: 9 credit hours
- Required concentration courses: 6 credit hours
- Elective courses: 9 credit hours
- Applied project: 6 credit hours

Admission Requirements: Prospective students must apply online to the Graduate College and applicants must submit the following materials:

1. The completed Supplementary Information Form (Appendix A of the Nutrition Graduate Handbook).
2. Three letters of recommendation, including at least one from an individual who has employed or supervised the applicant's work, with the Recommendation Form Cover Sheet (again found in Appendix A) included with each letter.
3. A resume that summarizes the academic, volunteer and employment experiences of the applicant and credentialing as a registered dietitian.
4. If the applicant wishes to apply for a graduate teaching or research assistantship, the form found in Appendix B of the Nutrition Graduate Handbook must be completed at the time of application.

Credentials submitted by applicants to the M.S. in nutrition program are evaluated by the ASU Graduate College and by the curriculum committee of the nutrition program. The dietetics concentration utilizes a rolling admissions process by conducting on-going application reviews. Based upon the recommendation of the curriculum committee, applicants will be recommended for admission to the ASU Graduate College by the head of the nutrition program. Applications for the M.S. in nutrition concentration in dietetics will be considered for admission in the upcoming fall or spring semester. Notification of admission to the department’s graduate program will be given in late March/early April or late October/early November.

Applicants for the dietetics concentration will receive regular admission status based on the following criteria and when enrollment limits have not been met:

1. Current registered dietitian (R.D.) credential by the Commission on Dietetic Registration.
2. A minimum of 2,080 hours (equivalent to one year full-time) of work experience in dietetics or a closely related discipline since becoming an R.D.
3. Adequate academic preparation.
4. Satisfactory and competitive GPA.
5. Personal interview (in lieu of GRE scores).
6. Favorable letters of recommendation.
7. Completed Supplementary Information Form (Appendix A).

The following courses are prerequisites:

- One general nutrition course for majors (e.g., NTR 241 at ASU)
- One microbiology course with laboratory component (e.g., MIC 205 and 206 at ASU)
- Two anatomy and physiology courses with laboratory component (e.g., BIO 201 and 202 at ASU)
- Two general chemistry courses with laboratory components (e.g., CHM 113 and 116 at ASU)
- One organic chemistry course with laboratory component (e.g., CHM 231 and 235 at ASU)
- One biochemistry course with laboratory component (e.g., BCH 361 and 367 at ASU)
- One statistics course

Each applicant’s background/undergrad transcript will be assessed on a case by case basis and, if admitted, deficiency courses will be specified in the admissions letter as needed.
Pediatric Nurse Practitioner - DNP NUANPPDNP
College of Nursing & Health Innovation

Official Degree Awarded: DNP Advanced Nursing Practice (Pediatric Nurse Practitioner)

Program Description: The D.N.P. program may be completed for certification to be a pediatric nurse practitioner. Graduate courses in application of theory to advanced practice, application of evidence to advanced practice, advanced pathophysiology, and advanced health assessment and advanced practice nursing role provide a foundation for this specialty. Nursing of children theory and clinical courses focus on the development of a framework for family-centered, culturally appropriate, advanced nursing practice with children and families. Individual courses focus on well child maintenance as well as diagnosis, clinical decision making and intervention strategies for children with common health problems.

Program Requirement: This program requires a minimum of 84 credit hours. The Association of Nursing for Critical Care (ANCC) has recommended a minimum of 1,000 post-baccalaureate hours for all students completing a D.N.P. The College of Nursing and Health Innovation’s program allows post-baccalaureate entry students to complete 630 hours of supervised clinical in their chosen specialty before receiving their M.S. This will allow students to then meet the requirements for certification and licensure in their specialty.

The additional 450 hours are completed after certification and licensure while practicing as an advance practice nurse and completing the final D.N.P. courses. The culminating document needed for completion of the D.N.P. is an evidence-based mentoring applied project. Each student will have a primary mentor and at least one committee member working with them on the project. Clinical practice residency hours will be used to carry out the project in a practice setting (work settings may be included, but specific objectives will be developed, individually with each student, that may differ from the student’s job.) Each project will be developed individually with each student. Post-master’s entry applicants should have ideas for a project already developed before entry.

Admission Requirements: Admission to graduate status in the College of Nursing and Health Innovation is based upon meeting the following requirements:
1. An undergraduate junior or senior GPA equal to 3.00, or a cumulative GPA equal to 3.00 (4.00=A) or higher for any bachelor's or graduate degree attained.

2. Completion of a bachelor’s degree in nursing accredited by a nationally recognized and regionally accredited agency.

3. A current unencumbered license in the state where clinical practice will be concluded and/or an unencumbered Arizona license to practice as a registered nurse to enroll in nursing practicum courses.

4. Satisfactory completion of the analytical writing section of the GRE.

5. Three professional recommendations from individuals knowledgeable about the applicant's academic and nursing leadership potential and one self-evaluation.

6. An interview with a representative of the specialty area.

7. Eligibility for admission to the Graduate College.

8. Completion of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS), if considered an international student.

Contact:
College of Nursing & Health Innovation
http://nursing.asu.edu
gponursing@asu.edu
NHI 158A
602/496-0857

Physical Activity, Nutrition, and Wellness (PhD) ECNUTRIPHD
College of Nursing & Health Innovation

Official Degree Awarded: PHD Physical Activity, Nutrition and Wellness

Program Description: The faculty mentors of the Physical Activity, Nutrition, and Wellness Program offers an interdisciplinary graduate program leading to the doctoral degree in physical activity, nutrition and wellness. The doctoral degree in physical activity, nutrition and wellness is an individualized interdisciplinary program that integrates graduate courses from several academic units to provide a sound foundation for research, leading to a dissertation.

One of the unique features of this interdisciplinary program is that a student may tailor a course of study to fit individual needs and goals within two main focus areas: physical activity health promotion and nutrition. The program focuses on issues that contribute to health through the reduction of disease risk, the promotion of quality of life and the enhancement of well-being. While many healthy lifestyles are studied, the emphasis is on physically active living and sound nutrition.

The program prepares research scholars, teachers and professionals who study physical activity, nutrition, healthy lifestyles and health promotion. The program will prepare graduates for careers in higher education, governmental agencies and health-related positions in private industry. The program requires residency and
three years of full-time study after the master's degree. Students will be actively involved in research at all stages of their doctoral study through their participation in research internships, independent research experiences, seminars and colloquia and dissertation research.

*Program Requirement*: This program requires a total of 97 credit hours of course work, written and oral progression and comprehensive examinations and a dissertation. The plan of study in the program consists of a minimum of 67 credit hours over the master's degree distributed across five areas of study:

- Research core (26)
- Cognate area courses (12)
- Professional development (5)
- Concentration area courses (12)
- Dissertation (12)

Cognate courses have two tracks with three courses (nine hours) per track: health promotion and nutrition. Students may take courses in both tracks (i.e., six hours per track) or all courses in a single track (nine hours) plus at least one class (three hours) in the opposite track.

The concentration courses allow students to focus on an interest area (e.g., aging, stress reduction, diabetes, strength, worksite health promotion, public health, bioenergetics, weight management, etc.) within the program. The content area is selected by the student in consultation with his or her academic mentor and supervisory committee. It is expected that nine of the 12 credit hours in the concentration will be in a focused content area and that student's research projects will reflect their concentration interests. At least three, but not more than nine credit hours in the concentration should be taken from a program or department outside the student's home program.

*Admission Requirements*: Applicants must submit the Graduate College online application. In addition to meeting Graduate College requirements, students must submit the following to the physical activity, nutrition, and wellness executive committee chair:

1. A letter of intent (designating the name of a potential mentor from a list of approved faculty mentors).
2. GRE scores (verbal, quantitative and writing).
3. A six- to 10-page writing sample.
4. A professional resume.
5. Three letters of recommendation.

It is expected that students admitted to the program will have a strong disciplinary foundation in either physical activity or nutrition. Individuals lacking background in these areas will be required to make up deficiencies before admission. Students must have completed the following prerequisite undergraduate and graduate
courses prior to admission: lower-division human nutrition, upper-division nutrition, lower-division anatomy, lower-division physiology, upper-division exercise physiology, graduate-level research methods and graduate level statistics. Other requirements may be necessary depending on the area of study and will be determined by the mentor and executive committee.

Additionally, all students must submit an application for a teaching or research graduate assistantship. Applicants whose native language is not English must submit a Test of English as a Foreign Language (TOEFL) score. Applicants must have successfully received a master's degree prior to admission to the doctoral program and it is preferable that they have completed a data-based research thesis. Admission decisions are based on the compatibility of the applicant’s research interests and career goals with the purpose of the degree program, previous academic training, GPA, GRE scores, recommendations, available funding and a match of research interests with available mentors.

It is expected that doctoral students will spend three years in full-time residence. The intent is to involve and embed students in ongoing research as well as class study. Thus, all doctoral students are to be full-time students and hold part-time appointments (20 hours per week) as a teaching assistant or research assistant. As such, to be accepted into the program, funding must be available and students must have the expertise, experience and willingness to teach courses in the exercise and wellness or nutrition undergraduate curriculum or be a research assistant as funding allows.

Applications are accepted for admission to the fall semester only, with first priority given to completed applications received by Jan. 15.

Contact:
College of Nursing & Health Innovation
http://nursing.asu.edu/programs/graduate/iphd/index.html
wellnessprograms@asu.edu
EAW 109
480/727-1945

Women's Health Nurse Practitioner - DNP NUANPWHDNP
College of Nursing & Health Innovation

Official Degree Awarded: DNP Adv Nursing Practice (Women's Health NP)

Program Description: Designed for nurses seeking to become an advanced practice nurse as a women's health nurse practitioner. Graduate courses in application of theory to advanced practice, application of evidence to advanced practice, advanced patho-physiology, advanced health assessment and advanced practice nursing role provide a foundation for this specialty.

Women's healthcare theory and clinical courses include theories, principles, and
clinical skills in the care of women and their families. Courses focus on critical thinking, diagnosis, problem-solving, and nursing management of women throughout the maternity cycle and with common gynecological problems. Client education, communication and collaboration are emphasized.

Program Requirement: The D.N.P. requires 84 credit hours of course work. The American Nurses Credentialing Center (ANCC) has recommended a minimum of 1,000 post-baccalaureate practicum hours for all students completing a D.N.P. The College of Nursing and Health Innovation’s program allows post-baccalaureate entry students to complete 630 hours of the 1,000 required clinical practice hours and then receive their Master of Science degree while continuing in the D.N.P. program. This will allow students to then meet the requirements for certification and licensure in their specialty. The additional 540 hours are completed after certification and licensure while practicing as an advance practice nurse and completing the final D.N.P. courses.

Post-master's entry applicants should have an idea for a project developed before entry and will complete 540 hours of clinical practice residency hours and the D.N.P. courses. The culminating document needed for completion of the D.N.P. is an evidence-based mentoring applied project. Each student will have a primary mentor and at least one committee member working with them on the project. Clinical practice residency hours will be used to carry out the project in a practice setting (work settings may be included, but specific objectives will be developed individually with each student, that may be different from the student’s job). Each project will be developed individually with each student.

Admission Requirements: Admission to graduate status in the College of Nursing and Health Innovation is based upon meeting the following requirements:

1. An undergraduate junior or senior GPA equal to 3.00, or a cumulative GPA equal to 3.00 (4.00=A) or higher for any bachelor's or graduate degree attained.
2. Completion of a bachelor’s degree in nursing accredited by a nationally recognized and regionally accredited agency.
3. A current unencumbered license in the state where clinical practice will be concluded and/or an unencumbered Arizona license to practice as a registered nurse to enroll in nursing practicum courses.
4. Satisfactory completion of the analytical writing section of the GRE.
5. Three professional recommendations from individuals knowledgeable about the applicant’s academic and nursing leadership potential and one self-evaluation.
6. An interview with a representative of the specialty area.
7. Eligibility for admission to the Graduate College.
8. Completion of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS), if considered an international student.
Public Programs, College of

Assessment of Integrative Health Modalities (Grad Certificate) PPSWGGRCH

Official Degree Awarded: CERT Assessment of Integrative Health Modalities (certificate)

Program Description: The School of Social Work graduate certificate in assessment of integrative health modalities will focus on integrative health, the current term used by practitioners in the field who feel strongly that treating the "whole person—body, mind and spirit" is the route to the highest quality of health. The purpose of the certificate is to enhance students' knowledge of integrative health practices. It will provide students with extensive knowledge of integrative health practices through directed readings in evidence-based journal articles, expert lectures from community health professionals and ASU faculty drawn from across disciplines, field observation, an individual research paper and a mindfulness in-class practice and class interaction that can enhance the quality and effectiveness of treating clients holistically.

Program Requirement: The certificate will require the completion of 15 credit hours, distributed among three core courses and two interdisciplinary electives. Each ASU campus, particularly the Polytechnic campus, offers a variety of courses that can meet the elective requirement. The core courses include: quality of life, ancient healing traditions and treating the whole person.

Admission Requirements: Students interested in applying to this program must submit the online Graduate College application.

This certificate is open to professionals in social work, nursing or related health and human service professions from the community, as well as students currently admitted to a health and human services degree program at the master's or doctoral level. A minimum of a bachelor's degree in health or human services or related field is required for entry into the certificate program.

Contact:
School of Social Work
http://ssw.asu.edu/certificates/index.html
social.work@asu.edu
Community Res and Dev PhD PPCRDPHD
College of Public Programs

Official Degree Awarded: PHD Community Resources and Development

Program Description: The School of Community Resources and Development and the Department of Recreation and Tourism Management offer a graduate program leading to the Ph.D. in community resources and development.

The Ph.D. in community resources and development is a theoretically grounded, research-intensive degree program designed to prepare graduates for research-oriented careers in higher education, governmental agencies, nonprofit organizations and private sector businesses. The program is based on the concept of building sustainable and healthy communities as the unifying principle in the established focus areas of: parks and recreation management, tourism development and management, nonprofit leadership and management, and community studies.

The theoretical and methodological approaches embedded in this program serve to integrate scholarship in these areas in order to gain a more meaningful understanding of, and impact on, community life and dynamics. The program is interdisciplinary in nature. The core faculty engaged in this program is housed in the School of Community Resources and Development (at the Downtown Phoenix campus) and the Department of Recreation and Tourism Management (at the West campus). In addition, the Ph.D. builds on current collaborations with faculty with related research interests from many ASU departments, schools and centers.

Program Requirement: The Ph.D. program consists of a minimum of 84 credit hours. Up to 30 hours from a previously awarded master’s can count toward the Ph.D. requirements. All students are advised initially by the Ph.D. graduate program director as a cohort. Students are required to take 18 credit hours of core course work, 15 hours of which are with the cohort, during the first year. Students are assigned an individual advisor/mentor at the end of the first year of study. A supervisory committee is also formed at the end of the first year which reflects the interests of the student and faculty.

Each student develops his or her program of study in consultation with the Ph.D. graduate program coordinator, advisor and supervisory committee. Students complete at least 12 credit hours of elective course work, including courses from contributing disciplines, selected in consultation with their advisor to foster the interdisciplinary nature of the degree program. Students can also complete at least 12 hours of CRD 792 Research and 12 hours of CRD 799 Dissertation. When the majority of course work has been completed and before dissertation research is started, students must complete a written examination followed by an oral examination. These examinations must be completed within five years of admission.
Admission Requirements: Applications are reviewed by the admissions committee and recommendations for admission are then made by the graduate program director to the dean of the Graduate College. Minimum Graduate College requirements must be met. Additionally, each applicant must provide a statement of academic and professional goals in sufficient detail to indicate compatibility with the educational objectives and capabilities of the Ph.D. program. GRE test scores, a current and professional resume, and three letters of recommendation are required. The letters may be a mix of academic and professional references, but each must address the applicant’s capacity to successfully complete the doctoral program. International applicants are also required to submit Test of English as a Foreign Language (TOEFL) scores and a financial guarantee statement.

Admissions recommendations are made only once a year, with admitted students beginning their studies in fall semester. To assure consideration for the ensuing fall semester, candidates should submit their application, graduate assistantship and tuition waiver by Feb. 1. Students applying to the program are expected to have a master’s degree from an accredited institution which included a master's-level research methods and statistics class or classes. If deficiencies exist in community resource and development-related course work at the master’s level, appropriate classes are suggested.

Contact:
School of Community Resources and Development
http://crdphd.asu.edu
scrd@asu.edu
UCENT 550
602/496-0550

Criminology and Criminal Justice (MS) PPCRJMS
College of Public Programs

Official Degree Awarded: MS Criminology and Criminal Justice

Program Description: The M.S. in criminology and criminal justice is a research degree designed to provide students with a high level of theoretical and empirical knowledge about crime and criminal justice. The program also is designed to provide students with the advanced research skills needed for careers as criminal justice researchers and continued study in doctoral programs in criminology or criminal justice. The degree consists of 24 credit hours of course work and a six-hour thesis.

Program Requirement: A minimum of 30 credit hours of graduate study beyond the baccalaureate degree is required for the M.S. in criminology and criminal justice. This includes 24 credit hours of course work and six credit hours of thesis. There are five required courses. Each student will write a thesis that reflects original research and scholarship, makes a contribution to knowledge in the field and demonstrates his/her ability to design and carry out an independent research
project.

Core Courses

- CRJ 501 Seminar in Criminal Justice (3)
- CRJ 502 Seminar in Criminology (3)
- CRJ 503 Research methods for Criminal Justice (3)
- CRJ 504 Statistical Tools for Criminal Justice (3)
- CRJ 604 Advanced Statistical Analysis (3)

Electives

Choose three in consultation with the supervisory committee (9)

Thesis (6)

Admission Requirements: Students must submit an application for admission, an official transcript from every university or institution attended, GRE scores and the application fee to the Graduate College. The suggested application deadlines are April 1 for fall semester and Nov. 1 for spring semester.

In addition to the application material required by the Graduate College, applicants must submit:

1. Two letters of recommendations.
2. A personal statement that addresses the applicant’s prior education and professional experience, discusses the applicant’s career goals and explains how the degree will help the applicant achieve these goals.

The letters of recommendation and personal statement should be sent to:

M.S. in Criminology and Criminal Justice Program
College of Public Programs
Arizona State University
4701 W. Thunderbird Rd.
Mail Code 3250
Glendale, AZ 85306-4908

Contact:
School of Criminology and Criminal Justice
http://ccj.asu.edu/degree-programs/ms
sccj@asu.edu
FAB S 301
602/543-6225

Criminology and Criminal Justice (PhD) PPCRJPHD
College of Public Programs
**Official Degree Awarded:** PHD Criminology and Criminal Justice

**Program Description:** The School of Criminology and Criminal Justice at Arizona State University offers a program of course work and research leading to the Ph.D. in criminology and criminal justice. This program emphasizes criminal justice theory, research and policy. The program is designed to produce highly skilled criminology and criminal justice faculty and agency researchers and administrators.

The Ph.D. in criminology and criminal justice program is organized around five components:

1. A core of required courses in theory and research on crime and the criminal justice system.
2. A core of required courses on research methods and analytical techniques.
3. Elective courses in criminology, criminal justice and related fields.
4. A comprehensive examination.

**Program Requirement:** The Ph.D. in criminology and criminal justice requires a minimum of 84 credit hours of graduate course work beyond the bachelor’s degree, a dissertation and a written comprehensive exam. This includes a minimum of 72 credit hours of course work and 12 credit hours (and only 12) of dissertation. A maximum of 30 credit hours of course work from a previously awarded master’s degree or J.D. may, with the approval of the supervisory committee, be applied toward the doctoral program of study.

Each student is required to complete course work in two core areas. This includes six credit hours of course work in theory and research on crime and the criminal justice system and nine credit hours of course work on research methods and analytical techniques. Elective courses comprise the remainder of the course work required for the Ph.D. All students must demonstrate proficiency in research and methodological skills.

**Core Courses**

- CRJ 601 Seminar on Criminological Theory (3)
- CRJ 602 Seminar on Criminal Justice Policies and Practices (3)
- CRJ 603 Advanced Research Design (3)
- CRJ 604 Advanced Statistical Analysis (3)
- CRJ 605 Special Problems in Quantitative Methods (3)

**Electives**

Choose nine in consultation with the supervisory committee (27)

**Dissertation** (12)

Credit hours for course work from master’s degree or J.D. (30)
Admission Requirements: Students must submit an application for admission, an official transcript from every university or institution attended, GRE scores and the application fee to the Graduate College. The application deadline is Feb. 1 for fall semester.

In addition to the basic requirements established by the Graduate College, the School of Criminology and Criminal Justice requires the following:

1. A master’s degree or a J.D. earned from an accredited institution. The master’s degree may be a degree in criminal justice, criminology or another field (e.g., sociology, political science, history, social work, public administration, psychology or philosophy).
2. Outstanding students with a bachelor’s degree may be admitted directly into the Ph.D. program. These students’ work will be reviewed after completion of 30 credit hours of graduate course work. Students whose work passes the review are awarded the master’s in passing.
3. Two letters of reference from faculty members or others qualified to evaluate the applicant’s academic potential for doctoral study.
4. A resume.
5. A personal statement, not exceeding five pages, that describes the applicant’s prior education, relevant professional experience, and career goals, and that explains how the Ph.D. in criminology and criminal justice will help the applicant attain his/her career goals. The statement should explicitly explain how the student’s plans are consistent with the role and mission of the School of Criminology and Criminal Justice at ASU.
6. Applicants who wish to apply for a graduate assistantship must also submit the school’s application for a graduate assistantship.
7. International students seeking admission to the program must meet ASU Graduate Faculty requirements governing the admission of international students, which can be found at http://graduate.asu.edu/admissions/international.html.

The letters of recommendation and personal statement should be sent to:

Ph.D. in Criminology and Criminal Justice Program
College of Public Programs
Arizona State University
4701 W. Thunderbird Rd.
Mail Code 3250
Glendale, AZ 85306-4908

Contact:
School of Criminology and Criminal Justice
http://ccj.asu.edu/degree-programs/phd
sccj@asu.edu
FAB S 301
602/543-6225
College of Public Programs

Official Degree Awarded: MSW Social Work (Planning, Administration and Community Practice)

Program Description: The professional program leading to the M.S.W. prepares social workers for advanced direct practice or planning, administration and community practice. The program is designed to prepare social workers to be capable of responding effectively to the needs of special populations in the Southwest. The M.S.W. degree program is accredited by the Council on Social Work Education, and is located at the Downtown Phoenix campus and in Tucson.

Program Requirement: This degree program requires 36 credit hours of course work. Students must start the program in summer (beginning with the first summer session) and complete a total of three credit hours in each summer session for a total of six hours. The six credit hours of summer courses are not offered in Tucson. Students also complete one internship. The planning, administration and community practice courses are generally not offered in Tucson. A written, comprehensive examination is also required.

Summer Session Course Work

D SWG 598 ST: Advanced Standing Bridge Seminar (3)
D SWG 598 ST: Advanced Standing Bridge Seminar (3)

Planning, Administration, and Community Practice (PAC)

D SWG 623 Agency and Community-Based Research in Social Work (3)
D SWG 632 Social Policy and Services II (3)
D SWG 643 Advanced Practicum: Planning, Social Work Administration, and Community Practice I (3)
D SWG 644 Advanced Practicum: Planning, Social Work Administration, and Community Practice II (3)
D SWG 681 Social Work Administration (3)
D SWG 682 Community Participation Strategies (3)
D SWG 685 P: Program Planning in Social Services (3)
Electives (9)

Electives may be selected from offerings at the School of Social Work or courses offered through other departments with the approval of the M.S.W. program coordinator.

Admission Requirements: Applicants must follow the procedures for admission to the Graduate College. Advanced Standing Program applicants must have a B.S.W. degree from a Council on Social Work Education.
Downtown Phoenix - Social Work - Advanced Direct Practice (MSW) PPAPDTMSW

College of Public Programs

Official Degree Awarded: MSW Social Work (Advanced Direct Practice)

Program Description: The professional program leading to the M.S.W. program prepares social workers for advanced direct practice or planning, administration and community practice. The program is designed to prepare social workers who are capable of responding effectively to the needs of special populations in the Southwest. This program is located at the Downtown Phoenix campus and in Tucson. It is accredited by the Council on Social Work Education.

Program Requirement: This degree program requires 36 credit hours of coursework. Students must start the program in summer (beginning with the first summer session) and complete a total of three credit hours in each summer session for a total of six hours. The six credit hours of summer courses are not offered in Tucson. Students also complete one internship and select one of three specializations: children, youth, and families health; behavioral health; or public child welfare. Not all of these specializations may be offered in Tucson. Students must also complete a written comprehensive examination.

Summer Session Course Work

- D SWG 598 ST: Advanced Standing Bridge Seminar (3)
- D SWG 598 ST: Advanced Standing Bridge Seminar (3)

The following specialization courses are required:

Children, Youth and Families

- D SWG 606 Assessment of Mental Disorders (3)
- D SWG 608 Ecological Approach to Practice with Children, Youth and Families (3)
- D SWG 619 Practice-Oriented Research (3)
- D SWG 617 Advanced Social Work Practice with Children and Adolescents (3)
- D SWG 621 Integrative Seminar
- D SWG 641 Advanced Practicum: Direct Practice I (3)
- D SWG 642 Advanced Practicum: Direct Practice II (3)

Electives: Nine hours. Two electives must be from an approved list of electives.
Health, Behavioral Health

D SWG 603 Practice in Health/Behavioral Health Settings (3)
D SWG 606 Assessment of Mental Disorders (3)
D SWG 619 Practice-Oriented Research (3)
D SWG 621 Integrative Seminar (3)
D SWG 641 Advanced Practicum: Direct Practice I (3)
D SWG 642 Advanced Practicum: Direct Practice II (3)

Choose one of the following courses:

D SWG 604 Advanced Social Work Practice in Health (3)
D SWG 613 Advanced Social Work Practice in Behavioral Health (3)

Electives: Nine hours. Two electives must be from an approved list of electives

Public Child Welfare

D SWG 606 Assessment of Mental Disorders (3)
D SWG 608 Ecological Approach to Practice with Children, Youth and Families (3)
D SWG 609 Advanced Social Work Practice with Child Welfare Families (3)
D SWG 619 Practice-Oriented Research (3)
D SWG 621 Integrative Seminar (3)
D SWG 633 Child Welfare Services (3)
D SWG 641 Advanced Practicum: Direct Practice I (3)
D SWG 642 Advanced Practicum: Direct Practice II (3)

Electives: Six hours, which must be from an approved list of electives

Admission Requirements: Applicants must follow the procedures for admission to the Graduate College. Advanced standing program applicants must have a B.S.W. from a Council on Social Work. Applications to the advanced standing program are accepted from Nov. 1 to Jan. 2 preceding the summer session to which the applicant is seeking admission. Applicants admitted to the advanced standing program begin classes in the summer.

All advanced standing program applicants must submit the following to the School of Social Work:

1. A School of Social Work M.S.W. application form.
2. An M.S.W. advanced standing application.
3. A statement of educational and career goals.
4. A professional resume that includes volunteer and paid work experience.
5. A written case example covering areas specified in the advanced standing application.
6. Three letters of reference. A combination of academic and professional references is desirable. References from friends, family members, or personal therapists are not accepted. At least one of the three required references
must be from the applicant’s B.S.W. field instructor, or if employed in a social work‐related job for two or more years, a recommendation from the applicant’s supervisor. Applicants must have received their B.S.W. no more than five years before the date of admission.

In addition, all applicants must submit the following to the Graduate College:

1. A completed Graduate College application form.
2. The application fee; and
3. An official transcript of all academic work completed or in progress.

Contact:
School of Social Work
http://ssw.asu.edu/
social.work@asu.edu
UCENT 800
602/496-0800

Downtown Phoenix - Social Work - Advanced Generalist (MSW) PPASWMSW
College of Public Programs

Official Degree Awarded: MSW Social Work - Advanced Standing

Program Description: This social work program is designed to meet the needs of traditional and nontraditional students with flexible class scheduling, a variety of internships and close mentoring relationships with faculty. This student‐centered program offers a strong practice oriented approach to social work. Program graduates are able to find meaningful employment in a variety of settings. The program is fully accredited by the Council on Social Work Education.

Program Requirement: An applied project is required. There are two program tracks (full-time and part-time) available for the advanced-standing program:

Advanced standing/full-time (AS/FT): a one-calendar year, three-semester program (37 credit hours/500 clock hours of fieldwork) for individuals who have received a B.S.W. within six years prior to the year they wish to enter the program. It begins with a summer “bridge” class and a summer research class. (Note: no exceptions will be granted).

Advanced standing/part-time (AS/PT): a five-semester program (37 credit hours/500 clock hours of fieldwork) for individuals who have received a B.S.W. within six years prior to the year they wish to enter the program. It begins with a summer “bridge” class and a summer research class. (Note: no exceptions will be granted).

Admission Requirements: Eligibility requires the applicant to have received a B.S.W. from a CSWE-accredited program within six years of the semester the applicant is planning to begin studies (e.g., for 2008, the B.S.W. date would be May or August,
2002) with a cumulative GPA of 3.00 for all social work courses. Social work-related experience (paid or volunteer) is highly desirable. Some applicants to the advanced standing program who are not offered admission to that program may be offered the option of admission into their choice of either of the two standard programs.

Application materials are generally available online after Sept. 1 of the year preceding your desired admission date. Application to the social work graduate program is a two-part parallel process requiring all applicants to submit:

1. A completed online application to the Graduate College and pay the application fee.
2. A completed online social work application. The social work application will require an applicant to designate the specific program for which they are seeking admission: AS/FT, AS/PT, Standard/2 or Standard/3.
3. A personal statement as part of the online social work application.
4. At least three letters of reference.

Contact:
School of Social Work
http://ssw.asu.edu
social_work@asu.edu
FAB S 149
602/543-4679

Downtown Phoenix - Social Work (PhD) PPSW2PHD
College of Public Programs

Official Degree Awarded: PHD Social Work

Program Description: The purpose of our doctoral program is to “prepare future social work scholars.” While there are many possible definitions of scholarship, the Arizona State University School of Social Work adheres to a broad definition.

A scholar in social work engages in research, teaching and service. Our program introduces students to the complex range of roles and responsibilities of faculty and other social work roles of leadership. Critical thinking and creativity in research, teaching and service are at the core of our program.

Given the cultural and economic diversity of the Southwest, our program also strives to elaborate the human potential embedded in our region’s distinct experiences and perspectives. The university offers opportunities for scholarship integrating diverse cultural experiences such as those offered through specialized programs, including American Indian studies and Chicana and Chicano studies, African and African American studies and Asian Pacific American studies. We hope that our graduates will play key roles in integrating diversity in their social welfare activities with local, state and regional groups.
The program emphasizes enhancement of scholarship through:

1. Applied social work research in diverse community settings and populations of the Southwest.
2. Teaching, from syllabus development to classroom teaching across the professional continuum.
3. Participation in collegial decision making.
4. Participation in field education and community services.

Students are expected to participate fully in research teaching, and field liaison activities during their course of studies.

Program Requirement: Our doctoral degree requires that a student take a minimum of 36 course credit hours beyond the M.S.W. and 84 beyond the bachelor’s degree. Students may need to take additional course work to achieve the competency requirements set by the program or set by their graduate supervisory committees. Students must also take a minimum of 24 credit hours of dissertation related research (12 hours of SWG 792 and 12 hours of SWG 799).

Residency

Within the first year of matriculation, all students must complete the School of Social Work residency requirement (a minimum of nine credit hours in each semester of consecutive fall/spring or spring/fall semesters excluding summers).

Foreign Language Requirement

None.

Qualifying Examination

Students are given a qualifying examination in the semester following the completion of the first 18 hours of approved Ph.D. course work. Students who fail the examination may retake it the following semester. Students failing the qualifying examination twice will be dropped from the program.

Comprehensive Examination

Upon completion of course work and the qualifying examination, but before beginning dissertation research, students are given a written examination covering research, theory and methods in their substantive areas. If students should fail one or more components of the examination, a reexamination may be administered no sooner than three months and no later than one year from the date of the original examination. Approval of the reexamination must be obtained from the supervisory committee and dean of graduate studies.
Research and Dissertation Requirements

Each candidate must register for a minimum of 12 hours of research credit and for 12 hours of dissertation credit.

Final Examination

The final oral examination in defense of the dissertation is scheduled and conducted by the student’s dissertation committee. A candidate must pass the final examination within five years after completing the comprehensive examination.

The following courses are required:

1. Twelve hours of required 700-level social work courses approved by the doctoral program committee.
2. Twelve hours of research methods and statistics courses selected from an approved list provided by the doctoral program committee.
3. Three hours of theory course in a social science discipline.
4. Nine hours of directed electives in an identified and chair-approved substantive area of which no more than three of these hours may be used in readings and conference or independent study courses.

Once the minimum 36 credit hours are completed, students are also required to register for 24 hours of dissertation research credit, SWG 792 before proposal defense and SWG 799 after. Students must be registered for at least one credit hour during the semester (including summer) when they do their dissertation proposal defense. At least one of the dissertation hours must be taken in the semester the student expects to defend his or her dissertation.

Admission Requirements: Admission to the Ph.D. program in the School of Social Work is based on the following criteria:

1. An M.S.W. from an accredited school of social work preferably with two or more years of post-M.S.W. employment in human services. Though an M.S.W. is preferred, exceptions may be made for students with a B.S.W. from an accredited school of social work and a master's degree in a related field and for students from countries without accreditation.
2. Undergraduate and graduate GPA.
3. Scores of the GRE, with emphasis on verbal and analytic scores.
4. Quality and extensiveness of social work experience.
5. Experience with diverse populations.
6. Experience in social work teaching or research and other scholarly activities.
7. Research potential and creativity as demonstrated in requested essays and references.
8. Goodness-of-fit with program goals.
9. Good professional standing.
Admission to the Ph.D. program requires completion of all admission requirement and procedures set forth by the Graduate College. Applications are accepted up to Feb. 1 preceding the fall semester to which the applicant is seeking admission.

All Ph.D. program applicants must submit the following to the School of Social Work:

1. An application to the Ph.D. program in social work.
3. Examples of written work (students may submit samples of their professional and/or academic writing).
4. Three letters of recommendation on the forms provided by the School of Social Work.

In addition, all applicants must submit the following to the Graduate College:

1. A completed online Graduate College application.
2. The application fee.
3. An official transcript of all academic work completed or in progress.
4. Test of English as a Foreign Language (TOEFL) or Speaking Proficiency English Assessment Kit (SPEAK) results for international students whose native language is not English.

Contact:
School of Social Work
http://ssw.asu.edu/
social.work@asu.edu
UCENT 800
602/496-0800

Latino Cultural Competency in Social Work (Grad Certificate) PPSWGGRCL
Official Degree Awarded: CERT Latino Cultural Competency in Social Work (certificate)

Program Description: In response to the need, ASU through the College of Public Programs, School of Social Work, offers a graduate certificate in Latino cultural competency. The School of Social Work offers Latino-oriented courses with an emphasis on Spanish language development for professional social workers.

The goal of the program is to enhance a social worker professional’s capacity for engaging in culturally grounded practice with Latino clients and their families.

The program is intended for the professional who wants to:

1. Learn the social/cultural context and theoretical principles of social work practice with Latinos.
2. Learn the critical cross-cultural factors that influence a worker's competency in forming professional helping relationships with Latinos.
3. Learn the social service delivery issues involved in providing services for bilingual and limited- or non-English-speaking Latino populations.
4. Expand their employment potential by adding an expertise in professional services with Latinos.

Program Requirement: For an M.S.W. graduate student 15 credit hours of course work is required for the Latino cultural competency certificate.

Requirements:

1. Field practice, six credit hours of field practicum.
2. Completion of 480 hours of field practicum with Latino clients/communities (60 percent of case load is to be Spanish-speaking).
3. Social work course work, three credit hours: diversity and oppression in a social work context.
4. Latino-oriented course work, six credit hours of Latino oriented course work. At least three hours are required to be taken from within the School of Social Work.

For a community professional social worker and community worker, the Latino cultural competency graduate certificate requires 15 credit hours of course work.

Requirements:

1. Field Practice, six credit hours of independent study field practice, completion of 480 hours of field practice with Latino clients/communities (60 percent of client caseload is to be Spanish-speaking). May petition to use place of employment.
2. Social work course work, three credit hours: diversity and oppression in a social work context, an M.S.W. or B.S.W. professional who has completed this course in the past five years may substitute this course with a Latino-oriented course.
3. Latino-oriented course work, six semester hours of Latino-oriented course work. At least three hours are required to be taken from within the School of Social Work.

Admission Requirements: Students interested in applying to this program must submit a Graduate College online application.

Option one, social work graduate student admissions requirements: graduate status in the College of Public Programs' School of Social Work and demonstrated proficiency in Spanish language.

Option two, community professional social worker admissions requirements: possess a M.S.W., B.S.W. or related master's degree and demonstrated proficiency in Spanish language.
Option three, community worker admissions requirements: the equivalency of a two-year work experience in the social service field, undergraduate degree, demonstrated proficiency in Spanish language.

Contact:
School of Social Work
http://ssw.asu.edu
social.work@asu.edu
UCENT 800
602/496-0800

NonProfit Leadership and Management (Grad Certificate) PPNONPROCE
Official Degree Awarded: CERT Nonprofit Leadership and Management (certificate)

Program Description: The graduate certificate in nonprofit leadership and management, offered through the College of Public Programs, is a graduate program that provides students with an understanding of the nonprofit sector's role in society and with the skills necessary for effective leadership and management of these organizations. The objective of this program is to provide students with professional skills needed by leaders in the nonprofit sector, including the understanding of the historical and philosophical context for nonprofit organizations in society, the management of human resources (paid and volunteer), the theory and practice of philanthropy, financial management practices and other topical content areas.

Program Requirement: This certificate program requires 15 credit hours.

Admission Requirements: All applicants must submit the Graduate College online application. The program is available to students who are pursuing their graduate degree in a chosen field of study and who have expressed interest in pursuing careers in the nonprofit sector. In addition, the program is well suited for working professionals, who may be pursuing a graduate degree, but who wish to strengthen their skills and connections to the nonprofit community. All applicants must have two years of demonstrable nonprofit experience to obtain the graduate certificate.

For more information, see the Web site.

Contact:
http://nonprofit.asu.edu
nonprofit@asu.edu
UCENT 500
602/496-0500

Nonprofit Studies (MNpS) PPNPSMNS
College of Public Programs

Official Degree Awarded: MNPS Nonprofit Studies
Program Description: The M.Np.S. program is intended for professionals who work in or desire to work in the nonprofit sector. The degree program provides an opportunity to obtain an advanced degree that addresses the unique character of nonprofit organizations and the social sector. Students interested in nonprofit management and social sector organizations explore research, theory and the practice of management and leadership in the nonprofit sector.

Program Requirement: The M.Np.S. consists of a minimum of 33 credit hours. Students are required to take 18 credit hours of core course work, in which three hours are a capstone course that is completed at the end of the program of study. The capstone course is integrative and case-based, allowing students to synthesize material from prior course work. Successful completion of this course is required in place of a thesis or applied project.

Students complete 15 credit hours of related elective course work. Courses are selected from two contributing disciplines (public affairs and social work) to foster the interdisciplinary nature of the degree. Students may include two three credit hour courses not listed below as approved electives in their program of study as long as the student can establish an intellectual and professional development objective that substantiates the course selection.

NLM 501 Program Evaluation and Information Management (3)
NLM 510 Foundations in Nonprofit Management (3)
NLM 520 Financial Management in Nonprofit (3)
NLM 540 Volunteer and Human Resource Management in Nonprofit (3)
NLM 550 Philanthropy: Theory and Practice (3)
NLM 620 Capstone: Critical Issues in Nonprofit Management (3)
Electives (15)

Admission Requirements: Potential applicants who hold a bachelor’s degree from a regionally-accredited institution are eligible to apply. Applications are accepted year-round and students are granted admission for fall, spring or summer semesters. Students must submit the following to apply for the M.Np.S.:

1. Completed application form to the Graduate College.
2. Statement of educational and career goals in sufficient detail to indicate compatibility with the educational objectives and capabilities of the school.
3. Three reference letters.
4. A curriculum vitae or resume.

Applicants whose junior/senior GPA is 3.00 or higher are eligible to apply for admission to the program. Certificate students who are interested in applying for the M.Np.S. program must apply to the degree program before the completion of nine credit hours in their certificate program.

Contact:
School of Community Resources and Development
Public Administration (MPA) - Downtown Phoenix PPPADTMPA
College of Public Programs

Official Degree Awarded: MPA Public Administration

Program Description: The M.P.A. is an interdisciplinary, professional degree program designed to prepare students for public service, public management and policy analysis at the local, state and national levels of government. The M.P.A. program is accredited by the National Association of Schools of Public Affairs and Administration.

Students may also elect to specialize in one of two of the approved M.P.A. concentrations: urban management (http://spa.asu.edu/new/mpa/mpa_urban_management.htm) or nonprofit administration (http://spa.asu.edu/new/mpa/mpa_nonprofit.htm).

The urban management concentration provides knowledge and skills for students seeking careers in local urban government management and enables students to develop the skills and techniques used by city and urban leaders and managers.

The concentration in nonprofit administration is intended for professionals who work in or desire to work in the nonprofit sector and who wish to explore research, theory and the practice of management and leadership in the nonprofit sector. In addition, the school offers a dual M.P.A./M.S.W. program (http://spa.asu.edu/new/mpa/mpa_msw.htm) with the School of Social Work.

Program Requirement: The M.P.A. program consists of 42 hours of graduate credit. Students take 27 of these hours in nine core classes in the School of Public Affairs, and 15 additional hours in elective courses. No more than nine credit hours of ASU graduate courses taken before admission to the school and approved by the M.P.A./M.P.P. committee can be included in the program of study.

Students enrolling in core courses must demonstrate minimum competency in statistics and American government. Courses taken to fulfill the competency do not count toward the 42-hour degree program. Competency in statistics is met with a grade of “B” (3.00) or higher in an approved course (PAF 401, POS 401, PSY 230, QBA 221, SOC 390 or SWU 321) within the last two years or passing a diagnostic test approved by the M.P.A./M.P.P. committee. Other courses taken within the last two years may be substituted upon approval of the M.P.A./M.P.P. director.

Competency in American government is met through an undergraduate class in American government (PAF 110, PAF 300, POS 310, POS 340 or a similar course).
Admission Requirements: Applicants to the M.P.A. program are accepted year-round. Students may be granted admission for fall, spring and summer semesters.

All applicants must submit the following materials to the School of Public Affairs:

1. Three letters of recommendation (at least two should be faculty who can evaluate applicant’s academic performance), there is no form required for the letters of recommendation.
2. Written statement of applicant’s educational and career goals (this is also used as a sample of the applicant’s writing abilities), and should be between one and two pages in length.
3. Applicants may also submit a resume or other documents.

Mail materials to:
ASU School of Public Affairs
Mail Code 3720
411 N. Central Avenue, Ste. 450
Phoenix, AZ 85004-0687

All applicants must submit the following materials to the ASU Graduate College:

1. An official ASU Graduate online application.
2. Application fee.
3. Scores on the GRE (verbal, quantitative, analytical)
4. International applicants must also submit acceptable TOEFL scores or IELTS scores.
5. Official transcripts of all undergraduate and graduate work.

Send transcripts to:
Arizona State University
Graduate College Admissions
Interdisciplinary Building, B-Wing, Room 170
P.O. Box 871003
Tempe, Arizona 85287-1003

Contact:
School of Public Affairs
http://spa.asu.edu/new/mpa/default.htm
spa@asu.edu
UCENT 400
602/496-0450

Public Administration (PhD) PPPUBADPHD
College of Public Programs

Official Degree Awarded: PHD Public Administration
Program Description: The School of Public Affairs offers a graduate program leading to the Ph.D. in public administration.

The mission of the Ph.D. program in public administration is to prepare students for an academic career as a researcher, teacher and member of the academic community. Accordingly, the Ph.D. program curriculum is theoretically grounded and research based. The program emphasizes:

1. The use of alternative theoretical frameworks and research methodologies to define, understand and develop solutions to public problems.
2. The application of normative and empirical approaches to improving democratic governance and advancing the public interest.
3. The development of skills necessary to produce and disseminate new knowledge in the field of public administration.

While the Ph.D. program is located in the School of Public Affairs, students are encouraged to tailor a course of study to fit individual needs and goals by drawing on faculty from across the university.

Program Requirement: The Ph.D. program consists of a minimum of 66 credit hours of graduate work beyond the master’s degree. The program of study consists of a minimum of 42 credit hours of graduate course work beyond the master’s degree, plus a minimum of 24 credit hours of dissertation and research credit. A minimum of 30 credit hours of approved course work (exclusive of dissertation and research) must be taken at ASU after admission to the program.

A sequence of four core courses (12 hours) is required of all students in their first year, followed by successfully passing a screening examination. Then students establish a program of study committee that works with them to develop an appropriate interdisciplinary course of study.

In addition to the four core courses, an approved program of study must include required courses in quantitative and qualitative methods (taken during their second year) and a professional development workshop (taken during their third year). Students are also expected to develop areas of specialization.

Admission Requirements: All applicants are expected to have completed graduate level statistics and research methods classes before admission. Applicants also are expected to have sufficient formal course work in public administration to pursue doctoral study in the field. Admitted students may be required to take deficiency courses as specified by the admissions committee before beginning the doctoral core classes.

Applicants are admitted for fall only. Admission is competitive; a limited number of well-qualified applicants will be admitted each year. A completed application packet is due by Jan. 15.
All applicants must submit the following materials to the ASU Graduate College:

1. An official online ASU Graduate application.
2. Application fee.
3. Scores on the GRE (verbal, quantitative, analytical).
4. International students must submit Test of English as a Foreign Language (TOEFL) and Test of Spoken English (TSE) scores to be considered for admission. This is true even for those who have a master's degree from a U.S. university. To be considered for admission, the minimum score on the traditional TOEFL test is 600. Applicants with TOEFL scores below 600 or who do not submit a TSE score (or Internet-based TOEFL) will not be admitted. Only test scores from within the past five years will be accepted.
5. Official transcripts of all undergraduate and graduate work.

Send transcripts to:

Arizona State University
Graduate College Admissions
Interdisciplinary Building, B-Wing, Room 170
P.O. Box 871003
Tempe, Arizona 85287-1003

In addition to the above, applicants submit the following materials directly to the Ph.D. program:

1. A written statement of educational and career goals.
2. A current resume or curriculum vitae.
3. Three letters of recommendation. These should be primarily academic letters. All letters should address the candidate’s capacity to successfully complete the doctoral program. They should assess the student's capacity for critical and analytic thought, their ability to communicate effectively, both orally and in writing, and their commitment to completion of the program.
4. Samples of research reports and/or papers (optional).

Mail materials to:
ASU School of Public Affairs
Mail Code 3720
411 N. Central Avenue, Ste. 450
Phoenix, AZ 85004-0687

Contact:
School of Public Affairs
http://spa.asu.edu/new/phd/default.htm
spa@asu.edu
UCENT 400
602/496-0450
Public Administration (NonProfit Administration) (MPA) PPONONPRMPA

College of Public Programs

Official Degree Awarded: MPA Public Administration (Nonprofit Administration)

Program Description: The M.P.A. is an interdisciplinary, professional degree program designed to prepare students for public service, public management, and policy analysis at the local, state and national levels of government. The M.P.A. program is accredited by the National Association of Schools of Public Affairs and Administration.

Students may also elect to specialize in one of two of the approved M.P.A. concentrations:

1. Urban management, see http://spa.asu.edu/new/mpa/mpa_urban_management.htm.

The urban management concentration provides knowledge and skills for students seeking careers in local urban government management and enables students to develop the skills and techniques used by city and urban leaders and managers.

The concentration in nonprofit administration is intended for professionals who work in or desire to work in the nonprofit sector and who wish to explore research, theory, and the practice of management and leadership in the nonprofit sector.

In addition, the school offers a dual M.P.A./M.S.W. program with the School of Social Work, see http://spa.asu.edu/new/mpa/mpa_msw.htm.

Program Requirement: The M.P.A. in nonprofit administration program consists of 42 credit hours of graduate credit. Students take 24 of these hours in eight core classes in the School of Public Affairs, 12 hours in concentration courses, and six additional elective hours. No more than nine credit hours of ASU graduate courses taken before admission to the school and approved by the M.P.A./M.P.P. committee can be included in the program of study.

Students enrolling in core courses must demonstrate minimum competency in statistics and American government. Courses taken to fulfill the competency do not count toward the 42-hour degree program. Competency in statistics is met with a grade of “B” (3.00) or higher in an approved course (PAF 401, POS 401, PSY 230, QBA 221, SOC 390 or SWU 321) within the last two years or passing a diagnostic test approved by the M.P.A./M.P.P. committee. Other courses taken within the last two years may be substituted upon approval of the M.P.A./M.P.P. director.

Competency in American government is met through an undergraduate class in American government (PAF 110, PAF 300, POS 310, POS 340) or a similar course.
Admission Requirements: Applicants to the M.P.A. program are accepted all year. Students may be granted admission for fall, spring and summer semesters.

All applicants must submit the following materials to the School of Public Affairs:

1. Three letters of recommendation; at least two should be faculty who can evaluate applicant’s academic performance. There is no form required for the letters of recommendation.
2. Written statement of applicant’s educational and career goals, and should be between one and two pages in length. This is also used as a sample of the applicant’s writing abilities.
3. Applicants may also submit a resume or other documents.

Mail materials to:

ASU School of Public Affairs
Mail Code 3720
411 N. Central Avenue, Ste. 450
Phoenix, AZ 85004-0687

All applicants must submit the following materials to the ASU Graduate College:

1. An official online ASU Graduate application.
2. Application fee.
3. Scores on the GRE (verbal, quantitative, analytical).
4. International applicants must also submit acceptable Test of English as a Foreign Language (TOEFL) scores or International English Language Testing System (IELTS) scores.
5. Official transcripts of all undergraduate and graduate work.

Send transcripts to:

Arizona State University
Graduate College
Admissions
Interdisciplinary Building, B-Wing, Room 170
P.O. Box 871003
Tempe, AZ 85287-1003

Contact:
School of Public Affairs
http://spa.asu.edu/new/mpa/default.htm
spa@asu.edu
UCENT 400
602/496-0450
Public Administration (Urban Management) (MPA) (PPAFUMPA)

College of Public Programs

Official Degree Awarded: MPA Public Administration (Urban Management)

Program Description: The M.P.A. is an interdisciplinary, professional degree program designed to prepare students for public service, public management and policy analysis at the local, state and national levels of government. The M.P.A. program is accredited by the National Association of Schools of Public Affairs and Administration.

Students may also elect to specialize in one of two of the approved M.P.A. concentrations: urban management (http://spa.asu.edu/new/ma/mpa_urban_management.htm) and nonporfit administration (http://spa.asu.edu/new/ma/mpa_nonprofit.htm).

The urban management concentration provides knowledge and skills for students seeking careers in local urban government management and enables students to develop the skills and techniques used by city and urban leaders and managers.

The concentration in nonprofit administration is intended for professionals who work in or desire to work in the nonprofit sector and who wish to explore the research, theory and practice of management and leadership in the nonprofit sector. In addition, the school offers a dual M.P.A./M.S.W. degree program (://spa.asu.edu/new/ma/mpa_msw.htm) with the School of Social Work.

Program Requirement: M.P.A. students pursuing the urban management concentration take 27 hours in nine core classes in the School of Public Affairs, 12 hours in four concentration classes, and three hours in one approved elective course. No more than nine credit hours of ASU graduate courses taken before admission to the school and approved by the M.P.A./M.P.P. committee can be included in the program of study.

Students enrolling in core courses must demonstrate minimum competency in statistics and American government. Courses taken to fulfill the competency do not count toward the 42-hour degree program. Competency in statistics is met with a grade of “B” (3.00) or higher in an approved course (PAF 401, POS 401, PSY 230, QBA 221, SOC 390 or SWU 321) within the last two years or passing a diagnostic test approved by the M.P.A./M.P.P. committee. Other courses taken within the last two years may be substituted upon approval of the M.P.A./M.P.P. director.

Competency in American government is met through an undergraduate class in American government (PAF 110, PAF 300, POS 310, POS 340, or a similar course).

Admission Requirements: Applicants to the M.P.A. program are accepted year-round. Students may be granted admission for fall, spring and summer semesters.
All applicants must submit the following materials to the School of Public Affairs:

1. Three letters of recommendation; at least two should be faculty who can evaluate applicant’s academic performance. There is no form required for the letters of recommendation.
2. Written statement of applicant’s educational and career goals, and should be between one and two pages in length. This is also used as a sample of the applicant’s writing abilities.
3. Applicants may also submit a resume or other documents.

Mail materials to:
ASU School of Public Affairs
Mail Code 3720
411 N. Central Avenue, Ste. 450
Phoenix, AZ 85004-0687

All applicants must submit the following materials to the ASU Graduate College:

1. An official online ASU graduate application.
2. Application fee.
3. Scores on the GRE (verbal, quantitative, analytical).
4. International applicants must also submit acceptable Test of English as a Foreign Language (TOEFL) scores or IELTS scores.
5. Official transcripts of all undergraduate and graduate work.

Send transcripts to:
Arizona State University
Graduate College Admissions
Interdisciplinary Building, B-Wing, Room 170
P.O. Box 871003
Tempe, Arizona 85287-1003

Contact:
School of Public Affairs
http://spa.asu.edu/new/mpa/default.htm
spa@asu.edu
UCENT 400
602/496-0450

Public Administration (Urbanism) PHD PPPAURBPHD
College of Public Programs

Official Degree Awarded: PHD Public Administration (Urbanism)

Program Description: The mission of the Ph.D. program in public administration is to prepare students for an academic career as a researcher, teacher and member of the
academic community. Accordingly, the Ph.D. program curriculum is theoretically grounded and research based. The program emphasizes:

1. The use of alternative theoretical frameworks and research methodologies to define, understand and develop solutions to public problems.
2. The application of normative and empirical approaches to improving democratic governance and advancing the public interest.

The development of skills necessary to produce and disseminate new knowledge in the field of public administration. The concentration in urbanism is a mechanism for organizing varied perspectives on urbanism into a collective body of scholarship. The study of Public Administration is enriched by grounding it in a comprehensive understanding of the characteristics of urban context and the dynamic forces that shape them.

The concentration in urbanism leverages the varied interests in urbanism and help emerging scholars as they attempt to compare, contrast and take stock of urbanism. Working with faculty from across a range of departments and programs at ASU, doctoral students will be able to capture the creative tensions that scholarship on urbanism has inspired in order to stimulate a provocative, constructive kind of inquiry.

**Program Requirement:** The Ph.D. program consists of a minimum of 66 credit hours of graduate work beyond the master’s degree. The program of study consists of a minimum of 42 credit hours of graduate course work beyond the master’s degree, plus a minimum of 24 credit hours of dissertation and research credit. A minimum of 30 credit hours of approved course work (exclusive of dissertation and research) must be taken at ASU after admission to the program.

A sequence of four core courses (12 hours) is required of all students in their first year, followed by successfully passing a screening examination. Then students establish a program of study committee that works with them to develop an appropriate interdisciplinary course of study.

In addition to the four core courses, an approved program of study must include required courses in quantitative and qualitative methods (taken during their second year) and a professional development workshop (taken during their third year). Students also take 15 credit hours selected from an approved list of applicable courses related to urbanism for the concentration.

1. **Admission Requirements:** Applicants must apply to the Graduate College for admission to the urbanism concentration program under the Ph.D. in public administration and meet the Graduate College criteria as well as Ph.D. program criteria for admission. The successful candidate for admission to the Ph.D. program has a M.P.A. or M.P.P. The additional expectation for admission to the concentration is a strong interest in urban affairs as indicated in the applicant’s written statement of educational and career...
goals.

Applicants are admitted for fall only. Admission is competitive; a limited number of well-qualified applicants will be admitted each year. A completed application packet is due by Jan. 15.

All applicants must submit the following materials to the ASU Graduate College:

An official online ASU Graduate application.
2. Application fee.
3. Scores on the GRE (verbal, quantitative, analytical).
   International students must submit Test of English as a Foreign Language (TOEFL) and Test of Spoken English (TSE) scores to be considered for admission. This is true even for those who have a master's degree from a United States university. To be considered for admission, the minimum score on the traditional TOEFL test is 600. Applicants with TOEFL scores below 600 or who do not submit a TSE score (or Internet-based TOEFL) will not be admitted. Only test scores from within the past five years will be accepted.
4. Official transcripts of all undergraduate and graduate work.

Send transcripts to:

Arizona State University
Graduate College Admissions
Interdisciplinary Building, B-Wing, Room 170
P.O. Box 871003
Tempe, Arizona 85287-1003

In addition to the above, applicants submit the following materials directly to the Ph.D. program:

1. A written statement of educational and career goals.
2. A current resume or curriculum vitae.
3. Three letters of recommendation. These should be primarily academic letters. All letters should address the candidate's capacity to successfully complete the doctoral program. They should assess the student's capacity for critical and analytic thought, their ability to communicate effectively, both orally and in writing and their commitment to completion of the program.
4. Samples of research reports and/or papers (optional).

Mail materials to:
ASU School of Public Affairs
Mail Code 3720
411 N. Central Avenue, Ste. 450
Phoenix, AZ 85004-0687
Public Policy (MPP) PPPUBPMPP
College of Public Programs

Official Degree Awarded: MPP Public Policy

Program Description: The M.P.P. program allows students to approach the study of public policy with a focus on public policy in the urban setting. The M.P.P. program prepares students for professional careers as policy analysts and leaders in public service involved in the formulation, approval, implementation and evaluation of public policy at all levels of government and in the private and nonprofit sectors. It can also serve as a platform for preparation for doctoral studies in public policy, public administration, urban studies or other related programs. Students learn analytical techniques and conceptual frameworks for understanding policy issues and identifying potential solutions and applying these skills to real-world issues (especially relating to the needs of cities in the region). Students also gain an understanding of policies addressing issues such as poverty, education, the environment and public safety.

Program Requirement: Course work for the M.P.P. program requires a minimum of 42 credit hours, including 11 required core courses and three elective courses. Students can elect to take either PAF 571 GIS and Analysis or PAF 572 Urban Demography as one of their core courses. The course not used for the core may be used as an elective. Students are required to complete a three-semester hour capstone course which will be an integrative, client-based applied project course. Students take this in their final semester after completion of all other required core courses. This culminating experience is required in place of a thesis.

Admission Requirements: Applications to the M.P.P. program are accepted year-round. Students may be granted admission for fall, spring and summer semesters. Potential applicants who hold a bachelor’s degree from a regionally accredited institution in a related field are eligible to apply to the program.

The following entry-level competencies are needed for admission to the program: an undergraduate social statistics course along with undergraduate course work in microeconomics, including coverage of market failure and public goods. Competency in statistics is met with a grade of “B” (3.00) or higher in approved courses (PAF 401, POS 401, PSY 230, QBA 221, SOC 390) within the past two years or passing a diagnostic test approved by the M.P.A./M.P.P. committee. Other courses taken within the last two years may be substituted upon approval of the M.P.A./M.P.P. director.
Competency in microeconomics is met through earning a “B” (3.00) or higher in an undergraduate course in microeconomics, PAF 504 Public Affairs Economics, or a similar course.

All applicants must submit the following materials to the School of Public Affairs:

1. Three letters of recommendation; at least two should be faculty who can evaluate applicant’s academic performance. There is no form required for the letters of recommendation.
2. Written statement of applicant’s educational and career goals, and should be between one and two pages in length. This is also used as a sample of the applicant’s writing abilities.
3. Applicants may also submit a resume or other documents.

Mail materials to:

ASU School of Public Affairs
Mail Code 3720
411 N. Central Avenue, Ste. 450
Phoenix, AZ 85004-0687

All applicants must submit the following materials to the ASU Graduate College:

1. An official online ASU Graduate application.
2. Application fee.
3. Scores on the GRE (verbal, quantitative, analytical).
4. International applicants must also submit acceptable Test of English as a Foreign Language (TOEFL) scores or IELTS scores.
5. Official transcripts of all undergraduate and graduate work.

Send transcripts to:

Arizona State University
Graduate College
Admissions
Interdisciplinary Building, B-Wing, Room 170
P.O. Box 871003
Tempe, Arizona 85287-1003

Contact:
School of Public Affairs
http://spa.asu.edu/new/mpp/default.htm
spa@asu.edu
UCENT 400
602/496-0450
**Trauma and Bereavement (Grad Certificate) HSCTBGRCT**

*Official Degree Awarded: CERT Trauma and Bereavement (certificate)*

**Program Description:** There is a growing need in society for healthcare workers and clinicians to be better prepared to help clients and patients experiencing trauma. The School of Social Work graduate certificate in trauma and bereavement will better prepare individuals to work in the field of death and dying, trauma and bereavement in clinical, organizational and administrative settings, enhancing knowledge about grief responses and the effects of trauma, providing opportunities for students to research an often under-explored topic, and helping transform the sociopolitical management of grief, traumatic losses and end-of-life issues in contemporary society.

**Program Requirement:** The certificate requires:

1. Eighteen credit hours of graduate course work, distributed among three core courses.
2. An applied project.
3. Two electives.

**Admission Requirements:** Deadline: April 1 for summer admission; Nov. 1 for spring admission.

All applicants must submit an application and application fee to the Graduate College. In addition the following materials are to be submitted to the School of Social Work.

1. The School of Social Work certificate application. The application is available on the department Web site.
2. Resume.
3. Three references, on the forms available on the department Web site.
4. A 2 to 4 page, doubled-spaced, personal statement (guidelines are listed on the application).
5. Unofficial transcripts from all institutions granting you an undergraduate or graduate degree.

**Contact:**
School of Social Work
http://ssw.asu.edu/
social.work@asu.edu
UCENT 800
602/496-0800

**Tucson / Downtown Phoenix - Social Work - Standard Program (MSW) PPSWDMSW**
College of Public Programs

*Official Degree Awarded: MSW Social Work*
Program Description: The professional program leading to the M.S.W. prepares social workers for advanced direct practice or planning, administration and community practice. The program is designed to prepare social workers to be capable of responding effectively to the needs of special populations in the Southwest. The M.S.W. program is accredited by the Council on Social Work Education.

Program Requirement: Students begin the standard M.S.W. program in the fall. It is divided into a foundation year (core curriculum) and a concentration year. In the concentration year, students pursue a concentration in either:

- Advanced direct practice.
- Planning, administration and community practice.

The planning, administration and community practice courses are generally not offered in Tucson. Students who select the advanced direct practice concentration also select one of the following three specializations:

- Children, youth and families.
- Health, behavioral health.
- Public child welfare.

All specializations may not be available in Tucson. During both years, students spend two days a week in a practicum setting.

The following foundation courses are required:

- D SWG 501 Micro Human Behavior in the Social Environment (3)
- D SWG 502 Macro Human Behavior in the Social Environment (3)
- D SWG 510 Foundation Practice I (3)
- D SWG 511 Foundation Practice II (3)
- D SWG 519 Research Methods in Social Work (3)
- D SWG 531 Social Policy and Services I (3)
- D SWG 533 Diversity and Oppression in a Social Work Context (3)
- D SWG 541 Field Practicum I (3)
- D SWG 542 Field Practicum II (3)
- D SWG 585 Macro Social Work Practice (3)

The following concentration courses are required for the planning, administration and community practice concentration:

- D SWG 623 Agency and Community-Based Research in Social Work (3)
- D SWG 632 Social Policy and Services II (3)
- D SWG 643 Advanced Practicum: Planning, Social Work Administration and Community Practice I (3)
- D SWG 644 Advanced Practicum: Planning, Social Work Administration and Community Practice II (3)
- D SWG 681 Social Work Administration (3)
D SWG 682 Community Participation Strategies (3)
D SWG 685 Program Planning in Social Services (3)
Electives: Nine hours

Elective credit may be selected from offerings at the School of Social Work or courses offered through other departments with the approval of the M.S.W. program coordinator.

The advanced direct practice concentration requires completion of one of the following three groups of required specialization courses.

**Children, youth and families**

D SWG 606 Assessment of Mental Disorders (3)
D SWG 608 Ecological Approach to Practice with Children, Youth and Families (3)
D SWG 619 Practice-Oriented Research (3)
D SWG 617 Advanced Social Work Practice with Children and Adolescents (3)
D SWG 621 Integrative Seminar
D SWG 641 Advanced Practicum: Direct Practice I (3)
D SWG 642 Advanced Practicum: Direct Practice II (3)
Electives: Nine hours. Two electives must be from an approved list of electives.

**Health, behavioral health**

D SWG 603 Practice in Health/Behavioral Health Settings (3)
D SWG 606 Assessment of Mental Disorders (3)
D SWG 619 Practice-Oriented Research (3)
D SWG 621 Integrative Seminar (3)
D SWG 641 Advanced Practicum: Direct Practice I (3)
D SWG 642 Advanced Practicum: Direct Practice II (3)

Choose one of the following courses:

D SWG 604 Advanced Social Work Practice in Health (3)
D SWG 613 Advanced Social Work Practice in Behavioral Health (3)
Electives: Nine hours. Two electives must be from an approved list of electives.

**Public child welfare**

D SWG 606 Assessment of Mental Disorders (3)
D SWG 608 Ecological Approach to Practice with Children, Youth and Families (3)
D SWG 609 Advanced Social Work Practice with Child Welfare Families (3)
D SWG 619 Practice-Oriented Research (3)
Admission Requirements: Applicants must follow the procedures for admission to the Graduate College. Applications to the standard M.S.W. program are accepted from Nov. 1 to March 1, or for priority review by Feb. 1, preceding the fall semester to which the applicant is seeking admission. Applicants admitted to the standard M.S.W. program begin classes in the fall.

All applicants for the standard M.S.W. program must submit the following to the School of Social Work:

1. A School of Social Work application form.
2. A statement of educational and career goals.
3. A professional resume that includes volunteer and paid work experience.

A combination of academic and professional references is desirable. References from friends, family members, or personal therapists are not accepted.

Test scores from either the GRE or the Miller Analogies test are required only if the applicant’s GPA was below a 3.00 on a 4.00 scale, during his or her junior and senior years. In addition, all applicants must submit to the Graduate College the following:

1. A completed online Graduate College application form.
2. The application fee.
3. An official transcript of all academic work completed or in progress.

The School of Social Work requires one of the following:

1. A liberal arts undergraduate degree.
2. A B.S.W. from a Council on Social Work Education accredited school of social work.
3. Another undergraduate degree, with 30 credit hours in liberal arts courses at the undergraduate or graduate level. The 30 credit hours must include course work from the social/behavioral sciences, natural sciences and humanities. The distribution should approximate the current curriculum for the B.S.W. program: 18 hours in social and behavioral sciences, six hours in natural sciences with at least one course in human biology and six hours in humanities.

All students are required to successfully complete a course in human biology before enrollment in the graduate program. Additionally, all students must have successfully completed a course in statistics before admission. If the statistics requirement has not been met, then an equivalent course must be successfully completed either by Dec. 31 or before registering for SWG 519.

Part-time Program

Academic Catalog Archive 2009-10  617
Students are admitted each fall to a planned part-time program. Students interested in this option must specifically apply to the part-time program and complete it in accordance with the plan developed to finish the degree in three years.

**Transfer Credit**

Upon recommendation of the admissions committee, the first year of graduate study (up to 30 graduate credit hours) earned at another CSWE accredited school of social work may be transferred and applied toward the M.S.W. at ASU. Under these circumstances, the student must complete the second full year of graduate study (at least 30 credit hours of graduate work) at ASU, resulting in a 60-hour program composed of the work from both schools. A full report from the school at which the intended transfer credit was obtained is required.

**Nondegree Course Work**

A maximum of nine graduate credit hours earned as a nondegree student in the ASU School of Social Work or six credit hours earned at another graduate degree program at ASU may be applied toward the program of study. A combination of credit earned as a nondegree student at ASU or transferred from another university may not exceed nine hours, and of those nine hours, no more than six hours may be electives. Consideration for acceptance of nondegree work must be applied for at the time of admission.

**Exemption and Waiver Examinations**

The number of hours required to complete the Standard M.S.W. degree ranges from 45 to 60 credit hours. In addition to transferring in credit (see previous section on transfer credit), admitted students may acquire up to 15 hours of credit towards the degree by a combination of: (1) exempting up to fifteen hours of foundation course work without examination or (2) passing an examination in any of the following foundation courses: SWG 501, SWG 502 or SWG 519.

**Exemptions.** Only students with B.S.W.s from CSWE accredited programs can be considered for exemptions. To be eligible for an exemption from any course, students must have received their B.S.W. no more than five years prior to the date of admission. Students awarded a B.S.W. by ASU are exempted from the courses listed below (if the GPA requirement is met). B.S.W. students from other accredited programs may also be exempted from the same courses but must submit their course content material (course description, syllabus and outline) for an equivalency review. B.S.W. students may be exempted from the following courses:

- SWG 501, if the student completed SWU 301 prior to fall 2007 and SWU 340 prior to spring 2008 and completed both courses with an “A” (4.00); or if the
student completed SWU 301 after spring 2007 with an “A” (4.00); or completed an equivalent social work course(s).

• SWG 502, if the student completed SWU 301 prior to fall 2007 and SWU 340 prior to spring 2008 and completed both courses with an “A” (4.00); or if the student completed SWU 340 after fall 2007 with an “A” (4.00); or completed an equivalent social work course(s).

• SWG 519, if the student has at least an “A” (4.00) in SWU 320 or 420; or an equivalent social work course.

• SWG 531, if the student has at least an “A” (4.00) in SWU 171 and SWU 332 or 432; or an equivalent social work course.

• SWG 533, if the student has at least an “A” (4.00) in SWU 374 or 474; or an equivalent social work course.

Contact:
School of Social Work
http://ssw.asu.edu/
social.work@asu.edu
UCENT 800
602/496-0800

Sustainability, School of

Sustainability (MS) SUSUSTMS
School of Sustainability

Official Degree Awarded: MS Sustainability

Program Description: The M.S. in sustainability is offered for students who have completed a bachelor’s degree. The program prepares students to address some of the most pressing concerns of the 21st century. Students learn how different disciplines view and approach the challenges of sustainability in theory, research and practice. They develop the academic and technical skills as well as the ethical insights that will help them understand, research and provide solutions to complex sustainability challenges at the local, regional, national and global levels. Although the graduate-degree programs emphasize the integration of a broad range of expertise in student training, the M.S. program is best suited to students inclined toward natural sciences or engineering.

All sustainability graduate students will possess:

1. The breadth of vision to recognize the interconnectedness of social, economic and environmental systems.
2. The critical thinking skills to approach sustainability challenges from a systems perspective.
3. The technical skills to formulate and solve problems at the appropriate scale.
4. An understanding of the need for an interdisciplinary approach to solving sustainability challenges.
5. The skills needed to work effectively in interdisciplinary teams.
6. The ability to communicate their work to professionals in other disciplines, policy-makers and the general public.

In addition to the common learning outcomes, M.S. students will be able to:

1. Understand the concepts and methods of environmental economics, ecology, environmental biology, hydrology, environmental chemistry, engineering, earth systems management and other disciplines relevant to the sustainable use of environmental resources;
2. Lead others in applying these concepts and methods to the development of sustainable strategies for water, land, air and urban management at the local and global level.
3. Apply appropriate metrics and indicators to evaluate the sustainability of technology, the built environment and their environmental regulations and policy.
4. Research particular problems in the sustainability of the economic and natural environment.

**Program Requirement:** This degree program requires 33 credit hours. Each student will formulate a program of study in consultation with their supervisory committee. The master’s programs are divided into the following four areas:

1. Core courses.
2. Problem-focused seminars and workshops.
3. Required research (for the thesis option).
4. Elective courses.

The taught-course element of the program will be evaluated through course-specific examinations, research papers and/or applied projects and will be considered to have been successfully completed if the student obtains a 3.25 or higher. The Graduate College policies and procedures for admission to the program and for fulfillment of degree requirements must also be met.

**Admission Requirements:** The School of Sustainability encourages applicants with diverse educational backgrounds and experience that are relevant to the school’s core objectives. In addition to the general requirements for admission to the Graduate College, the School of Sustainability requires graduate applicants to provide GRE scores, three letters of recommendation and a statement of intent. The statement of intent should not exceed 600 words and should:

1. Explain why the student is applying to the School of Sustainability.
2. Outline the student’s relevant background information.
3. Describe the outcomes expected from the program.
4. Identify potential faculty advisors and areas of research/study.
5. Elaborate on how the degree will support the student’s aspirations and goals.
Although it is not required, applicants are also encouraged to submit a resume or curriculum vitae.

Contact:
School of Sustainability
http://schoolofsustainability.asu.edu/
schoolofsustainability@asu.edu
GIOS 108
480/727-6963

Sustainability (PhD) SUSUSTPHD
School of Sustainability

Official Degree Awarded: PHD Sustainability

Program Description: The Ph.D. in sustainability is offered for students who have completed a bachelor’s or master’s degree. The doctoral program prepares students to become scientists and leaders in research to investigate the urgent sustainability challenges of the 21st century. Ph.D. graduates will possess an advanced understanding of the dynamics of coupled socioecological systems and be able to lead others in research providing adaptive solutions to specific sustainability challenges. The flexible, interdisciplinary nature of the program allows students to focus on problems of interest to them, drawing upon relevant knowledge from a variety of disciplines.

All sustainability graduate students will possess:

1. The breadth of vision to recognize the interconnectedness of social, economic and environmental systems.
2. The critical thinking skills to approach sustainability challenges from a systems perspective.
3. The technical skills to formulate and solve problems at the appropriate scale.
4. An understanding of the need for an interdisciplinary approach to solving sustainability challenges.
5. The skills needed to work effectively in interdisciplinary teams.
6. The ability to communicate their work to professionals in other disciplines, policy-makers and the general public.

In addition to the common learning outcomes, Ph.D. students will be able to:

1. Understand the concepts and methods of a number of critical disciplines bearing on the sustainability of systems at different spatial/temporal scales.
2. Lead others in applying these concepts and methods to the development of sustainable strategies for water, land, air and urban management at the local and global level.
3. Lead others in the analysis and design of the built environment and institutions’ policies, regulations and technologies to support sustainable development.
4. Conduct research on particular sustainability challenges using standard skills, including the capacity to identify problems; formulate and test hypotheses; use statistical, econometric and geographical-information-system techniques to construct and analyze datasets; and build and apply models.

**Program Requirement:** Students may be admitted to the program with a bachelor's or master's degree from relevant fields. The degree requirement is 84 credit hours of work beyond the bachelor's level. Up to 30 credit hours of master's-level work in a related field can be accepted toward the fulfillment of the Ph.D. requirements. Each student formulates a program of study in consultation with his or her supervisory committee. The doctoral program is divided into the following four areas:

1. Core courses.
2. Problem-focused seminars and workshops.
3. Required research.
4. Elective courses.

Each program of study must include 24 credit hours of a combination of research and dissertation. The taught-course element of the program will be evaluated through course-specific examinations, research papers and/or applied projects and will be considered to have been successfully completed if the student obtains a GPA of 3.25 or higher. Graduate College policies and procedures for admission to the program and fulfillment of degree requirements must also be met.

**Admission Requirements:** The School of Sustainability encourages applicants with diverse educational backgrounds and experience that are relevant to the school’s core objectives. In addition to the general requirements for admission to the Graduate College, the School of Sustainability requires graduate applicants to provide GRE scores, three letters of recommendation and a statement of intent. The statement of intent should not exceed 600 words and should:

1. Explain why the student is applying to the School of Sustainability.
2. Outline the student’s relevant background information.
3. Describe the outcomes expected from the program.
4. Identify potential faculty advisors and areas of research/study.
5. Elaborate on how the degree will support the student’s aspirations and goals.

Although it is not required, applicants are also encouraged to submit a resume or curriculum vitae.

**Contact:**
School of Sustainability  
http://schoolofsustainability.asu.edu/  
schoolofsustainability@asu.edu  
GIOS 108  
480/727-6963
Teacher Education and Leadership, College of

Early Childhood Education - Certification/Endorsement (MED) TEECDMED
College of Teacher Education and Leadership

Official Degree Awarded: MEd Curriculum and Instruction (Early Childhood Education)

Program Description: The M.Ed. in early childhood education is administered by the College of Teacher Education and Leadership (CTEL) at the West campus, curriculum and instruction (early childhood endorsement and certification) master's program. This option will provide you with the early childhood endorsement and an M.Ed. in curriculum and instruction or an M.Ed. in early childhood with certification depending on the pathway you choose. The courses are taught 100 percent online; however, your practicum placements will be determined by the campus you select for admission.

For more information on the concentration, program, and college, consult the college Web site.

Program Requirement: A minimum of 30 credit hours of graduate credit is required for the M.Ed. in curriculum and instruction. Each student is assigned a graduate advisor to design the program of study. Students in this program will complete an applied project as a culminating activity.

Admission Requirements: Applicants must apply to the ASU Graduate College and to the specific program and specialization to which they seek admission (endorsement or certification). Admission to a degree program is based on undergraduate and/or graduate GPAs.

Contact:
Educational Leadership & Innovation, Division W
http://www.ctel.asu.edu/programs/
ctelgrad@asu.edu
FABS236
602/543-5595

Early Childhood Education - Endorsement only (MEd) EDCHILDMED
College of Teacher Education and Leadership

Official Degree Awarded: MEd Curriculum and Instruction (Early Childhood Education)

Program Description: The M.Ed. in curriculum and instruction with a concentration in early childhood education is a practitioner’s degree program designed to facilitate the development of advanced level professional knowledge, skills and
understanding. The program emphasizes inclusion practices in early education classrooms. Course work focuses on developmental diversity, full inclusion practices and culturally relevant early education. Early childhood education encompasses education and care of children from birth through the primary grades. The discipline of early childhood education includes the ability to communicate and work with parents and other adults and agencies that serve young children. The program prepares professionals who can (1) educate and research to provide programs and services that are appropriate for young children from diverse backgrounds and (2) conduct research on the range of issues influencing young children’s education and well-being.

An online M.Ed. is also offered, which offers coursework for an early childhood endorsement for teachers who are already certified. It begins with a one-day, on-campus orientation each semester. Supervised pre-K internship/student teaching (four credit hours) and a passing score on the early childhood subject knowledge portion of the Arizona Educator Proficiency Assessment are required for the endorsement.

**Program Requirement:** A minimum of 30 credit hours of graduate credit is required for the M.Ed. in curriculum and instruction. Each student is assigned a graduate advisor to design the program of study. Students in this program will complete either a comprehensive examination, a research project or an applied project as a culminating activity after completing a minimum of 24 of the 30 credit hours listed on the program of study. Students must select their culminating activity in consultation with their faculty advisor before completing their program of study. Students who choose to complete an applied project must enroll in teacher as researcher the semester prior to completing the applied project, and they must meet with their graduate advisor for approval of the applied project. For more information, refer to the curriculum and instruction M.Ed. student handbook.

**Admission Requirements:** The following are required:

1. Application to the Graduate College.
2. Transcripts.
4. Statement of research interests.
5. A writing sample (approximately 10 pages long).
6. GRE scores.
7. Three letters of recommendation from individuals who can speak to the applicant's potential for success in a graduate program. Additional materials may be required to gain admission into certain programs or cohorts.

**Contact:**
http://education.asu.edu/prospective_students/graduate_studies
cniggrad@asu.edu
ED 434
480/965-4602
Educ Administration & Supervision - Principalship (MEd) TEPRINMED
College of Teacher Education and Leadership

Official Degree Awarded: MEd Educational Administration and Supervision (Principalship)

Program Description: The M.Ed. in educational administration and supervision with a concentration in principalship is designed to lead towards the Arizona Principal Certificate Prekindergarten-12. Principalship specialization is based on the Interstate School Leaders Licensure Consortium (ISLLC) standards. Students completing the program (including the internship) and providing evidence of three years of K-12 teaching experience may obtain an Institutional Recommendation to expedite their certification as principals.

Program Requirement: This program requires 36 credit hours. Students in the M.Ed. in educational administration and supervision program complete:

1. Core requirements (nine credit hours).
2. Program requirements (six credit hours).
3. Concentration requirements (21 to 30 credit hours).
4. A written comprehensive examination is required.

Admission Requirements:

1. All requirements of the ASU Graduate College.
2. Three letters from professional references.
3. Résumé.
4. Two-page personal statement describing professional goals. In most classes, students work with a school principal (or in the superintendency program, a superintendent) in order to provide for the application of knowledge in real world settings. It is wise to obtain one of your recommendations from the principal you plan to work with to demonstrate your supervisor's judgment as to your potential as an administrator. GRE scores are not required for admission.

Contact:
Educational Leadership & Innovation, Division W
http://www.ctel.asu.edu/programs/
ctelgrad@asu.edu
FAB S236
602/543-5595

Educational Ldrship and Innovation - Policy/Admin (EdD) TEINNPAEDD
College of Teacher Education and Leadership

Official Degree Awarded: EdD Leadership and Innovation (Policy and Administration)
Program Description: The Ed.D. in leadership and innovation is open to students who have a master’s degree in education or a closely related field. It is a cohort program designed to equip educational leaders, innovators and scholars with deep understanding, dispositions and skills to lead change and examine its impacts in the workplace. Courses are designed to meet the needs of working professionals integrating face-to-face and online learning.

Program Requirement: This program requires 90 credit hours, including a master’s degree:

1. Professional core: 12 hours.
2. Research core: nine hours.
3. Electives: 18 hours.
4. Participation in leader scholar communities (directed field-based studies), nine hours.
5. Comprehensive examination.

Admission Requirements:

1. All requirements of the ASU Graduate College.
2. A master’s degree in education or a related field from a regionally accredited institution.
3. Three letters from professional references.
4. A current résumé.

Contact:
Educational Leadership & Innovation, Division W
http://ctel.asu.edu/programs/
CTELgrad@asu.edu
FAB S236
602/543-5595

Educational Ldrship and Innovation - Teaching (EdD) TEINNTEEDD
College of Teacher Education and Leadership

Official Degree Awarded: EdD Leadership and Innovation (Teaching)

Program Description: The Ed.D. in leadership and innovation is open to students who have a master’s degree in education or a closely related field. It is a cohort program designed to equip educational leaders, innovators and scholars with the deep understanding, dispositions and skills to lead change and examine its impact in the workplace. Courses are designed to meet the needs of working professionals integrating face-to-face and online learning.

Program Requirement: This program requires 90 credit hours, including a master's degree:
1. Professional core: 12 hours.
2. Research core: nine hours.
3. Electives: 18 hours.
4. Participation in leader scholar communities (directed field-based studies): nine hours.
5. Comprehensive examination: 12 hours.

Admission Requirements:

1. All requirements of the ASU Graduate College.
2. A master’s degree in education or a related field from a regionally accredited institution.
3. Three letters from professional references.
4. A current résumé.

Contact:
Educational Leadership & Innovation, Division W
http://ctel.asu.edu/programs/
CTELgrad@asu.edu
FAB S236
602/543-5595

Elementary Ed (Content Academy) (MEd) TECONTMED
College of Teacher Education and Leadership

Official Degree Awarded: MEd Elementary Education (Content Academy)

Program Description: The master’s degree in elementary education with content academy specialization is available only for students in districts with a professional development partnership agreement with the College of Teacher Education and Leadership at ASU at the West campus. The content academies focus on reading, mathematics and science for primary, intermediate and middle school levels. The content academies are 80 percent content and 20 percent pedagogy. Courses are taught via distance learning.

Program Requirement: Students must complete a total of 33 credit hours to complete the M.Ed. education. The degree program includes 21 hours of content academy options. A comprehensive examination completes the master’s program.

Admission Requirements: Applicants must apply to the ASU Graduate College and to the specific program and concentration to which they seek admission. Admission to a degree program is based on:

- Undergraduate and/or graduate GPAs.
- Letters of recommendation.
- Personal statement.
- Work and academic experience.
- The availability of faculty to supervise academic areas of interest.
Applicants to the elementary or secondary programs must hold valid Arizona teaching certificates for those grade levels unless they are pursuing an M.Ed. with certification.

Contact:
Educational Leadership & Innovation, Division W
http://ctel.asu.edu/programs/
ctelgrad@asu.edu
FAB S236
602/435-595

Elementary Ed (Ed Technology) (MED) TEEDTECMED
College of Teacher Education and Leadership

Official Degree Awarded: MEd Elementary Education (Educational Technology)

Program Description: The master's degree in elementary education with a specialization in educational technology is designed to assist practicing teachers acquire the knowledge base and skills necessary to develop and provide the most current instructional methods and materials for their students. The emphasis of the program is on practical classroom applications that are based on the latest theory, research and best current practice.

Program Requirement: Students must complete a total of 33 credit hours, including 21 credits in their concentration and an applied project which completes the program.

Admission Requirements: Applicants must apply to the ASU Graduate College and to the specific program and concentration to which they seek admission. Admission to a degree program is based on:

- Undergraduate and/or graduate GPAs.
- Letters of recommendation.
- Personal statement.
- Work and academic experience.
- The availability of faculty to supervise academic areas of interest.
- Applicants to the elementary or secondary programs must hold valid Arizona teaching certificates for those grade levels unless they are pursuing an M.Ed. with certification.

Contact:
Educational Leadership & Innovation, Division W
http://ctel.asu.edu/programs/
ctelgrad@asu.edu
FAB S236
602/543-5595
Elementary Ed (Reading) (MEd) TERDGMED
College of Teacher Education and Leadership

Official Degree Awarded: MEd Elementary Education (Reading)

Program Description: The master's degree in elementary education with a specialization in reading is designed to assist practicing teachers acquire the knowledge base and skills necessary to develop and provide the most current instructional methods and materials for their students. The emphasis of the program is on practical classroom applications that are based on the latest theory, research and best current practice. The program leads toward an Arizona state endorsement as a reading specialist.

Program Requirement: Students must complete a total of 33 credit hours, including 21 credits in their concentration and a comprehensive examination which completes the program.

Admission Requirements: Applicants must apply to the ASU Graduate College and to the specific program and concentration to which they seek admission. Admission to a degree program is based on:

- Undergraduate and/or graduate GPAs.
- Letters of recommendation.
- Personal statement.
- Work and academic experience.
- The availability of faculty to supervise academic areas of interest.
- Applicants to the elementary or secondary programs must hold valid Arizona teaching certificates for those grade levels unless they are pursuing an M.Ed. with certification.

Contact:
Educational Leadership & Innovation, Division W
http://ctel.asu.edu/programs/
ctelgrad@asu.edu
FABS236
602/543-5595

Elementary Education (Teacher Certification Accelerated) (MEd) TEEEACLMED
College of Teacher Education and Leadership

Official Degree Awarded: MEd Elementary Education (Teacher Certification Accelerated)

Program Description: The master's degree in elementary education with teacher certification M.Ed. in is administered by the College of Teacher Education and Leadership from ASU at the West campus. This concentration is appropriate for those who hold a bachelor's degree and who do not have teacher certification, who
wish to become certified in Arizona and earn a master’s degree at the same time. Note that several delivery options are available which are listed as specializations.

**Program Requirement:** A minimum of 33 credit hours of graduate credit is required for the M.Ed in elementary education with certification. Each student is assigned a graduate advisor to design the program of study. Students in this program will complete an applied projects a culminating activity.

**Admission Requirements:** Applicants must apply to the ASU Graduate College through the online application. Admission to a degree program is based on undergraduate and/or graduate GPAs.

**Contact:**
Educational Leadership & Innovation, Division W
http://ctel.asu.edu/programs/
ctelgrad@asu.edu
FAB S236
602/543-5595

**Physical Education - Polytechnic Campus (MPE) ECPHYEDMPE**
College of Teacher Education and Leadership

**Official Degree Awarded:** MPE Physical Education

**Program Description:** Graduates of the M.P.E. program gain advanced knowledge of curriculum, instructional practices and administrative procedures in physical education and sports. Emphasis is placed on improving instructional effectiveness and developing quality sport and physical education programs in school settings.

**Program Requirement:** The degree requires 33 credit hours including:

1. An applied project.
2. Development of a professional portfolio.
3. A final written comprehensive examination.

The degree has two tracks.

**Physical education K-12 teaching track:**

1. Core studies: 21 hours.
2. Education cognate courses: 6 hours.
3. Electives: 6 hours.

**Physical education pedagogy track:**

1. Core studies: 21 hours.
2. Education cognate courses: 6 hours.
3. Electives: 6 hours.
Admission Requirements: In addition to the Graduate College application, submit the following items:

1. Letter of intent stating why you are interested in the program and how it will meet your professional goals.
2. Current résumé.
3. Three professional letters of recommendation addressing experiences with children and/or families.
4. Official (sealed) transcripts with institution’s name and degree granted date. All application materials need to be sent to the Graduate College's admission office.

Contact:
Educational Leadership & Innovation, Division W
http://www.poly.asu.edu/education/
polytechniceducation@asu.edu
SUTON 240
480/727-1103

Secondary Ed (ED Technology) (MEd) TESEDTCMED
College of Teacher Education and Leadership

Official Degree Awarded: MEd Secondary Education (Educational Technology)

Program Description: This program advances the knowledge and skill of future high school or middle school teachers. It is designed to assist practicing teachers acquire the knowledge base and skills necessary to develop and provide the most current instructional methods and materials for their students.

Program Requirement: Students must complete a total of 33 credit hours, including 15 credits in their concentration and an applied project which completes the program.

Admission Requirements: Applicants must apply to the ASU Graduate College and to the specific program and concentration to which they seek admission. Admission to a degree program is based on:

- Undergraduate and/or graduate GPAs.
- Letters of recommendation.
- Personal statement.
- Work and academic experience.
- The availability of faculty to supervise academic areas of interest.
- Applicants to the elementary or secondary programs must hold valid Arizona teaching certificates for those grade levels unless they are pursuing an M.Ed. with certification.

Contact:
Educational Leadership & Innovation, Division W
Secondary Ed (Teacher Certification) (MEd) TESCERTMED
College of Teacher Education and Leadership

Official Degree Awarded: MEd Secondary Education (Teacher Certification)

Program Description: The master’s degree in secondary education with teacher certification is a specialization designed for those with bachelor’s degrees who wish to earn an M.Ed. along with their secondary certification grades 7-12 in a specific content area.

Program Requirement: The M.Ed. in secondary education requires 33 credit hours of course work and completion of an applied project. Students must complete 48 credit hours which includes student teaching to receive Arizona certification.

Admission Requirements: The master’s degree in secondary education with teacher certification is a specialization designed for those with bachelor’s degrees who wish to earn an M.Ed. along with their secondary certification grades 7-12 in a specific content area.

Contact:
Educational Leadership & Innovation, Division W
http://ctel.asu.edu/programs
CTELquestions@asu.edu
FAB S236
602/543-5595

Secondary Education (Tailored) (MEd) TESECEMED
College of Teacher Education and Leadership

Official Degree Awarded: MEd Secondary Education

Program Description: This program in tailored to meet the needs of practicing or future high school or middle school teachers. The five electives can be used in a variety of ways that are chosen in consultation with an academic advisor. Typical configurations include content classes (such as history teachers taking history classes), educational technology, literacy and English as a second language courses. This program is designed to help teachers advance their knowledge and skills to become well-rounded teachers. For teachers needing more course work in one content area, the electives may enable them to become highly qualified.

Program Requirement: This program requires 33 credit hours, including 15 credits in their concentration and an applied project.
Admission Requirements: Applicants must apply to the ASU Graduate College and to the specific program and concentration to which they seek admission. Admission to a degree program is based on:

- Undergraduate and/or graduate GPAs.
- Letters of recommendation.
- Personal statement.
- Work and academic experience.
- The availability of faculty to supervise academic areas of interest.
- Applicants to the elementary or secondary programs must hold valid Arizona teaching certificates for those grade levels unless they are pursuing an M.Ed. with certification.

Contact:
Educational Leadership & Innovation, Division W
http://ctel.asu.edu/programs
CTELquestions@asu.edu
FAB S236
602/543-5595

Special Ed (Teacher Certification) (MEd) TESECRTMED
College of Teacher Education and Leadership

Official Degree Awarded: MEd Special Education (Teacher Certification)

Program Description: The master's in special education with Arizona certification, is a specialization designed for those individuals with a bachelor’s degree who want to earn an M.Ed. along with dual Arizona certifications in K-12 special education and grades one to eight elementary education. Students also receive a mild cross-categorical endorsement and provisional ESL endorsement.

Program Requirement: The M.Ed. in special education requires 33 credit hours of course work and completion of an applied project. Students must complete 51 credit hours; however, in order to receive Arizona certification.

Admission Requirements: Applicants must submit a Graduate College online application. Admission to a degree program is based on undergraduate and/or graduate GPAs.

A prerequisite course in introductory special education must also be met: SPE 222, SPE 311 and SPE 511.

Contact:
Educational Leadership & Innovation, Division W
http://ctel.asu.edu/programs/special_ed/
ctelgrad@asu.edu
FAB S236
602/543-5595
Special Education (Consultation and Collaboration) (MEd) TESECCMED
College of Teacher Education and Leadership

Official Degree Awarded: MEd Special Education (Consultation and Collaboration)

Program Description: The master’s degree in special education with specialization in collaboration and consultation is designed to assist practicing teachers to acquire the knowledge base and skills necessary to develop and provide the most current instructional methods and materials for their students. The program emphasizes practical classroom applications which are based on the latest theory, research and best current practice. This program also emphasizes collaboration and consultation with other interdisciplinary professionals and parents. The program is designed with the assistance of a faculty advisor to meet the needs of a student’s professional and career goals.

Program Requirement: Students must complete a total of 33 credit hours consisting of:

1. Nine hours of M.Ed. core (TEL 501, SPE 540, SPE 541).
2. Eighteen credit hours of special education (selected from SPE 512, SPE 520, SPE 521, SPE 531, SPE 536, SPE 548, SPE 561, SPE 598).
3. Three credit hours of special education practicum (SPE 580).
4. Three credit hours of applied project (SPE 593) to complete the program.

Admission Requirements: Applicants must apply to the ASU Graduate College and to the specific program and concentration to which they seek admission. Admission to a degree program is based on:

- Undergraduate and/or graduate GPAs.
- Letters of recommendation.
- Personal statement.
- Work and academic experience.
- The availability of faculty to supervise academic areas of interest.
- Applicants to the elementary or secondary programs must hold valid Arizona teaching certificates for those grade levels unless they are pursuing an M.Ed. with certification.

Contact:
Educational Leadership & Innovation, Division W
http://ctel.asu.edu/programs
ctelgrad@asu.edu
FAB S236
602/543-5595
Technology and Innovation, College of

Alternative Energy Technologies (MSTECH) TSATMSTECH

College of Technology and Innovation

Official Degree Awarded: MSTech Electrical Engineering Technology (Alternative Energy Technologies)

Program Description: The M.S.Tech. with a concentration in alternative energy technologies explores the demands of energy resources in the new economy. This degree program is designed for sufficient flexibility to permit the student to select a combination of courses in a technical concentration, alternative energy technologies and supporting area to meet individual career goals. The research activities in the alternative energy technologies field include the use of energy sources such as solar, wind, ocean, geothermal and biomass. At the heart of the program is the concept of the solar-hydrogen cycle, a renewable energy scenario that comprises production of electricity from solar energy, and utilizing electricity to split water into its elemental parts. The required research provides students with an opportunity to develop special research and application skills directly related to individual needs and objectives in the field of alternative energy technologies.

Program Requirement: Thesis Option (33 credit hours)

Concentration (15-16)
Supporting Area (8-9)
Research methods courses:

EET 500 Research/Writing (2)
EET 591 Graduate Seminar (1)
EET 599 Thesis (6)

A minimum of 20 credit hours must be 500-level courses. At least nine hours of 500-level course work must be included in the technical concentration. Students may take up to six credit hours of 400-level course work to broaden their technical knowledge within the concentration or supporting area. Students are required to complete six hours of EET 599 Thesis, write a thesis and make an oral defense. All course work applied toward the minimum 33 credit hour total must be at the 400 and 500 level.

Nonthesis Option (33 credit hours)

Concentration (15-18)
Supporting Area (9-12)
Research Methods Courses:
Admission Requirements: Prerequisites

Applicants are required to have earned a bachelor's degree that includes a minimum of 30 credit hours or equivalent in a technology area including course work applicable to the concentration being sought, and a minimum of 16 credit hours of mathematics and science. Depending upon the background of the student, the following application materials are necessary:

Graduate College online application.
Application fee.
Official transcripts from every college and university previously attended.
Test score reports. The Test of English as Foreign Language (TOEFL) report may be necessary for international students. The GRE is not required by the Department of Engineering Technology.
Domicile affidavit for applicants claiming Arizona residency.
Financial guarantee form (required for international students). Visit the Graduate College Web site for more information.

Contact:
Department of Engineering Technology
http://technology.asu.edu/engrtech
engrtech@asu.edu
480/727-1976

Applied Biological Sciences (MS) TSAPBIOSMS
College of Technology and Innovation

Official Degree Awarded: MS Applied Biological Sciences

Program Description: The M.S. in applied biological sciences is designed to train students who are technically proficient in the laboratory and the field, who know the technical literature in their field of research, who are articulate in oral and written communication and who understand the societal and policy implications of their work. The degree is supported by faculty with backgrounds in ecological restoration, environmental biotechnology, environmental policy, plant systematics, urban horticulture and wildlife biology.

All students are required to complete a core of graduate courses, conduct a research project under the direction of a faculty member and prepare and defend a research thesis.

Program Requirement: Program of Study: A minimum of 30 credit hours of approved graduate course work is required. All students are required to complete
two seminars: ABS 591 in the spring semester and ABS 691 in the fall semester. All students must complete six credit hours of thesis. The remaining hours are chosen to support the student's educational objectives.

There are no foreign language requirements and no comprehensive examinations.

**Thesis Requirements:** A thesis is required.

**Final Examinations:** A final oral examination covering the thesis and related subject matter is required.

*Admission Requirements:* Applicants to the program are expected to meet the minimum requirements for admission to the Graduate College. In addition, scores from the GRE (minimum score of 1080, verbal and quantitative combined) or Miller Analogies Test (minimum score 45) are required. Applicants are expected to have completed 18 credit hours in biological sciences and closely-related courses. Specific fields of study may have specific expectations regarding courses taken at the undergraduate level. Applicants not meeting these course requirements may be considered for admission with deficiencies.

**Submit the following separate application materials to:**

Department of Applied Biological Sciences  
School of Applied Arts and Sciences  
Arizona State University  
6073 S. Twining  
Mesa, AZ 85212-6032

1. A statement of intent (maximum 600 words) explaining, 1) the applicant's interest in environmental resources, 2) the applicant's academic background, and 3) the applicant's educational objectives.
2. Three letters of recommendation from references who are qualified to comment on the applicant's potential in the selected area of study.
3. A résumé.

**Application Deadlines**

For fall enrollment, application materials are due in the Department of Applied Biological Sciences and the Graduate College by March 15.

For spring enrollment, application materials are due in the Department of Applied Biological Sciences and the Graduate College by Oct. 15.

**Selection Procedures and Notifications**
Department faculty evaluate the applications and supporting materials and recommend to the Graduate College whether the applicant should be granted regular or provisional admission or if admission should be denied. If admission is provisional, the Graduate College, in its letter of admission, specifies the provisions that need to be met to gain regular status. The school informs successful applicants of the procedures for enrollment.

Contact:
Department of Applied Biological Sciences
http://www.poly.asu.edu/saas/appliedbiologicalsciences/index.html
appliedbiologicalscience@asu.edu
WANER 340
480/727-1444

*Applied Psychology (Polytechnic Campus) (MS) ECAPSYPCHMS*
College of Technology and Innovation

*Official Degree Awarded:* MS Applied Psychology

*Program Description:* This M.S. program provides a professional degree in human factors psychology for students wishing to pursue careers in this field. Human factors is concerned with assuring the usability of products through design and testing, improving human performance in domains such as sports by understanding the cognitive and perceptual processes involved, improving the effectiveness of instruction and training, team training and consumer psychology. The M.S. program offers specialized training to complement the B.S. in applied psychology at the Polytechnic campus.

*Program Requirement:* This M.S. requires the completion of 30 credit hours with grades of “B” (3.00) or higher. Students have the option of doing a thesis or an applied project to develop and demonstrate professional knowledge and skills. Students who plan to go on to a doctoral program are encouraged to complete a thesis. Work on the thesis will continue for at least a calendar year under faculty supervision. The first three credits will be devoted to developing an idea and preparing a proposal for approval by a faculty committee. The next three credits will allow for preparing the details of research design and data collection for the thesis (materials, computer programs, experimental text beds, questionnaires, etc.). The final six credits will be devoted to collecting and analyzing data and writing and revising the thesis under the direction of the advisor.

Students will defend the thesis in an oral examination. Students selecting the applied project option will, under the guidance of an advisor, allocate the 12 credit hours to a combination of research, practicum, project activities and report writing appropriate to the goals of the student and the program and the availability of practicum or internship opportunities. In all cases, the project will culminate in a substantial written report followed by a comprehensive oral examination covering the project and other materials from required courses.
Admission Requirements: Applicants must submit the Graduate College online application.

Admission requirements include:

1. A bachelor’s degree from a recognized educational institution (minimum 3.00 GPA).
2. GRE scores on the verbal and quantitative tests.
3. Three letters of recommendation.
4. A personal statement including background, interests, qualifications and goals.
5. Test of English as a Foreign Language (TOEFL) scores for applicants who are not native English speakers.

Contact:
Faculty of Applied Psychology
http://www.poly.asu.edu/saas/appliedpsych/masters/
SAAS@asu.edu
SANCA 150
480/727-1177

Aviation Mgmt/Human Factors (MSTech) TSHFMSTECH
College of Technology and Innovation

Official Degree Awarded: MSTech Technology (Aviation Management and Human Factors)

Program Description: The M.S.Tech. program offers a concentration in aviation management and human factors in the Department of Aeronautical Management Technology within the College of Technology and Applied Sciences. The program focus is on preparing graduates for a career in the aviation industry or as the foundation for further advanced study. Courses are offered at the Polytechnic campus, with some courses offered online. Graduates of this program are provided with technical and professional skills for use in leadership positions in industry and education. The program is designed for flexibility, permitting the student to select a combination of courses in a technical area and supporting area to meet individual goals.

Program Requirement: The following are the core requirements for meeting the department’s goal to provide an in-depth research and statistics background early in the program as a foundation for the student’s thesis or applied project. The comprehensive elective curriculum design will offer courses that reflect current and applied topics.

Core Requirements
Twelve credit hours are required for thesis option, and nine credit hours for the applied project option.

AMT 593 Applied Project (3) or AMT 599 Thesis (6)
ITM 549 Research Techniques and Applications or equivalent
PSY 530 Statistics or equivalent

Students have a choice of selecting a thesis option (12 credit hours of core courses plus 21 credit hours of selected course work) or an applied project option (nine credit hours of core courses plus 24 credit hours of selected course work). The detailed design of the graduate student’s total program requirements (33 credit hours) with the selection of the required courses will be the responsibility of the student’s supervisory committee chair and committee members.

The defining guideline for the department will be to match the student’s specific career goals and objectives, as well as a balanced curriculum that can be achieved in a reasonable time and in accordance with a known course-offering schedule. The flexibility of customizing the specific curriculum, which will involve the student taking almost one-half of the total courses, will not be at the discretion of the student, but rather at the discretion of the supervisory committee who will ensure a well-structured program of study with represented courses from across the curriculum.

**Additional Requirements**

Twenty-one credit hours are required for the thesis option, and 24 credit hours for the applied project option.

AMT 520 Airline Pricing and Yield Management
AMT 521 Air Transportation Regulations
AMT 522 Aviation Law
AMT 523 Intermodal Transportation Management (former Aviation Systems Management)
AMT 524 Airport Management Operations
AMT 525 Airport Planning and Design
AMT 526 Aviation Labor Relations
AMT 527 Airline Management Strategies
AMT 528 International Aviation
AMT 529 Fixed-Base Operations Management
AMT 532 Managing Diversity in Aviation
AMT 541 Aviation Physiology
AMT 542 Human Factors in Automation
AMT 545 Human Factors in Aviation
AMT 546 Crew Resource Management/LOFT
AMT 549 Applied Human Factors Research
All master’s courses will be 500-level courses. A single course exception (400-level course) may be authorized with the consensus of the supervisory committee.

Admission Requirements: Admission to the M.S.Tech. program requires the completion of all general admission requirements and procedures set forth by the Graduate College. The College of Technology and Innovation requires an appropriate bachelor’s degree from an accredited college or university, with a minimum of 30 credit hours in technology or equivalent and 16 credit hours of physical science and mathematics appropriate to the program pursued. The specific requirements vary within each department. To be considered for admission, a minimum 3.00 GPA is required.

Admission to the graduate degree program presupposes an adequate technical preparation in a selected technology at the undergraduate level. The applicant’s past work and professional experience are also evaluated and taken into consideration when determining admission classification. Admission into the M.S.Tech. program is based on a number of factors. These include, but are not limited to:

- Undergraduate GPA.
- Test of English as a Foreign Language (TOEFL) score for applicants whose native language is not English.
- References from individuals qualified to judge academic potential.
- Statement of purpose.
- Résumé.
- Likelihood for success.
- Potential for successful placement.
- Number of students currently enrolled in the program.

Contact:
Department of Technology Management
http://technology.asu.edu/aviation
aerotech@asu.edu
SIM 201
480/727-1021

Computing Studies - Polytechnic Campus (MCST) TSCOMP MCST
College of Technology and Innovation

Official Degree Awarded: MCSt Computing Studies

Program Description: The faculty of the Department of Engineering offers the M.C.S.T. graduate program. This program prepares students with the technical and professional knowledge necessary for career advancement and positions of leadership in computing through challenging problem-based, laboratory-rich course work and an applied research component. Graduate students study in a variety of areas, including distributed and Web-based applications, embedded systems, software systems, visualization and operating systems. Graduates of the M.C.S.T.
program may pursue advanced research degrees in the computing discipline, procure employment in one of the high growth and dynamic computing application areas or pursue careers in allied fields by leveraging computing interests in areas such as engineering, biology or business. In addition to academic credentials, departmental faculty have extensive industry experience.

*Program Requirement:* The program of study must contain a minimum of 33 credit hours of approved graduate-level course work. At least 18 of these credit hours must be 500-level courses (excluding CST 598 ST: Special Topics courses). A maximum of six credit hours may be taken at the 400-level. In keeping with the learning objectives of the Polytechnic campus, students must complete three credit hours of CST 584 Supervised Internship or three credit hours of CST 590 Reading and Conference to fulfill the degree requirements. Students must complete at least 12 credit hours in a primary area of specialization that is also used as the technical area for the research component. To promote breadth, M.C.S.T. students must take a total of nine credit hours in at least two additional specialization areas distinct from the primary specialization area. Areas of specialization are:

- Distributed and web-based applications.
- Embedded systems.
- Software systems and visualization.
- Operating systems and networks.

**Thesis Option** (33 credit hours)

Specialization (12)
Supporting area (9)
Research methods courses (12):

- CST 500 RM: Research/Writing (2)
- CST 584 Internship or CST 590 Reading and Conference (3)
- CST 591 Seminar (1)
- CST 599 Thesis (6)

**Nonthesis Option** (33 credit hours)

Specialization (15)
Supporting area (9)
Research methods courses (9):

- CST 500 RM: Research/Writing (2)
- CST 584 Internship or CST 590 Research and Conference (3)
- CST 591 Seminar (1)
- CST 593 Applied Project (3)

All M.C.S.T. students must completed a combined three credit hours in CST 500 Seminar and CST 591 Research/Writing.
Admission Requirements: Applicants are expected to satisfy all requirements for admission to the Graduate College with high success in completing a bachelor's degree in computing. Excellent applicants with partial computing background may be admitted with undergraduate computing deficiencies that must be completed early in the graduate program. Applicants must submit scores for the GRE, including verbal, quantitative and analytical. The subject test in computer science is not required. International applicants must submit results of the Test of English as a Foreign Language (TOEFL). Applicants for fall semester admission should submit all materials to the Graduate College by March 1, and applicants for spring semester should submit all admission materials by Oct. 1.

Contact:
Department of Engineering
http://technology.asu.edu/engineering/
egr@asu.edu
SANTN 230
480/727-2727

Electronics Engineering Technology (MSTech) TSSYMSTECH
College of Technology and Innovation

Official Degree Awarded: MSTech Technology (Electronic Systems Engineering Technology)

Program Description: The M.S.Tech. program promotes greater depth of understanding in electronics and its applications at a system level. A minimum of 33 credit hours of graduate credit is required for degree completion. The program is designed for sufficient flexibility to permit the student to select a combination of courses in a technical concentration and supporting area to meet individual career goals. The required research provides students with an opportunity to develop special research and application skills directly related to individual needs and objectives. The Department of Engineering Technology provides students with a concentration in electronic systems engineering technology.

Program Requirement: The degree requirements for the M.S.Tech. with a concentration in electronic systems engineering technology offered by the Department of Engineering Technology include:

Thesis Option (33 credit hours)

Concentration (15-16)
Supporting Area (8-9)
Research Methods Courses:

EET 500 Research/Writing (2)
EET 591 Graduate Seminar (1)
EET 599 Thesis (6)
At least nine hours of 500-level course work must be included in the technical concentration. Students may take up to six credit hours of 400-level course work to broaden their technical knowledge within the concentration or supporting area. Students are required to complete six hours of EET 599 Thesis, write a thesis and make an oral defense.

Nonthesis Option (33 credit hours)

Concentration (15-18)
Supporting Area (9-12)
Research Methods Courses:
   EET 500 Research/Writing (2)
   EET 591 Graduate Seminar (1)
   EET 593 Applied Project (3)

At least nine hours of 500-level course work must be included in the technical concentration. A maximum of three credit hours of EET 593 Applied Project may be applied toward the 20 credit-hour, 500-level minimum. Additional background deficiency hours may be required. All course work outside the Department of Engineering Technology must be preapproved by the department chair.

A final oral comprehensive examination is required. Any candidate who fails in that examination may, upon recommendation of the committee and approval of the dean of the Graduate College, be granted a second examination. The second examination is final. A final copy of the applied project report or thesis must be submitted before the candidate is eligible for this examination.

Program of Study

Course work: the student selects a concentration and supporting area, as well as a subset of courses from each area. Specifically, five to six courses are selected from the concentration area, and three or four are selected from the supporting area. Early in the program, the student identifies a major advisor, who is a faculty member of the department interested in the selected area of concentration. The student works with the major advisor to develop the program of study and subsequently to carry out the research component of the program.

Research: each student, as a part of the degree program, is required to complete an applied project or thesis within the student's area of emphasis. The applied project includes a written report.

Research Activity: research activities in the Department of Engineering Technology include systems, circuit applications and digital design. Research in microelectronics areas including device processing/fabrication, device packaging and reliability testing are explored utilizing the microelectronics laboratory clean-room facilities.
Electronic systems and alternative energy technologies are also topics of research by department faculty and graduate students. M.S.Tech. candidates will find a broad range of research that can lead to an applied project or thesis.

*Admission Requirements: Prerequisites*

Applicants are required to have earned a bachelor's degree that includes a minimum of 30 credit hours or equivalent in a technology area including course work applicable to the concentration being sought, and a minimum of 16 credit hours of mathematics and science. Depending upon the background of the student, the following application materials are necessary:

1. Graduate College online application.
2. Application fee.
3. Official transcripts from every college and university previously attended.
4. Test score reports. The Test of English as a Foreign Language (TOEFL) report may be necessary for international students. The GRE is not required by the Department of Engineering Technology.
5. Domicile affidavit for applicants claiming Arizona residency.
6. Financial guarantee form (required for international students). Visit the Graduate College Web site for more information. Admission to the Graduate College and the Department of Engineering Technology requires excellent attainments in prior university course work and academic experience equivalent to the bachelor's degree in the area of proposed study.

Admission is based upon:

1. Academic attainments in undergraduate course work, including junior/senior GPA, overall undergraduate GPA and GPA in major courses.
2. Academic preparation in the chosen field of study for the master’s degree.
3. Academic attainments in post-baccalaureate course work, if appropriate.
4. Any other supporting information provided by the applicant, such as educational and career objectives, explanation of background or letters of reference.

*Contact:*
Department of Engineering Technology
http://technology.asu.edu/engrtech
engrtech@asu.edu
TECH 101
480/727-1976

*Environmental Tech Mgmt (Polytechnic Campus) (MSTech) TSMGMSTECH*
College of Technology and Innovation

*Official Degree Awarded: MSTech Technology (Environmental Technology Management)*
Program Description: The M.S.Tech. with a concentration in environmental technology management provides three areas of study:

- Environmental management.
- Emergency management.
- International environmental management.

Classes are scheduled to minimize disruption of work schedules by meeting six times a semester on alternating Fridays and Saturdays. A Web-based distance learning format is also available.

Program Requirement: The M.S.Tech. with a concentration in environmental technology management is a 33 credit hour program. A thesis or an applied project is required for this degree program. Concentration area course work includes 12 credit hours of core classes and 15 credit hours of approved electives.

Supporting course work includes the following areas of study:

- Air pollution.
- Comprehensive emergency management.
- Environmental chemistry.
- Environmental risk assessment.
- International environmental law.
- International environmental management.
- Principles of hazardous materials/waste.
- Soils and groundwater contamination.
- Sustainability and sustainable development.
- Terrorism, weapons of mass destruction and current issues.

Admission Requirements: Admission to the M.S.Tech. program requires the completion of all general admissions requirements and procedures set forth by the Graduate College. The College of Technology and Innovation also requires an appropriate bachelor’s degree from an accredited college or university, with a minimum of 30 credit hours in technology or its equivalent and 16 credit hours of science and mathematics appropriate to the program pursued.

Admission to the graduate degree program presupposes an adequate technical preparation in a selected technology at the undergraduate level. Deficiencies for admission to the graduate degree program, if any, are specified at the time of admission. The applicant’s past work and professional experience are also evaluated and taken into consideration when determining admission classification. To be considered for regular admission, a minimum 3.00 GPA is required. Applicants should submit a letter of application and a current résumé to the Department of Technology Management for review by the graduate faculty in the technical concentration.
Global Technology and Development (MSTech) TSGTMSTECH
College of Technology and Innovation

Official Degree Awarded: MSTech Technology (Global Technology and Development)

Program Description: The M.S.Tech. program with a concentration in global technology and development is designed to integrate diverse areas of technical expertise and various academic disciplines with an awareness and understanding of how technology, processes of globalization and society influence one another.

The global technology and development (GTD) concentration provides students with a comprehensive understanding of systems of technology, how they interface, and their role in global economic, political and social development and change. The GTD concentration integrates the study of economic, social and political development with technology course work to explore issues critical to 21st-century globalization and the role and impact of technological innovations on societies around the world. Students completing the GTD concentration gain knowledge and skills to become technology interpreters and are prepared for careers in technology-related public policy, government service, international development and international management.

Program Requirement: A minimum of 33 credit hours are required for the M.S.Tech. with a concentration in global technology and development. Thesis and nonthesis options are available. At least 24 credit hours must be 500-level courses. A maximum of nine credit hours of course work at the 400 level can be included in the program of study.

Admission Requirements: Students interested in applying to this degree program must submit the Graduate College online application. Students applying to the global technology and development concentration must have:

1. An appropriate bachelor’s degree from an accredited college or university.
2. A combination of course work in the social sciences and technology/science.
3. Some element of international or intercultural knowledge, which could be fluency in a foreign language, academic course work or having resided in another country.

Contact:
Department of Technology Management
http://technology.poly.asu.edu/dtm/
TECH 102
480/727-1533
Official Degree Awarded: MSTech Technology (Graphic Information Technology)

Program Description: The M.S.Tech. with a concentration in graphic information technology provides students with the opportunity to study within the various areas of graphics. The areas include traditional and digital printing and publishing, multimedia, 3-D modeling, Web development, digital photography and animation. The courses offered in this degree program provide students with a working knowledge of the different facets of the graphic information industry with a focus on graphic communication. This is not a traditional information technology, computer science, computer information systems or information systems management program. The degree program is offered either as an on-campus or Web-based distance learning format.

Program Requirement: All candidates for the M.S.Tech. program are required to complete a minimum of 33 credit hours of graduate course work. Of these, a minimum of 18 credit hours must be 500-level courses and part of the approved program. Additional courses may be assigned by the faculty supervisory committee depending on the background of the candidate. The minimum degree requirements are as follows:

**Thesis Option** (33 credit hours)
- Technical area of emphasis (18)
- Supporting area (9)
- Thesis (6)

**Applied Project Option** (33 credit hours)
- Technical area of emphasis (18)
- Supporting area (9)
- Research course (3)
- Applied Research Project (3)

A maximum of nine credit hours of appropriate graduate course work completed before admission may be included in the program of study for the degree program. Most graduate degree students in this program elect to do an applied project rather than a thesis. The applied project generally allows the student to thoroughly explore a graphic problem and demonstrate knowledge of the problem, solutions for the problem and suggestions for further explanation of the problem.

Admission Requirements: Admission to the M.S.Tech. program requires the completion of all general admissions requirements and procedures set forth by the Graduate College. The College of Technology and Innovation also requires an appropriate bachelor’s degree from an accredited college or university, with a minimum of 30 credit hours in technology or its equivalent and 16 credit hours of
science and mathematics appropriate to the program pursued.

Admission to the graduate degree program presupposes an adequate technical preparation in a selected technology at the undergraduate level. Deficiencies for admission to the graduate degree program, if any, are specified at the time of admission. The applicant's past work and professional experience are also evaluated and taken into consideration when determining admission classification. To be considered for regular admission, a minimum 3.00 GPA is required. Applicants should submit a letter of application and a current résumé to the Department of Technology Management for review by the graduate faculty in the technical concentration.

Contact:
Department of Technology Management
http://technology.asu.edu/git
TECH BLDG, RM 102
480/727-1781

Integrated Electronic Systems (MSTECH) TSES MSTECH
College of Technology and Innovation

Official Degree Awarded: MSTech Technology (Integrated Electronic Systems)

Program Description: The M.S.Tech. with a concentration in integrated electronic systems covers the processes and technology used to develop, design, manufacture and exploit integrated electronic functions on silicon, in packages and on boards. This degree program is designed for sufficient flexibility to permit the student to select a combination of courses in a technical concentration, integrated electronic systems and supporting area to meet individual career goals. The program provides hands-on laboratory experience in integrated circuit device fabrication and manufacturing in a setting that emulates the real industry. The required research provides students with an opportunity to develop special research and application skills directly related to individual needs and objectives in the field of microelectronics.

Research activity

Research activities in the Department of Engineering Technology, include circuit applications and digital design. Research is conducted in the areas of microelectronics/integrated electronic systems, including design, device processing/fabrication, silicon device in packages and on boards and exploit integrated electronics functions in various applications. The research activities in the alternative energy technologies field, include exploration of the demands of energy resources in the new economy and use of energy sources such as solar, wind, ocean, geothermal and biomass. M.S.Tech. candidates will find a broad range of research topics that can lead to an applied project or thesis.
Program Requirement: Thesis Option  (33 credit hours)

Concentration (15-16)
Supporting Area (8-9)
Research Methods Courses:

   EET 500 Research/Writing (2)
   EET 591 Graduate Seminar (1)
   EET 599 Thesis (6)

A minimum of 20 credit hours must be 500-level courses. At least nine hours of 500-level course work must be included in the technical concentration. Students may take up to six credit hours of 400-level course work to broaden their technical knowledge within the concentration or supporting area. Students are required to complete six hours of EET 599 Thesis, write a thesis and make an oral defense. All course work applied toward the minimum 33 credit hour total must be at the 400 and 500 level.

Nonthesis Option  (33 credit hours)

Concentration (15-18)
Supporting Area (9-12)
Research Methods Courses:

   EET 500 Research/Writing (2)
   EET 591 Graduate Seminar (1)
   EET 593 Project (3)

Admission Requirements: Prerequisites

Applicants are required to have earned a bachelor's degree that includes a minimum of 30 credit hours or equivalent in a technology area including course work applicable to the concentration being sought, and a minimum of 16 credit hours of mathematics and science. Depending upon the background of the student, the following application materials are necessary:

1. Graduate College online application.
2. Application fee.
3. Official transcripts from every college and university previously attended.
4. Test score reports. The Test of English as a Foreign Language (TOEFL) report may be necessary for international students. The GRE is not required by the Department of Engineering Technology.
5. Domicile affidavit for applicants claiming Arizona residency.
6. Financial guarantee form (required for international students). Visit the Graduate College Web site for more information.

Contact:
Department of Engineering Technology
Management of Technology (MSTech) TSMRMSTECH
College of Technology and Innovation

Official Degree Awarded: MSTech Technology (Management of Technology)

Program Description: The purpose of the M.S.Tech. with a concentration in management of technology is to prepare graduates of the program for leadership roles in technology-driven organizations, whether private or public, and to improve the leadership skills of technically proficient professionals. Students are prepared to successfully transition into leadership positions in their field of expertise and to move into a general leadership role outside their area of technical expertise as their career grows.

This degree program is open to individuals with a technical undergraduate degree who wish to develop their leadership/management skills to complement their technical expertise. The course schedule is tailored to the needs of the student while ensuring that basic leadership and management skills are acquired.

Program Requirement: For the M.S.Tech., a minimum of 33 credit hours are required and it is expected that graduates of the program possess skills in research and the ability to apply these research skills in practice. To achieve this goal each student is required to complete OMT 549 Research Techniques and either TMC 593 Applied Project or TMC 599 Thesis.

Additionally, each student is required to select four courses (12 credit hours) from the following list:

- OMT 503 Marketing Management
- OMT 504 Law and Ethics for Technical Professionals
- OMT 540 International Management
- OMT 548 Statistical Methods for Research
- OMT 550 Industrial Training and Development
- OMT 552 Global Management Philosophies
- OMT 592 Research (1-3)
- TMC 584 Internship (1-3)
- OMT 598 ST: Forecasting and Evolution of Technology
- OMT 598 ST: Simulation of Operations
- OMT 598 ST: Advanced Quality Topics
- OMT 598 ST: Advanced Operations Topics

Graduate courses from other majors may be selected with approval from the student’s graduate advisory committee. These additional courses are selected to support the student’s individual career goals and perceived needs. If selecting the
thesis option, courses are chosen to support the student’s research topic and research methods. To ensure that all courses taken will fit into the plan of study, all students are expected to discuss their tentative plan with their program advisor prior to registering for their first class, and must have an approved plan of study on file by the completion of nine credit hours toward the degree.

Students without a statistics course at the undergraduate level will be required to complete an appropriate course during their first semester in the program. This course will be in addition to the other requirements for the degree. Additional courses may be required to fulfill deficiencies, based on a review of the applicant’s transcripts. Please contact the department for more information.

Admission Requirements: All applicants must submit the Graduate College online application and the admission requirements include:

1. Bachelor’s degree or the equivalent from a regionally accredited institution.
2. Equivalent to a “B” (3.00) average for the undergraduate program of study in the last 60 credit hours or 90 quarter hours of undergraduate course work. If an applicant does not meet the minimum GPA, their application may still be considered although the degree program office may require additional supporting documents.
3. International applicants must meet the previous qualifications, plus have a valid minimum Test of English as a Foreign Language (TOEFL) score of 550 on the paper test or a score of 213 on the computer-based test.

The College of Science and Technology admission requirements include:

1. An appropriate baccalaureate degree from an accredited college or university, with a minimum of 30 credit hours in technology or its equivalent and 16 credit hours of science and mathematics appropriate to the program pursued.
2. A minimum 3.00 GPA is required for regular admission.
3. A letter of application.
4. A current résumé. Industrial experience beyond completion of a baccalaureate degree is strongly recommended. Graduate work presupposes an adequate technical preparation in a selected technology at the undergraduate level. Deficiencies for admission to the graduate program, if any, are specified at the time of admission. The applicant's past work and professional experience are also evaluated and taken into consideration when determining admission classification.

Contact:
Department of Technology Management
http://technology.asu.edu/omt
TECH BLDG, RM 102
480/727-1781
Manufacturing Engineering Technology (MSTech) TSMFMSTECH
College of Technology and Innovation

Official Degree Awarded: MSTech Technology (Manufacturing Engineering Technology)

Program Description: At the graduate level, the Department of Engineering Technology offers a M.S.Tech. with a concentration in manufacturing engineering technology. M.S.Tech. students can select a technical concentration of manufacturing processes, management or computerization.

This flexible program permits the student to develop a program of study, with faculty approval, to meet individual career goals. While the program is not an evening program, many courses are offered either during the late afternoon or early evening.

The program presupposes that the student has a sound technical undergraduate degree, but not necessarily in manufacturing engineering. The degree concentration is designed to provide graduates with technical and professional skills that will facilitate preparation for, and advancement in, leadership positions in industry, education, government and military. Laboratories and classrooms are well equipped, and the faculty members teaching the classes have relevant teaching, research, industry and training experience and background.

Program Requirement: There are two basic options in the M.S.Tech. program with a concentration in manufacturing engineering technology: thesis and applied project. Both options require the completion of 33 credit hours. All course work applied toward the minimum 33 credit hour total must be at the 400 level or higher with a grade of “B” (3.00) or higher. An oral defense of the written applied or research project (thesis) is required as the final examination in either option. This defense is typically done during the last semester of study. All course work outside the Department of Engineering Technology must be preapproved and on the program of study.

Thesis Option

In the thesis option, a minimum of 24 credit hours must be 500-level courses, allowing students to take up to six credit hours of 400-level course work to broaden their technical knowledge within the technical concentration or a supporting area. The course work may be a combination of manufacturing, mechanical or aeronautical engineering technology courses or a limited number from outside the department. Students are required to complete six credit hours of MET 599 Thesis, write a thesis and present an oral defense.

Thesis Option (33 credit hours)
Technical concentration area (18)
Supporting area (6)
Research methods courses:

MET 591 Research Seminar (1) and a research writing course (2)
MET 599 Thesis (6)

**Applied Project Option**

In the applied project option, a minimum of 24 credit hours must be 500-level courses, allowing students to take up to six credit hours of 400-level course work to broaden their technical knowledge within the technical concentration or a supporting area. The course work may be a combination of manufacturing, mechanical or aeronautical engineering technology courses or a limited number from outside the department. The applied project requires a supporting report; the project and report are defended in a final oral examination.

**Applied Project Option**  (33 credit hours)

Technical concentration area (18)
Supporting area (9)
Research methods courses:

MET 591 Research Seminar (1) and a research writing course (2)
MET 593 Applied Project (3)

**Admission Requirements:** Applicants are expected to satisfy all requirements for admission to the Graduate College. In addition to the materials required by the Graduate College, applicants are required to provide a résumé and statement of purpose to the department.

Recommendation letters are not required but up to two letters will be considered. Letters of recommendation may be helpful during the admission process if the candidate’s qualifications are atypical or the letters provide information not typically addressed in the required admission materials listed above. Letters of recommendation should be sent directly to the department. For more information, please contact the department or the Graduate College.

Industrial experience beyond completion of a bachelor’s degree is recommended. Applicants with deficiencies in critical undergraduate technical subjects or those not meeting program prerequisites may be required to complete them before being admitted to the degree program.

Applicants who hold a bachelor’s degree from a regionally accredited U.S. institution are not required to take the GRE. Applicants holding a bachelor’s degree from outside the U.S. should take the GRE. If English is not the applicant’s native language, the Test of English as a Foreign Language (TOEFL) examination is required.
**Contact:**
Department of Engineering Technology
http://technology.asu.edu/engrtech
engrtech@asu.edu
SIM 295
480/727-1584

**Mechanical Engineering Technology (MSTech) TSMHMSTECH**
College of Technology and Innovation

**Official Degree Awarded:** MSTech Technology (Mechanical Engineering Technology)

**Program Description:** At the graduate level, the Department of Engineering Technology offers a M.S.Tech. with a concentration in mechanical engineering technology.

This flexible degree program permits the student to develop a program of study, with faculty approval, to meet individual career goals. While the program is not an evening program, many courses are offered either during the late afternoon or early evening.

The program presupposes that the student has a sound technical undergraduate degree, but not necessarily in mechanical engineering. The degree concentration is designed to provide graduates with technical and professional skills that will facilitate preparation for, and advancement in, leadership positions in industry, education, government and military. Laboratories and classrooms are well equipped, and the faculty members teaching the classes have relevant teaching, research, industry and training experience and background.

**Research Activity**

Department faculty are engaged in both theoretical and applied research projects, involving undergraduate and graduate students in mechanical-related topic areas. Graduate students employed in local industry are encouraged to develop research topics that address problems of interest to their employers.

Current research interests of the faculty include modeling and simulation, “smart” materials, composite materials, hydrogen power and fuel cells and other alternative energy sources, optimization of turbine engines, machinability and manufacturing processes, manufacturing and program management, manufacturing cost economics, automation and design and mechanics education.

Applied research projects are carried out in a number of well-equipped laboratories and facilities:

- Automation laboratory.
- Computer numerical control (CNC) machining center laboratory.
• Composite materials laboratory.
• Computer-aided design and computer-aided manufacturing laboratory.
• Energy conversion and combustion laboratory.
• Materials inspection and metrology laboratory.
• Metallurgy/materials testing laboratory.
• Welding and casting laboratory. For more information on research areas and laboratories, please access the Department of Engineering Technology Web site.

Program Requirement: There are two basic options in the M.S.Tech. degree program with a concentration in mechanical engineering technology: thesis and applied project. Both options require the completion of 33 credit hours. All course work applied toward the minimum 33 credit hour total must be at the 400 level or higher with a grade of “B” (3.00) or higher. An oral defense of the written applied or research project (thesis) is required as the final examination in either option. This defense is typically done during the last semester of study. All course work outside the Department of Engineering Technology must be pre-approved and on the program of study.

Thesis Option

In the thesis option, a minimum of 24 credit hours must be 500-level courses, allowing students to take up to six credit hours of 400-level course work to broaden their technical knowledge within the technical concentration or the supporting area. The course work may be a combination of manufacturing, mechanical or aeronautical engineering technology courses or a limited number from outside the department. Students are required to complete six credit hours of MET 599 Thesis, write a thesis and present an oral defense.

Thesis Option (33 credit hours)

Technical concentration area (18)
Supporting area (6)
Research methods courses:

MET 591 Research Seminar (1) and a research writing course (2)
MET 599 Thesis (6)

Applied Project Option

In the applied project option, a minimum of 24 credit hours must be 500-level courses, allowing students to take up to six credit hours of 400-level course work to broaden their technical knowledge within the technical concentration or the supporting area. The course work may be a combination of manufacturing, mechanical or aeronautical engineering technology courses or a limited number from outside the department. The applied project requires a supporting report; the
project and report are defended in a final oral examination.

**Applied Project Option**  (33 credit hours)

- Technical concentration area (18)
- Supporting area (9)
- Research methods courses:
  - MET 591 Research Seminar (1) and a research writing course (2)
  - MET 593 Applied Project (3)

**Admission Requirements:** Applicants are expected to satisfy all requirements for admission to the Graduate College. In addition to the materials required by the Graduate College, applicants are required to provide a résumé and statement of purpose to the department.

Recommendation letters are not required but up to two letters will be considered. Letters of recommendation may be helpful during the admission process if the candidate’s qualifications are atypical or the letters provide information not typically addressed in the required admission materials listed above. Letters of recommendation should be sent directly to the department. For more information, please contact the department or the Graduate College.

Industrial experience beyond completion of a baccalaureate degree is recommended. Applicants with deficiencies in critical undergraduate technical subjects or those not meeting program prerequisites may be required to complete them before being admitted to the degree program.

Applicants who hold a bachelor’s degree from a regionally accredited U.S. institution do not need to take the GRE. Applicants holding a bachelor’s degree from outside the U.S. should take the GRE. If English is not the applicant’s native language, the Test of English as a Foreign Language (TOEFL) examination is required.

**Contact:**
Department of Engineering Technology  
http://technology.asu.edu/engrtech  
engrtech@asu.edu  
SIM 295  
480/727-1584
UNDERGRADUATE PROGRAMS

Minors (Program Descriptions and Requirements)

African American Studies (Minor) LAAFRMIN

Description: The African and African American Studies Program offers an interdisciplinary examination of the many ways in which African and African-descended peoples have created robust lives for themselves and, in turn, contributed to the creation of the modern world.

The program's mission is advanced by its core undergraduate curriculum and certificate and minor programs that examine the culture, arts, history, politics, economics and current status of African Americans, Africans and the African Diaspora everywhere, especially in the Caribbean, Central America, and South America.

The curriculum combines a research-based understanding of the humanities, social and behavioral sciences and the arts with practical applications (internships, community/civic engagement and research projects) to prepare students for lifelong learning, advanced study in a variety of fields and successful careers and productive public service in an increasingly diverse society, especially in Arizona.

Program Requirement: The minor requires 18 semester hours. All African and African American Studies minors must take the following six core hours:

AFH 300 Precolonial Africa (3)
AFS 200 Introduction to African and African Diaspora Studies (3)

Choose one of the following regional courses (3)

AFH 319 Black Experience in Latin America (3)
AFR 210 Introduction to African American Studies C (3)
AFS 340 The Making of Modern Africa (3)
AFS 355 Democracy and Civil Society in Africa (3)
Related courses* (9)

* Nine semester hours are required, with one 300 or 400 level course from each of the following thematic areas: Culture and Literature; Politics and Governance; and Family, Gender, and Society. At least 50 percent of the course content (which may be AFH or AFS) must deal with African peoples inside and outside the African continent. At least nine of the 18 semester hours in this minor must be completed at ASU.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if (1) the
college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met and (2) the college (and, in certain colleges, the department) of the student’s major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student’s major.

Contact Information:
School of Social Transformation
http://www.asu.edu/clas/aframstu/
aframstu@asu.edu
WILSN 140
480/965-4399

Aging and Lifespan Development (Minor) HSALDMIN
Description: The minor in aging and lifespan development is available to any ASU undergraduate students who wish to have knowledge of aging-related issues that may help them in their career or personal lives. Students pursuing the minor will have the opportunity to learn about the specific and often unique needs of older adults and their families, and the impact on social institutions. Students majoring in areas such as business, criminal justice, recreation and tourism, finance, political science, social work, marketing, architecture, rehabilitation therapy and many other programs may find the aging and lifespan development minor a competitive advantage for career development.

Program Requirement: The minor is 18 credits (six courses), consisting of one required overview course (ALD 101), one “core” course (ALD 420, PGS 427 or ALD 440), and four elective courses (which may include any of the core courses not used as the core).

Please note that all courses except ALD 101 are offered online. The courses offered include:

- ALD 101 Introduction to Aging Issues Across the Lifespan
- ALD 303 Aging, Lifespan Development, and the Family
- ALD 404 Sexuality and Aging
- ALD 420 Health Aspects of Aging
- ALD 431 Caregiving for Older Adults
ALD 440 Social Policy Issues in Midlife and Beyond
ALD 460 Alzheimer’s and Related Dementias
ALD 474 Women, Aging, and the Life Course
ALD 484 Internship (requires permission)
ALD 494 Special Topics:
  • Elder Abuse
  • Diversity in Aging
  • Mental Health and Aging
  • Spirituality
  • Others, as approved by the department

SOC 353 Death and Dying
CMN 417 Communication and Aging
PGS 427 Psychology of Aging
RTM 450 Leisure and Aging

Contact Information:
School of Aging and Lifespan Development
http://sald.asu.edu/
FAB 115A
602/543-6642

American Indian Studies (Minor) LAAISMIN
Description: The minor in American Indian studies is designed for students interested in developing an understanding of American Indian issues and analyzing issues through critical inquiry.

Program Requirement: Fifteen credit hours are required, including AIS 180, 285 and 380 and six elective credit hours from either of the two areas of emphasis.

No pass/fail or credit/noncredit course work may be applied to the minor.

A minimum of nine hours must be in-resident credit at the Tempe campus.

Students must receive a minimum grade of “C” (2.00) for all courses in the minor and meet all course eligibility requirements.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student’s major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student’s major. Please contact the department for more information.

Contact Information:
American Indian Studies Program
http://americanindian.clas.asu.edu/
AIS@asu.edu
DHALL 356
480/727-7056

American Studies (Minor) ASAMSMIN
Description: The minor in American studies offers students the opportunity to pursue an interest in the interdisciplinary study of American culture. This interdisciplinary minor is particularly appropriate for students majoring in one of the humanities or social sciences disciplines.

Program Requirement: The minor consists of 18 credit hours, 12 of which must be upper-division hours:

The following courses are required (6):

- AMS 301 Introduction to American Studies, L (3)
- AMS 330 Introduction to American Lives, HU (3)

Choose from the following combinations (6):

- AMS 310 History of American Systems to 1865, L, C, H (3)
- AMS 311 History of American Systems since 1865, H (3)

--- or ---

- AMS 320 American Cultural History I, SB, H (3)
- AMS 321 American Cultural History II, SB, H (3)
Supporting Courses (6)

Two courses with substantial American content that must be approved by the American studies faculty advisor.

Enrollment Requirements: Students wishing to pursue the American studies minor should consult an academic advisor in the unit offering that minor to ensure that the appropriate set of courses is taken, to sign the minor check sheet, and to have the minor added to their program of study. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major recognizes the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student’s major. Please contact the department for more information.

Contact Information:
Division of Humanities, Arts, and Cultural Studies
harcs.dept@asu.edu
FAB N290
602/543-4444

Anthropology (Minor) LAASBMIN

Description: The minor in anthropology provides students with a great deal of flexibility in selecting courses. The program has been designed to allow students to focus on areas within the discipline that articulate well with their major. All students interested in the anthropology minor are encouraged to discuss the options available with a School of Human Evolution and Social Change undergraduate advisor.

Program Requirement: The anthropology minor requires a minimum of 18 credit hours.

Two of the introductory courses—from ASB 102, ASM 104 and ASB 222 or 223—are required. However, the particular introductory courses selected may limit the anthropology courses available in the upper division.

Twelve credit hours must be upper-division and represent at least two of the three subfields of anthropology.

The three subfields are:

1. Sociocultural anthropology (with linguistics).
2. Archaeology.
3. Physical anthropology.

The courses chosen to represent two of the three subfields must be drawn from the distribution requirements of those two subfields.

A minimum grade of “C” (2.00) is required for all courses taken for the minor in anthropology.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student’s major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student’s major. Please contact the department for more information.

Contact Information:
School of Human Evolution & Social Change
http://shesc.asu.edu/degree-ug
shesc@asu.edu
SHESC 233
480/965-6215

Applied Biological Sciences (Minor) TSABSMIN

Description: The Department of Applied Biological Sciences offers rigorous and practical programs in applications of the biological sciences. Consistent with a polytechnic vision, programs involve extensive student interaction with faculty through experience-based learning activities, including laboratories, field trips, internships and faculty-guided research and service-learning projects. Mastery of fundamental biological principles is emphasized through quality learning in the classroom and hands-on activities in laboratories and in the living laboratories of
the Sonoran desert and surrounding ecosystems (as well as the landscape of the greater Phoenix area).

Program Requirement: The applied biological sciences minor consists of 24 credit hours, including BIO 187 General Biology I and BIO 188 General Biology II, and at least 15 hours selected with the approval of an advisor; at least 12 hours must be in upper-division courses offered by the Department of Applied Biological Sciences.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information: http://www.poly.asu.edu/saas/appliedbiologicalsciences/abs_minor.html.

Contact Information:
Department of Applied Biological Sciences
http://www.poly.asu.edu/saas/appliedbiologicalsciences/
appliedbiologicalscience@asu.edu
WANER 340
480/727-1444

Applied Psychology (Minor) ECPSYMIN
Description: Applied psychology offers a traditional psychology core curriculum with emphasis on human factors, human-computer interaction, aviation or manufacturing.

Program Requirement: This minor in applied psychology consists of 22 credit hours with at least 12 being upper-division courses. The following are required courses that must be completed with a grade of “C” (2.00) or higher:
**PGS 101** Introduction to Psychology, SB (3)
**PSY 230** Introduction to Statistics, CS (3) (or equivalent statistics course)
**PSY 290** Research Methods, L/SG (4)
**PSY 437** Human Factors, L (3) or **PSY 438** Human-Computer Interaction* (3)
or **PSY 440** Industrial/Organizational Psychology* (3)

Additional hours of upper-division PSY and/or PGS courses (9). A maximum of three credit hours from the following courses can be used to satisfy this minor requirement:

- PGS 399 Supervised Research (3)
- PGS 499 Individualized Instruction (3) or PSY 499 Individualized Instruction (3)
- PSY 492 Honors Directed Study (3)

Note: A minimum of three classes (two of which are in the upper division) must be taken in residence at ASU.

*This PSY course is offered only at the Polytechnic campus. All other PSY courses listed above are offered at the Polytechnic and Tempe campuses.

**Enrollment Requirements:** Please contact the department for more information: http://www.poly.asu.edu/saas/minors/.

**Contact Information:**
Faculty of Applied Psychology
http://www.poly.asu.edu/saas/appliedpsych/
SAAS@asu.edu
SANCA 150
480/727-1177

**Architectural Studies (Minor) ARSTDMIN**

**Description:** The architectural studies minor is available to nonarchitecture majors interested in this field who wish to pursue another major. The courses are designed to provide an overview of architecture throughout history while focusing on architectural design, with the intention to explore the process of design thinking.

**Program Requirement:** A minimum of 18 credit hours (to include six credit hours of upper-division course work) are required for the minor.

**Required Courses (12 credit hours)**

- ALA 100 Introduction to Environmental Design, HU, G, H (3)
- ALA 102 Architecture, Landscape Architecture, and Society, G (3)
- APH 213 History of Architecture I, L/HU, G, H (3)
- APH 214 History of Architecture II, L/HU, G, H (3)
Six additional credit hours of electives in the architectural history and theory concentration must be selected from the following list for a total of 18 credit hours, of which 12 hours must be taken at the 300 or 400 level:

- ANP 494 Special Topics (1-3)
- APH 305 Contemporary Architecture (3)
- APH 394 Special Topics (3)
- APH 414 History of the City, H (3)
- APH 441 Ancient Architecture (3)
- APH 444 Baroque Architecture (3)
- APH 446 20th-Century Architecture I, HU (3)
- APH 447 20th-Century Architecture II, HU (3)
- APH 494 Culture of Place, C (3)
- APH 494 Special Topics (3)
- APH 499 Individualized Instruction* (3)
- APH 511 Energy Environmental Theory (3)
- APH 598 Special Topics (3)
- ARP 451 Architectural Field Studies (6)
- ATE 494 Special Topics (3)
- ATE 598 Special Topics (3)

* These courses require a petition to the School of Architecture and Landscape Architecture.

A minimum GPA of 2.50 in minor courses is required to earn the minor in architectural studies. In addition, students may not use a core course to count toward the minor. Students pursuing the B.S. in landscape architecture must petition the school to request a substitution for any core courses that are also included in the architectural studies minor.

**Enrollment Requirements:** Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student’s major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either
by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student’s major.

Contact Information:
School of Architecture and Landscape Architecture
http://design.asu.edu/sala/index.shtml
design.advising@asu.edu
DS (DESIGN SOUTH) 101
480/965-3536

Art History (Minor) FAARTHMIN
Description: The art history minor is designed for those students who are interested in a broad introduction to the study of the history of art. In giving a broad chronological exposure to the history of art from diverse cultures, the minor strengthens academic preparation and provides students with many options to select courses based on their individual interests.

Program Requirement: The School of Art offers a minor in art history consisting of 18 credit hours of course work, including 12 upper-division electives. A minimum grade of “C” (2.00) is required in all classes in the minor. For those pursuing a minor, a minimum overall GPA of “C” (2.00) is required. Courses may not be double counted in a major and the minor, and a minimum of 12 credit hours of resident credit at the Tempe campus are required.

ARS 100 or 300 may be used toward a minor. ARS 100 and 300 may not be used toward an art history minor if the student is an art major or has credit in ARS 101 and 102.

Required Courses
Select two of the following courses:

ARS 101 Art from Prehistory Through Middle Ages, HU, H (3)
ARS 102 Art from Renaissance to Present, HU, H (3)

or

ARS 201 Art of Asia, HU, G, H (3)
ARS 202 Art of Africa, Oceania and the Americas, HU, G, H (3)

Elective Courses
Students pursuing an art history minor select four three-credit-hour, upper-division courses. A seminar is strongly recommended for those considering graduate study.

Students need to be aware of lower-division prerequisites for all upper-division
courses. Interested students should contact the School of Art for specific requirements and admission procedures.

*Enrollment Requirements:* Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if, 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student’s major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor. Please contact the department for more information.

Note: certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student’s major.

*Contact Information:*
School of Art
http://art.asu.edu
ART 102
480/965-3468

*Asian Languages - Chinese (Minor) LACHIMIN*

*Description:* Students pursuing a minor in Asian languages-Chinese gain an understanding of the language, literature and cultures of China. There are opportunities to partake in study abroad programs, which can serve to enhance a student’s minor experience and education.

*Program Requirement:* The minor in Asian languages (Chinese) consists of 18 credit hours, of which 12 credit hours must be at the upper division. Required courses are:

- Up to six credit hours of 200-level Chinese.
- CHI 301 Third-Year Chinese I (5).
- CHI 302 Third-Year Chinese II (5).
- Two credit hours of CHI course work chosen in consultation with the advisor in the School of International Letters and Cultures.

Course substitutions are allowed for heritage and advanced speakers of the language.
Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student’s major. Please contact the department for more information.

Contact Information:
School of International Letters and Cultures
http://silc.asu.edu/undergraduate/majors-minors-certs
silcadvising@asu.edu
LL 440
480/965-6281

Asian Languages - Japanese (Minor) LAJPNMIN
Description: Students pursuing a minor in Asian languages-Japanese gain an understanding of the language, literature, and cultures of Japan. There are opportunities to partake in study abroad programs, which can serve to enhance a student’s minor experience and education.

Program Requirement: The minor in Asian languages (Japanese) consists of 18 credit hours, of which 12 credit hours must be at the upper division. Required courses are:

- Up to six credit hours in 200-level JPN courses.
- JPN 313 Third-Year Japanese I, G (3).
- JPN 314 Third-Year Japanese II, G (3).
- Six credit hours of additional upper-division JPN courses chosen in consultation with a School of International Letters and Cultures advisor.

Course substitutions are allowed for heritage and advanced speakers of the language.
Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student’s major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student’s major. Please contact the department for more information.

Contact Information:
School of International Letters and Cultures
http://silc.asu.edu/undergraduate/majors-minors-certs
silcadvising@asu.edu
LL 440
480/965-6281

Astronomy (Minor) LAASTMIN
Description: The astronomy minor is designed for students interested in developing a basic understanding of astronomy and astrophysics and analyzing issues through a scientific viewpoint. A minimum of 24 hours of AST and related courses are required, including 4 hours of upper-division electives to be chosen after consultation with an academic advisor.

Program Requirement: The minor in astronomy consists of a minimum of 24 credit hours. At least 12 credit hours must in upper-division courses. Required courses:

- AST 113 Astronomy Laboratory I, SQ (1)*
- AST 114 Astronomy Laboratory II, SQ (1)**
- AST 321 Introduction to Planetary and Stellar Astrophysics, SQ (3)*
- AST 322 Introduction to Galactic and Extragalactic Astrophysics, SQ (3)**

Choose between the course combinations below:
PHY 150 Physics I, SQ (4) or 
PHY 121 University Physics I: Mechanics, SQ (3)*** and PHY 122 University 
Physics Laboratory I SQ (1)*** 

and 

PHY 151 Physics II, SQ (4) or 
PHY 131 University Physics II: Electricity and Magnetism, SQ (3)**** and PHY 
132 University Physics Laboratory II SQ (1)**** 

or 

PHY 252 Physics III, SQ (4) 

Eight credit hours of electives are chosen with approval of an astronomy advisor 
from upper division courses in physics and astronomy. 

*Both AST 113 and 321 must be taken to secure SQ credit. 
**Both AST 114 and 322 must be taken to secure SQ credit. 
***Both PHY 121 and 122 must be taken to secure SQ credit. 
****Both PHY 131 and 132 must be taken to secure SQ credit. 

**Enrollment Requirements:** Students in most majors may pursue one or more minors 
and, upon successful completion of the prescribed course work, have that 
accomplishment officially recognized on the ASU transcript at graduation if: 

1. The college and/or department of the minor officially certifies, through 
established verification procedures, that all requirements for the minor have 
been met. 
2. The college (and, in certain colleges, the department) of the student’s major 
allows the official recognition of the minor. 

A student wishing to pursue a specific minor should consult an academic advisor in 
the unit offering that minor to ensure that an appropriate set of courses is taken. 
The student should also consult with an academic advisor in the college or 
department of his or her major to make sure the college or department of the major 
allows the recognition of the minor. 

Note: Certain major and minor combinations may be deemed inappropriate either 
by the college or department of the major or minor. Inappropriate combinations 
include (but are not limited to) ones in which an excessive number of courses in the 
minor are simultaneously being used to fulfill requirements of the student’s major. 
Please contact the department for more information: http://sese.asu.edu/students. 

**Contact Information:** 
Department of Physics 
http://sese.asu.edu 
seseinfo@asu.edu
**Biochemistry (Minor) LABCHMIN**

*Description:* The biochemistry minor is designed to give students majoring in other disciplines a solid grounding in the basics of biochemistry in order to complement their major degree. It is especially appropriate for majors in the various disciplines of life sciences, physics, engineering and geology, and for students planning careers in medical disciplines.

*Program Requirement:* A minor in biochemistry is awarded to students who complete 25 credit hours in the following required courses:

- BCH 461 General Biochemistry (3)
- BCH 462 General Biochemistry (3)
- CHM 113 General Chemistry I, SQ (4)
- CHM 116 General Chemistry II, SQ (4)
- CHM 233 General Organic Chemistry I (3)
- CHM 234 General Organic Chemistry II (3)
- CHM 237 General Organic Chemistry Laboratory I (1)
- CHM 238 General Organic Chemistry Laboratory II (1)
- CHM 341 Elementary Physical Chemistry (3) or CHM 345 Physical Chemistry I (3)

A minimum grade of “C” (2.00) is required for each of the courses. A minimum of 12 upper division credit hours are required to complete this minor.

*Enrollment Requirements:* Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and
2. The college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

*Note:* Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major.
Please contact the department for more information:
http://chemistry.asu.edu/undergrad/programIntro.asp.

Contact Information:
Department of Chemistry and Biochemistry
http://chemistry.asu.edu
chmugadv@asu.edu
PS D102
480/965-3461

Biological Sciences (Minor) LABIOMIN
Description: Biological sciences encompasses the study of all living things and includes the study of basic organization and function, how organisms evolve, their roles in the natural environment, how hereditary information is transferred and the development of biotechnology. The minor in biological sciences gives students a flexible curriculum that may be tailored to their interests.

Program Requirement: The minor consists of 24 credit hours, including BIO 187 General Biology I and BIO 188 General Biology II. The following courses taken together may be substituted for BIO 187 or 188:

- PLB 200 Biology of Plants and PLB 201 Biology of Plants Laboratory or
- MIC 206 Microbiology Laboratory and MIC 220 Biology of Microorganisms

Alternatively, MBB 245 Cellular and Molecular Biology may be substituted for BIO 188.

The remaining 16 hours are selected by the student with the approval of an advisor. At least 12 of these 16 hours must be in upper-division courses in the life sciences. Courses that are not available for credit in the life science majors cannot be used for the minor (e.g., BIO 100 The Living World, BIO 201 Human Anatomy and Physiology I).

Any one of these combinations of courses may be taken to fulfill the remaining credit hour requirements:

- BIO 187 and BIO 188
- BIO 187 and PLB 200 and 201
- BIO 188 and PLB 200 and 201
- BIO 187 and MIC 206 and 220
- BIO 188 and MIC 206 and 220
- BIO 187 and MBB 245

Enrollment Requirements: This minor is not available to students majoring in the life sciences. Students in most majors may pursue one or more minors and, upon
successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information: http://sols.asu.edu/ugrad/degree_prog/index.php.

Contact Information:
School of Life Science
http://sols.asu.edu/
sols.advising@asu.edu
LSC 206
480/727-6277

Business (Minor) BABUSMIN
Description: A minor in business is available to students across the university interested in business courses but who wish to pursue majors in other colleges. The business minor includes a strong business foundation covering topics that are important to managers such as accounting, computer information systems, economics, finance, management and marketing.

Program Requirement: Students must complete 36 credit hours of the specified business courses with a grade of “C” (2.00) or higher in each course. Six of the 12 upper-division credit hours must be resident credit. The upper-division courses specified for the minor will be restricted to students with 56 earned credit hours, a minimum 2.50 ASU cumulative GPA and course prerequisite requirements met. Business students are not eligible to apply for the minor.

Lower-Division Courses (24 hours)
ACC 231 Uses of Accounting Information I or ACC 303 Honors Financial Accounting
ACC 241 Uses of Accounting Information II
CIS 105 Computer Applications and Information Technology or other approved computer science/information course
ECN 211 Macroeconomic Principles
ECN 212 Microeconomic Principles
ECN 221 Business Statistics (or other approved statistics course)
MAT 210 Brief Calculus or MAT 270 Calculus with Analytical Geometry I
MAT 211 Mathematics for Business Analysis or MAT 271 Calculus with Analytical Geometry II

Upper-Division Courses (12 credit hours, six of which must be taken from the W. P. Carey School of Business)

FIN 300 Fundamentals of Finance or FIN 302 Managerial Finance or FIN 303 Honors Finance
MGT 300 Organization and Management Leadership or MGT 303 Honor Organizational Strategies, Leadership and Behavior
MKT 300 Marketing and Business Performance or MKT 302 Applied Marketing Management and Leadership or MKT 303 Honors Marketing Theory and Practice
SCM 300 Global Supply Operations or SCM 303 Honors Global Supply Chain Operations

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

Contact Information:
Dean, W. P. Carey School of Business
Chemistry (Minor) LACHMMIN

Description: The chemistry minor is designed to give students majoring in other disciplines a solid grounding in the basics of chemistry in order to complement their major degree. It is especially appropriate for majors in the various disciplines of physics, materials science, geology, engineering and life sciences.

Program Requirement: A minor in chemistry is awarded to students who complete a minimum 24 credit hours. The following courses are required:

- CHM 113 General Chemistry I, SQ (4)
- CHM 116 General Chemistry II, SQ (4)
- CHM 325 Analytical Chemistry (3)
- CHM 326 Analytical Chemistry Laboratory (1)

Choose between the course combinations (8 credit hours):

- BCH 361 Principles of Biochemistry (3)
- BCH 367 Elementary Biochemistry Laboratory (1)
- CHM 231 Elementary Organic Chemistry, SQ (3)
- CHM 235 Elementary Organic Chemistry Laboratory, SQ (1)

--- or ---

- CHM 233 General Organic Chemistry I (3)
- CHM 234 General Organic Chemistry II (3)
- CHM 237 General Organic Chemistry Laboratory I (1)
- CHM 238 General Organic Chemistry Laboratory II (1)

Choose between the course combinations below (4 or 8 credit hours):

- CHM 341 Elementary Physical Chemistry (3)
- CHM 343 Physical Chemistry Laboratory (1)

--- or ---

- CHM 345 Physical Chemistry I (3)
- CHM 346 Physical Chemistry II (3)
- CHM 348 Physical Chemistry Laboratory I (1)
- CHM 349 Physical Chemistry Laboratory II (1)

A minimum grade of “C” (2.00) is required for each of the courses in the minor. A minimum of 12 upper division credit hours are required to complete this minor.
Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student’s major. Please contact the department for more information: http://chemistry.asu.edu/undergrad/programIntro.asp.

Contact Information:
Department of Chemistry and Biochemistry
http://chemistry.asu.edu
chmugadv@asu.edu
PS D102
480/965-3461

Chemistry (Minor) ASCHMMIN
Program information not available at time of publication.

Contact Information:
New College of Interdisciplinary Arts and Sciences
http://www.newcollege.asu.edu/

Communication (Minor) LACOMMIN
Description: The minor in communication focuses on teaching students how communication processes create, maintain and transform identities, relationships, workplaces and communities.

Our mission statement is, “through the study and critique of human communication, we generate knowledge, creativity and understanding to facilitate healthy
relationships and workplaces, civil and secure communities and constructive intercultural interaction."

*Program Requirement:* The minor in communication consists of 18 credit hours of courses:

- **COM 100 Introduction to Human Communication (3)**
- **COM 225 Public Speaking (3) or COM 259 Communication in Business and the Professions (3)**
- Two of the following courses (6):
  - **COM 310 Relational Communication (3)**
  - **COM 312 Communication, Conflict, and Negotiation (3)**
  - **COM 316 Gender and Communication (3)**
  - **COM 323 Communication Approaches to Popular Culture (3)**

- Two upper-division-related courses in Global Studies, Asian Pacific American Studies, African and African American Studies, Chicana/Chicano Studies or American Indian Studies (6)

Nine of the 18 credit hours must be Tempe campus resident credits. No pass/fail, Y credit or credit/no-credit courses are allowed. Communication courses required for one’s major may not also count for the minor. All prerequisite and GPA requirements must be met. The “C” (2.00) minimum grade requirement must be met for each class.

*Enrollment Requirements:* Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student’s major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student’s major. Please contact the department for more information: http://www.asu.edu/clas/communication/undergraduate/programinfo/minor/.
Communication Studies (Minor) HSCMNNMIN

*Description:* The communication studies minor offers students the opportunity to understand the role and function of communication in various cultural, public, organizational and relational contexts. The program offers a variety of courses and is designed for students majoring in another field. A maximum of six credit hours are allowed from lower-division course work.

*Program Requirement:* The minor consists of 18 credit hours of communication studies courses. Students wishing to pursue a minor must meet with a communication studies faculty advisor to construct a minor that reflects a particular area of specialty and interest. At least 12 credit hours must come from upper-division courses. To graduate with the minor, students must earn a minimum cumulative GPA of 2.00 in communication studies courses. All courses must be passed with a minimum grade of “C” (2.00).

*Enrollment Requirements:* Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student’s major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student’s major. Please contact the department for more information.

*Contact Information:*
Division of Social and Behavioral Sciences - W
Computational Mathematical Sciences (Minor) LACMSMIN

Description: The computational mathematical sciences curriculum strives to provide students with a background in computer science and the natural or physical sciences in addition to a core of course work in mathematics.

Program Requirement: The minor in computational mathematical sciences consists of a minimum of 18 credit hours. Required courses are the following, for a total of 18-20 credit hours:

- MAT 271 Calculus with Analytic Geometry II MA (4) or MAT 266 Calculus for Engineers II (3)
- MAT 272 Calculus with Analytic Geometry III MA (4) or MAT 267 Calculus for Engineers III (3)
- MAT 342 Linear Algebra (3) or MAT 343 Applied Linear Algebra (3)
- MAT 420 Scientific Computing (3)
- MAT 421 Applied Computational Methods CS (3)
- MAT 423 Numerical Analysis I CS (3) or MAT 425 Numerical Analysis II CS (3)

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student’s major. Please contact the department for more information and see http://math.asu.edu/undergraduate/degrees.html.
Contact Information:
School of Mathematical and Statistical Sciences
http://math.asu.edu/
math@asu.edu
PSA 211
480/965-7195

Dance (Minor) FADANMIN
Description: The School of Dance provides a dynamic and culturally diverse learning environment where students develop their creativity as artists, scholars and educators. The interdisciplinary curriculum promotes creative collaboration and a holistic approach to acquiring skills for successful career transitions. Movement practices, performance and creativity define the core of the program, and the rich educational experience is further enhanced by studies in:

- Dance cultures.
- Dance history.
- Digital media.
- Movement science.
- Music.
- Philosophy and criticism.
- Somatics.
- Stage and screen production.

Program Requirement: The school offers a minor in dance consisting of 18 credit hours of course work, including twelve upper-division hours. A minimum grade of “C” (2.00) or higher is required in all courses that fulfill the dance minor. Students must maintain an overall cumulative GPA of “B” (3.00) or higher for dance minor courses.

Dance minor requirements

Choose one from the following courses, for a total of three credit hours:

- DCE 100 Introduction to Dance, G
- DCE 201 Dance, Culture, and Global Context, HU, G

Choose one from the following courses, for a total of three credit hours:

- DAH/DCE 301 Philosophy and Criticism of Dance, L, HU
- DAH/DCE 302 Cross-Cultural Dance Studies, L, HU, G
- DAH/DCE 401 Dance History, HU

Choose two from the following courses, for a total of four credit hours:
DAN/DCE 130 Dance
DCE 194 Special Topics*
DCE 294 Special Topics*
DCE 394 Special Topics*

Choose eight credit hours of upper-division dance electives in topics such as:

- Argentine Tango
- Ballet
- Capoeira
- Country Western
- Dances of Africa
- Dances of India
- Hip Hop
- Jazz
- Latin Salsa
- Latin/Swing/Ballroom
- Modern
- Oriental/Belly Dancing
- Pilates/Yoga
- Tai Chi

For more information, contact the Herberger Student Academic Services office.

*Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if, 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

Contact Information:
School of Dance
Design Studies (Minor) ARDSNMIN

Description: Students interested in design can earn a minor in design studies. The courses may also appeal to students who wish to pursue the study of design within the B.I.S.

Program Requirement: Courses selected must satisfy the minimum requirement of 18 credit hours for the minor. Twelve of the credit hours must be in 300- or 400-level course work. To enhance understanding of the subject matter, some of the designated courses are sequential in nature and require certain prerequisites. Consequently, students should carefully note the semester in which these particular courses are offered. All designated courses for the minor in design studies are lecture courses. To pursue the minor in design studies, students must have a minimum cumulative GPA of 2.50.

Designated Courses for the Minor

Architecture and Landscape Architecture:

- ALA 100 Introduction to Environmental Design, HU, G, H (3)
- ALA 102 Architecture, Landscape Architecture and Society, G (3)
- APH 313 History of Architecture I, HU, G, H (3)
- APH 314 History of Architecture II, HU, G, H (3)
- APH 411 First Concepts (3)
- LPH 311 Contemporary Landscape Architecture, HU (3)
- APH 598 South American Architecture (3)

Design:

- DSC 101 Design Awareness, HU, G (3)

Graphic Design:

- GRA 111 Graphic Design History I, HU (3)
- GRA 112 Graphic Design History II (3)
- GRA 225 Communication/Interaction Design Theory (3)
- GRA 345 Design Rhetoric, L (3)
- GRA 440 Finding Purpose (3)

Industrial Design:

- IND 242 Materials and Design (3)
- IND 243 Design for Ecology and Social Equity (3)
- IND 316 20th-Century Design I, HU, H (3)
IND 317 20th-Century Design II, HU, H (3)
IND 344 Human Factors in Design (3)
IND 354 Principles of Product Design (3)
IND 470 Professional Practice for Industrial Design, L (3)

Interior Design:

INT 111 Interior Design Issues and Theories, HU (3)
INT 121 Introduction to Computer Modeling for Interior Design, CS (3)
INT 123 Introduction to Computer-Aided Design of Built Environments (3)
INT 131 Design and Human Behavior, SB (3)
INT 310 History of Interior Design I, HU, H (3)
INT 311 History of Interior Design II, HU, H (3)
INT 412 History of Decorative Arts in Interiors, HU (3)
INT 413 History of Textiles in Interior Design (3)
INT 494 Latin American Design (3)

Urban Planning:

PUP 100 Introduction to Environmental Design, HU, G, H (3)
PUP 190 Sustainable Cities, HU/SB, G (3)
PUP 200 The Planned Environment, HU, H (3)
PUP 301 Introduction to Urban Planning, L (3)
PUP 363 History of Planning (3)
PUP 412 History of the City (3)
PUP 425 Urban Housing Analysis (3)
PUP 430 Transportation Planning and the Environment (3)
PUP 432 Planning and Development Control Law (3)
PUP 442 Environmental Planning (3)
PUP 444 Preservation Planning (3)
PUP 445 Women and Environments, C (3)
PUP 475 Environmental Impact Assessment (3)
PUP 485 International Field Studies in Planning, G (3)

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student’s major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major
allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student’s major.

Contact Information:
School of Design Innovation
http://design.asu.edu/students/minors.shtml
DS (DESIGN SOUTH) 101
480/965-7007

Early Childhood Education (Minor) EDECEMIN
Program information not available at time of publication.
Not accepting new students.

Contact Information:
College of Teacher Education and Leadership
http://ctel.asu.edu/

Economics (Minor) LAECNMIN
Description: The program of study is designed for students planning to seek employment upon completion of their undergraduate studies or for students intending to go on to graduate school or law school.

Program Requirement: This minor (and B.I.S. area of concentration) requires 18 credit hours of course work which includes ECN 211 and 212, and 12 hours of economics courses at the 300 level or above for which all prerequisites have been met. Only courses in which a student receives a grade of “C” (2.00) or higher may be used to meet these requirements.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student’s major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or
Economics for Students Planning a Career in Law (Minor) LAECNLMIN

Description: The program of study is designed for students planning to seek employment upon completion of their undergraduate studies or for students intending to go on to graduate school or law school.

Program Requirement: This minor requires 18 credit hours of course work that includes ECN 211, 212, 312 (formerly 314), 450, 453 and one additional economics course at the 300 level or above for which all prerequisites have been met. Only courses in which a student receives a grade of “C” (2.00) or higher may be used to meet these requirements.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the
minor are simultaneously being used to fulfill requirements of the student’s major. Please contact the department for more information: http://wpcarey.asu.edu/ecn/advising.cfm.

Contact Information:
Economics Program in CLAS
http://clas.asu.edu/minors/description/?vid=585
BAC 653
480/965-2128

English (Minor) ASENDMIN
Description: A minor in English represents an ideal choice for students who enjoy English, but who are committed to another major. Our requirements ground the student in the basics of literary and cultural study, and then allow for a range of course offerings in creative writing, linguistics, rhetoric, literature and technical and professional communication. The minor will help the student to become a better writer, reader and thinker, making the English minor the perfect complement to any major. Once completed, "Minor: English" appears on the transcript.

Program Requirement: The minor in English requires a minimum of 24 credit hours.

Required Core Course:
ENG200 Critical Reading and Writing about Literature L/HU (3)

Campus Specific Requirements
Distribution Cluster Requirement:

Select one course from each distribution cluster. At least two courses must be at the 400-level. Students may once only, use one course to satisfy two distribution requirements.

1. Literature and culture before 1860
2. Literature and culture after 1860
3. Theory and interdisciplinary studies
4. Ethnicity, gender and postcoloniality
5. Rhetoric, writing and linguistics

Total 24

Additional hours to complete 24 credit hours are electives chosen from program offerings. Eighteen credit hours must be upper division.

Enrollment Requirements: Students wishing to pursue the English minor should consult an academic advisor in the unit offering that minor to ensure that the appropriate set of courses is taken, to sign the minor check sheet, and to have the
minor added to their program of study. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major recognizes the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student’s major. Please contact the department for more information.

Contact Information:
Division of Humanities, Arts, and Cultural Studies
harcs.dept@asu.edu
FAB N290
602/543-4444

English (Minor) LAARTHMIN
Program information not available at time of publication.

Not accepting new students.

Contact Information:
http://clas.asu.edu/

English - Linguistics (Minor) LAENGMINN
Description: In the minor in English with a concentration in linguistics, students focus on the history and structure of language.

Program Requirement: The minor in English with a concentration in linguistics consists of 24 credit hours. Required courses are as follows:

- ENG 200 Critical Reading and Writing About Literature, L/HU (3)
- ENG 213 Introduction to the Study of Language (3)
- ENG 221 Survey of English Literature, HU (3) or
- ENG 222 Survey of English Literature, HU, H (3) or
- ENG 241 Literatures of the United States to 1860, HU (3) or
- ENG 242 Literatures of the United States, 1860 to Present, HU (3)
- ENG 312 English in Its Social Setting, L/HU/SB (3)
- ENG 314 Modern Grammar (3)
- ENG 413 History of the English Language, HU (3)

The six additional hours are electives chosen from the department’s offerings, with at least one course (three hours) required at the 300 or 400 level. A grade of “C” (2.00) or higher is required in all courses for the minor.
Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met; and the college (and, in certain colleges, the department) of the student’s major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

Contact Information:
Department of English
http://english.clas.asu.edu
englishadvising@asu.edu
LL 542
480/965-3168

English - Literature (Minor) LAENGMINT
Description: Students pursuing a minor in English with a concentration in literature study British, American and global literatures in English from the earliest writings to the present.

Program Requirement: The minor in English with a concentration in literature consists of 24 credit hours, including ENG 200 Critical Reading and Writing About Literature, L/HU (3) and one course from three of the following distribution areas:

- Literature and culture before 1800
- Literature and culture after 1800.
- Literary theory and interdisciplinary studies.
- Transnational, postcolonial and global literatures.

At least one of these three distribution area courses must be 400-level. To complete the 24 credit hours, students choose electives from among the department’s offerings. At least four courses (12 of the 24 hours) must be taken at the 300 or 400 level. A grade of “C” (2.00) or higher is required in all courses taken for the minor.
Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met; and the college (and, in certain colleges, the department) of the student’s major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student’s major. Please contact the department for more information.

Contact Information:
Department of English
http://english.clas.asu.edu
englishadvising@asu.edu
LL 542
480/965-3168

Environmental Resources (Minor) ECERSMIN
Program information not available at time of publication.

Not accepting new students.

Contact Information:
College of Technology and Innovation
http://technology.asu.edu/

Ethnic Studies (Minor) ASETHMN
Description: Students take courses that introduce a general conceptual framework regarding race and ethnicity and how they intersect in the construction of social formations. Students seeking the minor in ethnic studies complete an internship that is designed to give a hands-on experience working in community-based settings. With an emphasis on service learning that combines the acquisition of analytical skills from classroom instruction and work experience gained through internships, students are placed at a significant advantage to pursue their goals.
Program Requirement: The minor consists of 21 credit hours, 15 of which must be at the upper-division level. Students are encouraged to take courses that develop breadth rather than limiting their selection to courses in one particular discipline. Up to three credit hours of individualized instruction may be applied toward the minor. All courses must be passed with a minimum grade of “C” (2.00).

Required Courses
- ETH 300 Principles of Ethnic Studies, C (3)
- ETH 484 Ethnic Studies Internship (3)

Electives* (15)

*These courses must be chosen from the approved ethnic studies course list in consultation with the ethnic studies advisor.

Enrollment Requirements: Students wishing to pursue the ethnic studies minor should consult an academic advisor in the unit offering that minor to ensure that the appropriate set of courses is taken, to sign the minor check sheet and to have the minor added to their program of study. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major recognizes the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

Contact Information:
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/programs/erfns/minor_cert/minor.shtml/
harcs.dept@asu.edu
FAB N270
602/543-4444

Exercise Science and Physical Education (Minor) LAEPEMIN
Program information not available at time of publication.

Not accepting new students.

Contact Information:
College of Liberal Arts and Sciences
http://clas.asu.edu/
**Film and Video Studies (Film) (Minor) ASFILMIN**
Program information not available at time of publication.

Not accepting new students.

*Contact Information:*
New College of Interdisciplinary Arts and Science
http://www.newcollege.asu.edu/

**Film and Video Studies (Media) (Minor) ASVIDMIN**
Program information not available at time of publication.

Not accepting new students.

*Contact Information:*
New College of Interdisciplinary Arts and Science
http://www.newcollege.asu.edu/

**Family and Human Development (Minor) LAFASMIN**

*Description:* A minor in family and human development, from the School of Social and Family Dynamics, exposes students to the basic course work and issues within the discipline. This program provides an exceptional balance to studies in psychology, communication, education, business or nursing.

*Program Requirement:* The minor in family and human development consists of 18 credit hours in which students specialize in family studies/child development. At least 12 of the 18 credit hours must be in upper-division courses. Students take the following courses:

- CDE 232 Human Development, SB (3)
- FAS 331 Marriage and Family Relationships, SB (3)
- FAS 370 Family, Ethnic, and Cultural Diversity, SB, C (3)

Three courses (or nine credit hours) must be selected from the following and at least one course must be a CDE course:

- CDE 337 Early Childhood Intervention (3)
- CDE 430 Infant/Toddler Development in the Family, SB (3)
- CDE 444 Risk and Variation in Child Development (3)
- CDE 498 Pro-Seminar (3) or FAS 498 Pro-Seminar (3)
- FAS 431 Parent-Adolescent Relationships SB (3)
- FAS 440 Fundamentals of Marriage and Family Therapy (3)

*Enrollment Requirements:* Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if: the
college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met; and the college (and, in certain colleges, the department) of the student’s major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student’s major. Please contact the department for more information: http://www.asu.edu/clas/ssfd/undergrad/minor.html.

Contact Information:
School of Social/Family Dynamics T
http://ssfd.clas.asu.edu/
ssfd@asu.edu
SS 144
480/965-6978

Film and Media Production (Minor) FAFMPMIN
Description: Students pursuing the film minor will study the basic production processes of film while exploring its history and contemporary social issues.

Program Requirement: The school offers a minor in film and media production consisting of 15 credit hours of course work. A grade of “C” (2.00) or higher is required for all courses in the minor. All prerequisites for the minor courses must be met. Transfer students may transfer up to six credit hours toward the minor.

The following courses are required, for a total of 15 credit hours:

  FMP 201 Film The Creative Process I, HU (3)*
  FMP 250 Sex and Violence in Film and TV: Ethics Survey (3)
  FMP 300 Focus on Film: Film Production for Nonmajors (3)
  THE 403 Independent Film (3)
  Upper division elective in FMP, THP or THE related to film and media production (3)

*Students considering a minor in theatre concurrently must complete an additional course in theatre or film to make up for the overlapping FMP 201 course.
Courses ordinarily limited to majors only are available to minors on a second-priority basis; that is, minors may not register for these courses early, but are allowed to register after all major students’ needs have been met.

*Enrollment Requirements:* Contact the Herberger Institute for Design and the Arts advising office for information at http://theatrefilm.asu.edu/students/current/undergrad-minors.php.

*Contact Information:*
School of Theatre and Film
http://theatrefilm.asu.edu
theatrefilm@asu.edu
GHALL 232
480/965-5337

**Film and Media Studies (Minor) LAFMSMIN**

*Description:* The film and media studies minor is useful for students who want to explore the critical and creative study of film and media. Students can select to study a range of courses that emphasize media and society, media industries, styles and genres and screenwriting.

*Program Requirement:* The film and media studies minor consists of 18 credit hours. Of the 18 credit hours, 12 credit hours are upper division courses. Required courses include:

- FMS 100 Introduction to Film, HU
- FMS 200 Film History, HU
- FMS 300 Media and Cultural Studies, HU, L
- Three upper-division courses from the areas of emphasis course list

For more information contact the film and media studies advisor.

*Transfer Admission Requirements:* Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if: the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met; and the college (and, in certain colleges, the department) of the student’s major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student’s major. Please contact the department for more information.

Contact Information:
Dean, College of Liberal Arts and Sciences
http://film.asu.edu/minor
filminfo@asu.edu
LL 641
480/965-6747

Food and Nutrition Management (Minor) ECFNTRMIN
Description: This minor is available to any ASU student interested in learning about food and nutrition. The student will develop a greater understanding of nutrition, the food industry and food service operations.

Program Requirement: The minor requires that students take the following courses, for a total of 18 credit hours:

- NTR 100 Introductory Nutrition (3) or NTR 241 Human Nutrition (3)
- NTR 142 Applied Food Principles (3)
- NTR 300 Computer Applications in Nutrition CS (3)
- NTR 343 Food Service Purchasing (3)
- NTR 344 Nutrition Services Management L (3)
- NTR 445 Management of Food Service Systems (3)

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student’s major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations
include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student’s major. Please contact the department for more information: http://www.poly.asu.edu/saas/nutrition/undergraduate/minors.html.

Contact Information:
College of Nursing & Health Innovation
http://www.poly.asu.edu/saas/nutrition
nutrition@asu.edu
HSC 1386
480/727-1728

French (Minor) LAFREMIN
Description: Students pursuing a minor in French gain an understanding of the language, literature, and cultures of French speaking peoples and regions. There are opportunities to partake in study abroad programs, which can serve to enhance a student’s minor experience and education.

Program Requirement: The French minor requires 18 upper-division credit hours. In addition, specific required courses for each area follow and are in a brochure in the School of International Letters and Cultures. Course substitutions are allowed for heritage and advanced speakers of the language. Required courses include:

- FRE 311 French Conversation, G (3)
- FRE 312 French Composition, G (3)
- FRE 321 French Literature, L/HU, H (3) or FRE 322 French Literature, L/HU (3)

Nine hours of upper-division French courses with at least three hours from the 400 level are also required.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student’s major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

**Contact Information:**
School of International Letters and Cultures
http://silc.asu.edu/undergraduate/majors-minors-certs
silcadvising@asu.edu
LL 440
480/965-6281

**Geography (Minor) LAGCUMIN**
**Description:** The minor in geography, with a minimum of 18 credit hours, enables students to be as broad or specific in their geographic education as they wish. Beyond the two required courses, the remaining courses should be chosen in consultation with the geography advisor.

**Program Requirement:** A minor in geography is awarded to students who complete a minimum of 18 hours in geography. A grade of “C” (2.00) or higher is required for all courses taken for the minor. The following lower-division courses are required, for a total of six credit hours:

- GCU 102 Introduction to Human Geography, SB (3)
- GPH 111 Introduction to Physical Geography, SQ (4) or GPH 411 Physical Geography (3)

**Enrollment Requirements:** Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the
Geological Sciences (Minor) LAGLGMIN

Description: The geological sciences minor is designed for students interested in developing a basic understanding of earth science and analyzing issues through a scientific viewpoint. A minimum of 21 hours of geological science courses is required including two upper-division electives chosen after consultation with an academic advisor.

Program Requirement: A minor in geological sciences is awarded to students who complete a minimum of 21 credit hours of geological science courses. There are 15 credit hours of required courses:

- GLG 101 Introduction to Geology I (Physical), SQ* G (3)
- GLG 102 Introduction to Geology II (Historical), SG**, H (3)
- GLG 103 Introduction to Geology I-Laboratory, SQ* (1)
- GLG 104 Introduction to Geology II-Laboratory, SG** (1)
- GLG 310 Structural Geology (3)
- GLG 321 Mineralogy (3)
- GLG 400 Geology Colloquium (1)

*Both GLG 101 and 103 must be taken to secure SQ credit.

**Both GLG 102 and 104 must be taken to secure SG credit. The remaining six semester hours may be chosen among other upper-division geological sciences courses, except GLG 300 and 400, after consultation with a departmental advisor.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken.
The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student’s major. Please contact the department for more information.

Contact Information:
Department of Geological Sciences
http://sse.asu.edu
sesinfo@asu.edu
PSF 686
480/965-5081

German (Minor) LAGERMIN
Description: Students pursuing a minor in German gain an understanding of the language, literature, and cultures of German speaking peoples and regions. There are opportunities to partake in study abroad programs, which can serve to enhance a student’s minor experience and education.

Program Requirement: Required courses include:

- Two GER 200-level courses (6)
- GER 311 German Conversation, G (3) or GER 312 German Conversation, G (3)
- GER 313 German Composition, G (3)
- One 400-level GER course (3)
- One upper-division GER course (3)

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student’s major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.
Global Studies (Minor) LASGSMIN

Description: The School of Government, Politics, and Global Studies offers a minor in global studies for students who wish to examine global issues from a transdisciplinary perspective focused on an overarching theme of quality of life.

Program Requirement: The global studies minor consists of 18 credit hours, with at least 12 credit hours in upper division courses. Required courses are:

- SGS 101 Thinking Globally: Individual and Authority (3) or SGS 301 Principles of Global Studies (3)
- SGS 103 (3) or SGS 303 Global Trends (3)

The remaining 12 credit hours may be chosen among the other upper division SGS courses. The student must earn at least a “C” (2.00) in a course for credit hours to be counted toward the minor. Twelve of the 18 credit hours must be taken at the ASU Tempe campus. For minor verification, students must consult the global studies advisor.

Enrollment Requirements: Students who wish to pursue minors should get the permission of the department of their major as well as meet with the global studies advisor in the School of Government, Politics and Global Studies.

Contact Information:
School of Government, Politics and Global Studies
http://globalstudies.clas.asu.edu/
globalstudies@asu.edu
COOR 6th floor
480/727-8286

History (Minor) LAHISMIN

Description: Students who pursue the minor in history study the growth and development of human society from all aspects—political, social, economic and cultural. The school covers the history of Europe, the United States, Asia, Latin
America and Africa, and courses are designed to give students both breadth and depth in understanding today's complex world.

Program Requirement: The history minor consists of 18 credit hours of course work, at least 12 hours of which are in upper-division course work. Students earning a minor in history must complete one 12-hour HST geographic concentration (U.S., Europe, Asia or Latin America). The School of Historical and Critical Inquiry requires a grade of at least “C” (2.00) in all courses in the minor. A minimum of six upper-division hours in the minor must be taken in residence at the Tempe campus.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student’s major. Please contact the department for more information.

Contact Information:
School of Historical and Critical Inquiry
http://history.clas.asu.edu
historyadvisor@asu.edu
COOR 4587
480/965-8364

History (Minor) ASHISMIN
Description: The minor in history within the New College of Interdisciplinary Arts and Sciences trains students in the use of basic tools and methods of the historical discipline. Students are exposed to a broad span of modern history, a wide range of historiographical perspectives and approaches, and such fundamental categories of historical analysis as race, class, gender and ethnicity.
Program Requirement: The minor in history consists of 18 credit hours of history course work with a grade of “C” (2.00) or higher, of which six credit hours may be lower-division.

Choose one of the following combinations (6 credit hours):

A two-semester survey in U.S. history, European history, or world history

--- or ---

HIS 355 World History to 1500, G, H and HIS 356 World History since 1500, G, H

--- or one course each from the following two lists ---

AMS 310 History of American Systems to 1865, L, C, H
AMS 320 American Cultural History I, SB, H
HIS 305 History of American Systems to 1865, L, C, H

AMS 311 History of American Systems since 1865 II, H
AMS 321 American Cultural History II, SB, H
AMS 330 Introduction to American Lives, HU
HIS 304 American Cultural History II, SB, H
HIS 306 History of American Systems since 1865, H

Upper-Division Requirements (3 credit hours)

HIS 300 Historical Methods, L, H

History Electives (9 credit hours)

Enrollment Requirements: Students wishing to pursue the History minor should consult an academic advisor in the unit offering that minor to ensure that the appropriate set of courses is taken, to sign the minor check sheet, and to have the minor added to their program of study. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major recognizes the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student’s major. Please contact the department for more information.

Contact Information:
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/programs/history/minor_certs/
harcs.dept@asu.edu
FAB N290
History & Culture (Minor) ECHTYMIN

Description: The history and culture minor focuses on public policy, archival work, Southwest history and related fields. Six degree tracks are available:

- Archival preservation and digital media.
- Environmental history and culture.
- History and culture of the American southwest.
- History and philosophy of science and technology.
- History and public policy.
- History for secondary teachers.

Program Requirement: The minor in history and culture consists of 18-24 credit hours as follows:

1. Nine credit hours from the core (HST 300, HST 343, and HST 344).
2. Six credit hours of focus-area courses in their chosen track.
3. Three to nine credit hours of electives.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major.

Contact Information:
School of Letters and Sciences
http://www.poly.asu.edu/saas/humanitiesarts/
hua@asu.edu
SANCA 233
Human Nutrition (Minor) ECNTRMIN

Description: This minor program is available to any ASU student interested in learning about human nutrition. The student will develop a greater understanding of how nutrition contributes to healthy lifestyles and disease prevention.

Program Requirement: The minor requires that students take the following courses, for a total 18 credit hours:

- NTR 241 Human Nutrition (3)
- NTR 340 Applications in Human Nutrition (3)
- NTR 341 Introduction to Planning Therapeutic Diets (3)
- NTR 440 Advanced Human Nutrition I (3)
- NTR 441 Advanced Human Nutrition II (3) and NTR 444 Medical Nutrition Therapy (3)

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information and see http://www.poly.asu.edu/saas/nutrition/undergraduate/minors.html.

Contact Information:
College of Nursing & Health Innovation
http://www.poly.asu.edu/saas/nutrition
nutrition@asu.edu
HSC 1386
480/727-1728
Interdisciplinary Arts and Performance (Minor) ASIAPMIN
Program information not available at time of publication.

Not accepting new students.

Contact Information:
New College of Interdisciplinary Arts and Sciences
http://www.newcollege.asu.edu/

Interdisciplinary Organizational Studies (Minor) ASIOSMIN
Description: The minor in interdisciplinary organizational studies is designed to increase students’ understanding of the behavior and the dynamics of individual, group and organizational processes in the workplace. It incorporates perspectives from the behavioral and social sciences, communication studies and management. The minor is learner-centered and allows students to select course work that matches their career and educational goals.

Program Requirement: The minor consists of 21 credit hours, of which 18 must be upper-division course work.

Required Courses
Research methods course (3)*
ASB 440 Women in the Global Factory, SB, G (3) or POL 435 Women, Power, Politics, SB, C (3)
PGS 430 Industrial Psychology (3) or SBS 461 Program Evaluation and Policy Research (3)
PGS 453 Organizational Behavior, SB (3)

Cluster 1: Courses Focused on Organizations
Choose two from the following courses for a total of six credits:
CMN 450 Theory and Research in Organizational Communication, SB (3)**
CMN 451 Employee Participation Processes in Organizations (3)**
CMN 453 Communication Training and Development (3)**
GLB 303 Relationship Management (3)
MGT 301 Principles of Management (3)
MGT 412 Managing Human Resources (4)
PGS 430 Industrial Psychology (3)***
PGS 482 Social Influence and Consumer Behavior, SB (3)
PHI 360 Business and Professional Ethics, HU (3)
RTM 301 Leadership in Recreation and Tourism (3)
SBS 461 Program Evaluation and Policy Research (3)***
SOC 324 Work and the Workplace, SB, H (3)
SOC 419 Organizations and Technological Change, G (3)
PGS 484, CMN 484, or SOC 484 (or others) Internship in Organizations (3)

The internship site must be approved by the SBS advisor.

**Cluster 2: Courses Focused on Diversity Within Organizations**

Choose one from the following courses for a total of three credits:

- CMN 463 Cultural and Intercultural Communication Theory and Research, SB, G (3)**
- PGS 480 Cross-Cultural Social Psychology, SB, G (3)
- POL 435 Women, Power, and Politics, SB, C (3)
- SOC 270 Racial and Ethnic Minorities, SB, C (3)
- SOC 400 Perspectives on Aging, SB (3)
- SOC 426 Social Inequality, SB (3)
- WST 350 Race, Class, and Gender, SB, C (3)
- WST 487 Gender and International Development, SB, G (3)

* SBS advisor’s approval is required.
** Prerequisites CMN 308 and 309 may be waived for students not majoring in communication studies.
*** Course may be selected if not used to fulfill core requirements.

**Enrollment Requirements:** The minor in interdisciplinary organizational studies is open to all undergraduate majors. However, students should consult with the advisors in the department of their major to determine if the minor is consistent with their educational goals. Students are encouraged to take courses outside their major and college. No more than six credits may be applied from major requirements toward completion of the minor. Please contact the department for more information and see http://newcollege.asu.edu/programs/interdisciplinary_org_studies/.

**Contact Information:**
Division of Social and Behavioral Sciences - W
http://newcollege.asu.edu/divisions/sbs/
SBS.Dept@asu.edu
FAB N251
602/543-6058

**Interior Design History (Minor) ARINTMIN**

**Description:** The minor in interior design history is available to students interested in design and culture. The courses designated for the minor are part of the professional studies in interior design within the program of interior design. Moreover, the courses serve to inform the students about the importance of the
global community, especially sociocultural groups, and the impact of the global community on the design of the interior environment.

**Program Requirement:** The selected courses satisfy the minimum requirement (18 credit hours, 12 of which must be from the 300 or 400 level) for the minor. To enhance the understanding of the subject matter, the selected courses are sequential in nature and require certain prerequisites. Consequently, students should carefully note the semester in which any of these courses are offered.

**Required Courses:**

- DSC 101 Design Awareness, HU, G (3)
- INT 111 Interior Design Issues and Theories, HU (3)
- INT 310 History of Interior Design I, HU, H (3)
- INT 311 History of Interior Design II, HU, H (3)
- INT 412 History of Decorative Arts in Interiors, HU (3)
- INT 413 History of Textiles in Interior Design (3)

Students must have an overall GPA of 2.50 or higher and achieve a minimum 2.50 GPA in minor classes to be awarded the minor.

**Enrollment Requirements:** Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information:

http://design.asu.edu/students/minors.shtml.

**Contact Information:**

School of Design Innovation
http://design.asu.edu/interior/index.shtml
CDN 162
Italian (Minor) LAITAMIN

Description: Students pursuing a minor in Italian gain an understanding of the language, literature and cultures of Italian speaking peoples and regions. There are opportunities to partake in study abroad programs, which can serve to enhance a student's minor experience and education.

Program Requirement: The Italian minor requires 18 upper-division credit hours. In addition, specific required courses for each area follow and are in a brochure in the School of International Letters and Cultures. Course substitutions are allowed for heritage and advanced speakers of the language.

Required courses include:

ITA 201 Intermediate Italian, G (4)
ITA 202 Intermediate Italian, G (4)
ITA 311 Italian Composition and Conversation, G (3) or ITA 312 Italian Composition and Conversation, G (3) or ITA 315 Italian for Business (3)
ITA 325 Introduction to Italian Literature, HU (3)
One 300 or 400-level ITA course (3)
One 400-level ITA course (3)

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

Contact Information:
School of International Letters and Cultures
http://silc.asu.edu/undergraduate/majors-minors-certs
Justice Studies (Minor) LAJUSMIN

Description: The minor in justice studies is designed for students interested in developing an understanding of meanings of justice and injustice and analyzing often controversial issues through critical inquiry and social science investigation.

Program Requirement: Eighteen credit hours of graded classroom JUS course work are required, including JUS 105 or 305 and JUS 303. No pass/fail or noncredit course work may be applied to the minor. A minimum of nine credit hours must be resident credit at the Tempe campus, and at least 12 credit hours must be upper-division. Students must receive a minimum grade of “C” (2.00) for all courses in the minor and meet all course eligibility requirements, including prerequisites.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student’s major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student’s major. Please contact the department for more information.

Contact Information:
School of Social Transformation
http://sjsi.clas.asu.edu
justiceinfo@asu.edu
WILSN 228
480/965-7682
**Kinesiology (Minor) LAKINMIN**

*Description:* The kinesiology minor is for the student interested in gaining a disciplinary knowledge of anatomical, biomechanical, developmental, physiological, psychological and sociological aspects of human movement and physical activity.

*Program Requirement:* The minor in kinesiology consists of the 21 credit hours shown below and 15-21 credit hours of prerequisite courses. All prerequisite courses must be completed with a grade of “C” (2.00) or higher before taking the respective Kinesiology core course. All Kinesiology courses must also be completed with a grade of “C” (2.00) or higher.

1. **KIN 101 Introduction to Kinesiology (3)**

Choose nine credits from among the courses below:

- KIN 335 Biomechanics (3)
- KIN 340 Physiology of Exercise (3)
- KIN 345 Motor and Developmental Learning (3)
- KIN 352 Psychosocial Aspects of Physical Activity, SB, C (3)

Nine additional credit hours in KIN, excluding KIN 305, 310, 484, 492, 493, 498 and 499

*Enrollment Requirements:* Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student’s major. Please contact the department for more information.

*Contact Information:*
Department of Kinesiology
http://kinesiology.clas.asu.edu/
Landscape Architecture Studies (Minor) ARLNDMIN

Description: The minor in landscape studies is designed for students who have an interest in landscape aesthetics, but are pursuing a major in another field. The course selection is intended to provide greater understanding of landscape issues that may be relevant in related professional disciplines and to broaden knowledge about the landscape in which we live.

Program Requirement: A minimum of 18 credit hours (to include six credit hours of upper-division course work) are required for the minor.

Required Courses:

ALA 100 Introduction to Environmental Design, HU, G, H (3)
ALA 102 Architecture, Landscape Architecture, and Society, G (3)
LPH 210 History of Landscape Architecture, HU, H (3)
LPH 211 Contemporary Landscape Architecture, HU (3)

Six additional semester hours of electives in the landscape architecture history and theory concentration must be selected from the following list, for a total of 18 credit hours, of which 12 hours must be taken at the 300 or 400 level:

APH 494 Culture of Place, C (3)
APH 511 Energy Environment Theory (3)
ANP 494 Special Topics (1-3)
LPH 394 Special Topics (3)
LPH 410 Social Factors in Landscape and Urban Planning (3)
LPH 411 Landscape Architecture Theory and Criticism (3)
LPH 412 Landscape Ecology and Planning (3)
LPH 413 Southwest Landscape Interpretation (3)
LPH 494 Special Topics (3)
LPH 499 Individualized Instruction* (3)
LPH 598 Special Topics (3)
LPH 485 International Field Studies in Landscape Architecture (6)

* These courses require a petition to the School of Architecture and Landscape Architecture.

A minimum GPA of 2.50 in minor courses is required to earn the minor in landscape architecture studies. In addition, students may not use a core course to count toward the minor. Students pursuing the B.S.D. in architecture must petition the school to request a substitution for any core courses that are also included in the landscape architecture minor.
Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major.

Contact Information:
School of Architecture and Landscape Architecture
http://design.asu.edu/sala/minors.shtml
CDN 162
480/965-3536

Life Sciences (Minor) ASLSCMIN
Description: A minor in life sciences can be a valuable asset particularly when paired with an appropriate major. For instance, a biology minor paired with a political science major would provide a good background for someone who wanted to practice environmental law.

Program Requirement: Required Courses (28)

- BIO 187 General Biology I, SG (4)
- BIO 188 General Biology II, SQ (4)
- CHM 113 General Chemistry, SQ (4)
- CHM 116 General Chemistry II, SQ (4)
- LSC 320 Fundamentals of Ecology (3)
- LSC 322 Fundamentals of Ecology Laboratory (1)
- LSC 347 Fundamentals of Genetics (3)
- LSC 348 Fundamentals of Genetics Laboratory (1)
- LSC 353 Cell Biology (3)
- LSC 355 Cell Biology Laboratory (1)
Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

Contact Information:
Division of Mathematical and Natural Sciences
http://newcollege.asu.edu/programs/lifesci/
MNS.Dept@asu.edu
CLCC 217
602/543-6050

Literature, Writing and Film (Minor) ECLWFMIN
Description: Literature, writing, and film offers students the opportunity to develop their skills in professional, academic and imaginative writing, as well as their interpretation of literary and non-literary texts and critical thinking. The focus is on effective writing, critical thinking, and sophisticated reading of literary and non-literary texts. The program stresses cultural and information literacy. It encourages the study of texts in their cultural context and stresses the role of media and technology in the reading process.

The philosophy of the program is that students should be offered an experience that integrates formal course work, independent and varied research, internships and service opportunities. The program goal is to prepare independent and effective scholars and professionals who can transition seamlessly into careers in writing and teaching and who are well prepared for graduate or further professional study. Three tracks are available:

- English for secondary teachers.
• Writing.
• Literature and film.

*Program Requirement:* The minor in literature, writing and film consists of 18-24 credit hours as follows:

1. Nine credit hours from the core (ENG 200, ENG 217 and ENH 230).
2. Six credit hours of focus-area courses in their chosen track.
3. Three to nine credit hours of electives.

*Enrollment Requirements:* Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major.

*Contact Information:*
School of Letters and Sciences
http://www.poly.asu.edu/saas/humanitiesarts/
hua@asu.edu
SANCA 233
480/727-1526

**Materials Science and Engineering (Minor) ESMSEMIN**
*Description:* The materials science and engineering minor is designed to give other science and engineering majors an in-depth understanding of materials, including their structure, processing, properties, performance and relationships.

*Program Requirement:* Students are required to take six courses (20-21 credits), listed below:
CHM 114 (4) or CHM 113 (4)
CHM 116 (4)
MSE 250 Structure and Properties of Materials (3)
MSE 355 Structure and Microstructure of Materials (3)
MSE 356 Structure and Microstructure of Materials Laboratory (1)
Two MSE courses at the 300 level or higher

One materials-related course from the following list:

- BME 318 Biomaterials (4)
- CEE 353 Civil Engineering Materials (3)
- CHE 458 Semiconductor Material Processing (3)
- CHM 471 Solid State Chemistry (3)
- EEE 352 Properties of Electronic Materials (4)
- EEE 436 Fundamentals of Solid-State Devices (3)
- MAE 351 Manufacturing Processes (3)
- Any MSE course at the 300 level or higher
- PHY 481 Materials Physics I (3)

*Enrollment Requirements*: Students need sophomore status and a minimum 3.00 GPA to enroll in the minor in materials science and engineering, and a 2.50 GPA in all courses in the minor to receive the minor.

*Contact Information*:
Materials Program
http://som.asu.edu
som@asu.edu
ECG 303
480/727-9311

*Mathematics (Minor) ASMATHMIN*

*Description*: The minor in mathematics explores the study of higher mathematics. It is designed to enable the student to understand the mathematics most commonly used in business, economics and science. It is expected that students in the minor will be able to reason, and to find creative solutions to problems that were either presented to them or meaningfully formulated by them. The minor is recommended for students who plan to major in integrative studies, life sciences and business, and those who are preparing for further graduate study.

*Program Requirement*: The minor in mathematics consists of a minimum of 27 credit hours, of which nine credit hours must be taken in the mathematical sciences and applied computing department.

Required Courses (27)
MAT 270 Calculus with Analytic Geometry I, MA (4)
MAT 271 Calculus with Analytic Geometry II, MA (4)
MAT 272 Calculus with Analytic Geometry III, MA (4)
MAT 300 Mathematical Structures (3)
MAT 342 Linear Algebra (3)

Choose three electives from the following courses, or other approved course, in consultation with a departmental advisor, for a total of nine credits:

MAT 310 Introduction to Geometry (3)
MAT 371 Advanced Calculus I (3)
MAT 411 History and Philosophy of Mathematics, HU, H (3)
MAT 443 Abstract Algebra (3)
MAT 445 Theory of Numbers (3)
STP 420 Introductory Applied Statistics, CS (3)

*Enrollment Requirements:* Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major.

*Contact Information:*
Department of Mathematical Sciences & Appld Cmptg
http://www.newcollege.asu.edu/programs/math_sci/
MNS.Dept@asu.edu
CLC C217
602/543-6050

**Mathematics (Minor) LAMATMIN**
*Description:* The minor in mathematics is designed for students who want to further their knowledge of mathematics and is recommended for students who are
majoring in such disciplines as physics, engineering, business, economics and the life and social sciences where the need for quantification in the analysis of phenomena is strong.

Program Requirement: The minor in mathematics consists of a minimum of 18 credit hours. Required courses are as follows, for a total of nine to eleven hours:

- MAT 271 Calculus with Analytic Geometry II MA (4) or MAT 266 Calculus for Engineers II (3)
- MAT 272 Calculus with Analytic Geometry III MA (4) or MAT 267 Calculus for Engineers III (3)
- MAT 342 Linear Algebra (3) or MAT 343 Applied Linear Algebra (3)

Electives must be upper-division courses in mathematics (MAT) or Statistics and Probability (STP). Students may not apply MAT 411 or 485 or a course not offered at ASU to the minor, unless otherwise approved by a department advisor.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student’s major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information.

Contact Information:
School of Mathematical and Statistical Sciences
http://math.asu.edu/
math@asu.edu
PS A 211
480/965-7195
Mathematics (Teaching) (Minor) LAMATTMIN
Program information not available at time of publication.

Not accepting new students.

Contact Information:
http://clas.asu.edu

Media Analysis (Minor) CSCMOMINA
Description: The mass media, more than ever before, play a vital role in how information is disseminated and how societies are shaped and function. As traditional forms of media and information dissemination change rapidly in an increasingly technological world, it is more important than ever for students to understand the way that media work as well as learn to evaluate the messages that are sent. All students can benefit from the study of mass communications institutions, functions and techniques. In this minor, students will learn to understand the roles that media play, how they are changing and their impact. They will be given the tools they need to critically evaluate, analyze and interpret media messages in order to become wise consumers of media themselves.

Program Requirement: The minor of media analysis consists of 18 credit hours of course work. This is a requirement consistent with many other minor programs at Arizona State University and at other colleges and universities. The focus of the program is on media analysis. Students in the minor will concentrate on evaluating the impact of information dissemination rather than on topics that focus on the practice of gathering and distributing messages. Students in the minor may not register for courses in the professional journalism curriculum.

To take upper-division courses, the student must be at least a sophomore (25 credit hours). To pursue the minor in media analysis, the student must maintain a minimum 2.00 overall GPA, obtain a minimum grade of “C” (2.00) in each course in the minor and have a major other than journalism and mass communication.

Three specific classes will be required (nine hours). The required classes are:

- MCO 120 Media and Society, SB (3)
- MCO 240 Media Issues in American Pop Culture (3)
- MCO 418 History of Mass Communication, SB, H (3)

In addition, students select three additional courses (nine hours) from the list of electives offered by the Cronkite school. The common element of these courses is that they focus on understanding specific aspects of the mass media and how those aspects impact individuals and societies in terms of function, effects, and enculturation. Electives offered include:

- MCO 200 Introduction to the Electronic Media (3)
- MCO 240 Media Issues in American Pop Culture (3)
MCO 430 International Mass Communication, G (3)
MCO 435 Emerging Media Technologies (3)
MCO 450 Visual Communication, HU (3)
MCO 455 War and the Mass Media (3)
MCO 460 Race, Gender and Media, C (3)
MCO 465 Sports and Media (3)
MCO 473 Sex, Love and Romance in the Mass Media, SB (3)
MCO 494 Special Topic courses (3)

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if, 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student’s major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student’s major. Please contact the department for more information: http://cronkite.asu.edu/undergrad/minor_media_analysis.php.

Contact Information:
Walter Cronkite School of Journalism & Mass Commhttp://cronkite.asu.edu
cronkiteadvising@asu.edu
CRONK 220
602/496-5055

Microbiology (Minor) LAMICMIN
Program information not available at time of publication.

Not accepting new students.

Contact Information:
College of Liberal Arts and Sciences
http://clas.asu.edu
Music (Minor) FAMUSMIN

Description: The music minor is designed for those students who are interested in a broad introduction to the study of music. The program allows for a diverse exposure to traditional through contemporary music practices, with numerous options to select courses based on students' interests.

Program Requirement: The School of Music offers a minor in music consisting of 21 credit hours of course work. A minimum grade of “C” (2.00) is required in all courses.

Required Courses (9 credit hours)

MHL 201 Mac Literacy for Musicians* (3)
MUP 100 Concert Attendance (four semesters) (0)
MUS 100 Fundamentals of Music Notation (3)
MUS 340 Survey of Music History (3)

Music history: Select two of the following five courses (6 credit hours)

MUS 347 Jazz in America (3)
MUS 355 Survey of American Music (3)
MUS 356 Survey of Musical Theatre (3)
MUS 361 African Music (3)
MUS 410 History of Women in Music (3)

Electives: Choose two of the following five courses (6 credit hours)

MUS 354 Rock and Roll (3)
MUS 354 Rock and Roll since 1971 (3)
MUS 354 Hip-Hop (3)
MUS 354 Elvis Presley (3)
MUS 354 The Beatles (3)

* The online version of this course is required.

Note: MHL, MTC, MUP courses may be accepted as electives if the appropriate prerequisites are met and with instructor approval. Music reading and notation skills are a prerequisite for the music minor.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if, 1) the college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met, and 2) the college (and, in certain colleges, the department) of the student’s major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information at http://music.asu.edu/students/current/undergrad/minorinfo.php.

Contact Information:
Dean, Herberger Institute for Design and the Arts
http://music.asu.edu
ugradmusicadmissions@asu.edu
MUSIC E167
480/965-3371

Nonprofit Administration (Minor) PPNLMMIN
Description: The minor in nonprofit administration empowers students to positively impact the community in which they work. Course work introduces students to the competencies required for successful professional careers with nonprofit, social sector organizations that exist to improve the quality of life of communities. The nonprofit sector in the United States is unique in form and function, with more than 1.2 million organizations in the U.S. The Arizona nonprofit sector also is experiencing robust growth with more than 29,000 registered nonprofits and more than 1,500 new nonprofits formed yearly. The minor allows students enrolled in other undergraduate programs at ASU to broaden their educational experiences. Students from such various disciplines as business, education, museum studies, nursing, public affairs, religious studies, social work and many others might find this program a beneficial supplement to their existing program.

Program Requirement: Completion of a nonprofit minor in the School of Community Resources and Development requires the following:

1. NLM 160.
2. NLM 220.
3. Fifteen hours of graded classroom course work (no internship, no independent study).
4. Nine hours of course work at the upper division level, from the approved list.
5. A minimum grade of “C” (2.00) is required for all classes in the minor.
6. No double counting of courses for both a major and the minor.
Standards

1. A minimum GPA of 2.00 for those pursuing the minor, a major or pre-major, other than B.S. in nonprofit leadership and management.
2. Must be a junior to take 400-level courses.

Course Selection (approved list)

Required Courses

NLM 160 Voluntary Action and Community Leadership (3)
NLM 220 Introduction to Nonprofit Organizations (3)

Select three courses

NLM 300 Fund Raising and Resource Development (3)
NLM 301 Sustainable Communities (3), (NLM 160 or 191 must be completed before or simultaneously with a grade of “C” (2.00) or higher)
NLM 302 Inclusive Community Development C (3), (NLM 160 or 191 must be completed before or simultaneously with a grade of “C” (2.00) or higher)
NLM 310 Volunteer Management (3)
NLM 435 Service Learning for Community Development (3)
NLM 494

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information at http://scrd.asu.edu/portal/programs/undergraduate/nonprofit-leadership-management-nlm.
Parks and Protected Area Management (Minor) PPPRMMINT

Description: As the Southwest continues to develop and urbanize, the demands and pressures on public lands and natural resources continues to grow. The interplay between society and natural resources is key to understanding modernity and continues to be at the center of policy issues and quality of life debates in the West. The minor in parks and protected area management introduces students to the role of parks and protected areas, with a focus on the unique issues faced by urban-proximate natural area managers. The minor allows students enrolled in other undergraduate programs at ASU to broaden their educational experiences. Students from such various disciplines including business, education, nursing, public affairs, social work and many others might find this program a beneficial supplement to their existing program. Students interested in the parks and protected area management minor may also be interested in the school’s therapeutic recreation program.

Program Requirement: Completion of a parks and protected area management minor in the School of Community Resources and Development requires the following:

1. PRM 120.
2. PRM 370.
3. PRM 380.
4. TDM 480.
5. Fifteen hours of graded classroom course work (no internship, no independent study).
6. Twelve hours of course work at the upper-division level, from the approved list. A minimum grade of “C” (2.00) is required for all classes in the minor.
7. No double counting of courses for both a major and the minor.

Standards

1. A minimum GPA of 2.00 for those pursuing the minor, a major, or pre-major, other than parks and recreation management, and tourism development and management.
2. Must be a junior to take 400-level courses.

Course Selection (approved list)

Required Courses
**Enrollment Requirements:** Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student’s major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student’s major. Please contact the department for more information at http://scrd.asu.edu/portal/programs/undergraduate.

**Contact Information:**
School of Community Resources and Development
http://scrd.asu.edu
scrd@asu.edu
UCENT 550
602/496-0550

**Philosophy (Minor) ASPHIMIN**

*Description:* The minor is designed to provide students with an understanding of central philosophical issues.

The minor provides students with:

- A knowledge of the most important problems and ideas in the philosophical areas studied.
- A capacity for critical thinking and analytical reasoning.
- The ability to present one’s positions effectively through oral and written communication.

**Program Requirement:** The minor in philosophy consists of 21 credit hours of philosophy course work, of which 15 must be upper-division hours. Fifteen credit
hours of campus resident credit is required. Only courses in which the student earns a grade of “C” (2.00) or higher will fulfill requirements for the minor.

Courses are to be selected from the following list in consultation with a philosophy advisor to create a coherent and complete program of study:

- IAS 411 History and Philosophy of Mathematics, HU, H (3) or MAT 411
- History and Philosophy of Mathematics, HU, H (3)
- IAS 484 Internship (3)
- IAS 494 ST: Special Topics (3)
- PHI 101 Introduction to Philosophy, HU (3)
- PHI 103 Principles of Sound Reasoning, L/HU (3)
- PHI 306 Applied Ethics, HU (3)
- PHI 340 Bioethics, HU (3) or IAS 340 Bioethics, HU (3)
- PHI 360 Business and Professional Ethics, HU (3)
- PHI 406 Moral Dilemmas, L/HU (3) or IAS 406 Moral Dilemmas, L/HU (3)
- PHI 407 Environmental Philosophy and Policy, L/HU (3) or IAS 407 Environmental Philosophy and Policy, L/HU (3)
- PHI 408 Feminist Ethics, HU (3) or IAS 408 Feminist Ethics, HU (3)
- PHI 494 Special Topics (3)
- PHI 499 Individualized Instruction (3)

**Enrollment Requirements:** Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student’s major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student’s major. Please contact the department for more information.

**Contact Information:**
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/programs/integrative_studies/minor_cert/philosophy.s
Philosophy (Minor) LAPHIMIN

Description: The minor in philosophy provides students with an understanding of philosophical inquiry and method. The minor offers an introduction to the central themes both in the history of philosophy and in the current literature. Minor students have the opportunity to sharpen their critical reasoning skills while addressing profound questions regarding the nature of knowledge, existence, morality, science, law and politics.

Program Requirement: A minor in philosophy consists of 18 credit hours, of which at least 12 must be in the upper division and approved by an advisor in the school. All courses must be passed with a minimum grade of “C” (2.00). No more than two courses may be taken in any one of the following philosophical subdisciplines:

- Metaphysics
- Epistemology
- Logic
- History of Philosophy
- Ethics / Political Philosophy

Students should consult with the undergraduate advisor in the philosophy department about a proposed selection of courses before registering.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the
Physics (Minor) LAPHYMIN

Description: Physics is concerned with the nature, structure and interactions of matter and radiation. Adding a physics minor to another major program of study provides a student with the fundamental scientific basis to address the most challenging opportunities faced in a student’s career.

Program Requirement: Required courses (24)

Choose between the following course combinations (4):

- PHY 150 Physics I, SQ (4) or
- PHY 121 University Physics I: Mechanics, SQ (3) and PHY 122 University Physics Laboratory 1, SQ (1)*

Choose between the following course combinations (4):

- PHY 151 Physics II, SQ (4) or
- PHY 131 University Physics II: Electricity and Magnetism, SQ (3) and PHY 132 University Physics Laboratory 2, SQ (1)**

- PHY 252 Physics III, SQ (4)
- PHY 334 (3)
- PHY 361 (3)

Two upper-division electives (to be selected with the approval of the physics advisor) (6)

*Both PHY 121 and PHY 122 must be taken to secure SQ credit.

**Both PHY 131 and PHY 132 must be taken to secure SQ credit.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student’s major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student’s major. Please contact the department for more information.

Contact Information:
Department of Physics
http://physics.asu.edu
physics.info@asu.edu
PS F 470
480/965-3561

Plant Biology (Minor) LAPLBMIN
Program information not available at time of publication.

Not accepting new students.

Contact Information:
College of Liberal Arts and Sciences
http://clas.asu.edu

Political Science (Minor) LAPOSMIN
Description: The minor in political science offers students the necessary skills and knowledge to participate effectively as citizens in a democratic political system and to flourish in the rapidly developing globalization of the world’s political institutions, cultures and economies. The major aims to provide students with the tools and skills necessary to make connections linking theory with real world problems and issues.

Program Requirement: The minor in political science consists of 18 credit hours in political science courses, 12 hours of which must be upper-division courses. Students who minor in political science must have two courses from among the following in addition to four POS electives:

- POS 110 Government and Politics, SB (3) or POS 310 American National Government, SB (3) (but not both courses)
Students who minor in political science must have a minimum GPA of 2.00 for all courses that count toward the minor. Courses that count toward the minor must have a grade of "C" (2.00) or higher. No more than three credit hours of POS 484 Internship and three credit hours of POS 499 Individualized Instruction may be applied to the minor.

Enrollment Requirements: Students who wish to pursue a minor in political science may do so with the permission of the department, school or college of their major as well as the advisor in the School of Government, Politics and Global Studies. An ASU student who is pursuing a degree at any ASU campus may elect to add a minor offered at any other ASU campus.

Contact Information:
School of Government, Politics and Global Studies
http://www.asu.edu/clas/polisci
COOR 6797
480/965-8563

Political Science (Minor) ASPOLMIN

Description: The political science minor program is designed to help students gain an understanding of theory, practice and policy underlying political processes locally, nationally and internationally, and train students in research skills necessary for the analysis of complex sociopolitical issues locally and globally.

The program strives to meet these goals by offering students learner-centered course work in political theory, American political institutions and international relations and world affairs. These goals are accomplished by offering a flexible program of course work focusing on international urban, race/ethnic sociopolitical areas, internships and service-learning/action research opportunities. Under the direction of faculty, students throughout the degree program focus on intellectual and concrete policy issues in the greater Phoenix metropolitan area, Arizona, the Arizona-Mexico borderlands, the Americas and the world.

Program Requirement: The minor in political science consists of 18 credit hours in POL courses, 12 of which must be in upper-division courses. Choose either the lower-division or upper-division option of the following three required core courses; at least one core course must be the upper-division option:

POL 101 Political Ideologies, SB (3) or POL 340 Political Theory, SB/HU (3)
POL 110 Government and Politics, SB (3) or POL 310 American National Government: Ideas and Institutions, SB, H (3)
POL 160 Global Politics, SB, G (3) or POL 360 World Politics Theory, SB, G (3)
Political science electives* (9)

* A maximum of three credit hours of internship and three credit hours of individualized instruction may be used to fulfill requirements.

Enrollment Requirements: The minor in political science is open to all undergraduate majors. However, students should consult with the advisors in the department of their major to determine if the minor is consistent with their educational goals. Please contact the department for more information and see http://newcollege.asu.edu/programs/polisci/minor/.

Contact Information:
Division of Social and Behavioral Sciences – W
http://newcollege.asu.edu/divisions/sbs/
FAB N 251
SBS.Dept@asu.edu
602/543-6058

Pre-law (Minor) HSLAWMIN

Description: The prelaw minor is designed to explore the study of law from an interdisciplinary perspective. Students will take a core of classes that will enhance a student’s critical thinking and writing skills. In addition, students will select elective courses for the minor with assistance from the School of Criminology and Criminal Justice Advising Office and from a faculty member on the college’s prelaw advising committee. In general, the courses selected as prelaw minor electives are those that enhance the student’s critical thinking and writing skills, develop the student’s knowledge of the law and enhance the student’s understanding of the social, cultural, historical, economic and political development of the law in our society and the world.

The minor is designed for students who plan to attend law school or who contemplate careers in fields closely related to the legal profession. Students who exhibit exceptional critical thinking and writing skills are highly successful in their legal studies. It is expected that students in the minor will be able to think both logically and creatively about the law and its philosophical basis. In addition, students will be able to effectively apply legal principles to various factual problems, a rudimentary part of the case book method of legal study.

Program Requirement: The 18-credit-hour minor in prelaw consists of nine hours of required courses and nine hours of elective courses to be selected with an advisor. Students may not count classes toward both completion of their major and the prelaw minor.
Core Classes

Choose three of the following courses, for a total of nine credits:

- CMN 422 Argumentation, Critical Reasoning, and Public Communication, L (3)
- CRJ 360 Substantive Criminal Law (3)
- LES 306 Business Law (3)
- POL 470 Law and the Political Order, SB (3)
- Electives (9)

Enrollment Requirements: Please contact the department for more information.

Contact Information:
Dean, College of Human Services
http://ccj.asu.edu/
FAB S 301
sccj@asu.edu
602/543-8319

Psychology (Minor) ASPGSMIN

Description: Psychology is the scientific study of the behavior and mental processes of individuals and groups. The study of psychology includes basic and applied courses in the subfields of clinical, developmental, organizational, cross-cultural and social psychology, cognitive systems and behavioral neuroscience. The psychology degree prepares students for immediate employment, as well as for admission to graduate and professional schools. The program emphasizes the development of wide-ranging skills in critical thinking and reasoning, quantitative and qualitative research methods, working collaboratively on teams and presentation of information in oral and written form.

Program Requirement: The minor consists of 22 credit hours in psychology, including the following:

Foundations of Psychological Science

- PGS 101 Introduction to Psychology SB (3)
- PSY 230 Introduction to Statistics CS (3)
- PSY 290 Research Methods SG (4)

Social and Developmental Core

Choose one from the following courses (3):

- PGS 315 Personality Theory and Research SB (3)
- PGS 341 Developmental Psychology SB (3)
- PGS 350 Social Psychology SB (3)
Neuroscience Core

Choose two from the following courses* (6):

- PSY 320 Learning and Motivation (3)
- PSY 323 Sensation and Perception (3)
- PSY 324 Memory and Cognition (3)
- PSY 325 Physiological Psychology (3)
- PSY 330 Statistical Methods (3)
- PSY 369 Biology of Human Sexuality (3)
- PSY 470 Psychopharmacology (3)
- PGS or PSY upper-division electives (3)

* At least one choice must be PSY 323, 324 or 325. A maximum of three credit hours of research (PGS 399 Supervised Research and PGS/PSY 499 Individualized Instruction) may be used to meet the minor requirements. PGS 484 Internship may be taken for elective credit only. All courses must be passed with a minimum grade of “C” (2.00) or higher.

Enrollment Requirements: The minor in psychology is open to all undergraduate majors. However, students should consult with the advisors in the department of their major to determine if the minor is consistent with their educational goals. Please contact the division for more information and see http://newcollege.asu.edu/programs/psychology/minor_cert/.

Contact Information:
Division of Social and Behavioral Sciences – W
http://newcollege.asu.edu/divisions/sbs/
SBS.Dept@asu.edu
FAB N 251
6025436058

Psychology (Minor) LAPGSMIN
Description: The minor in psychology focuses on appreciating and understanding the human condition from a scientific, psychological point of view. Students completing the minor in psychology should possess breadth of knowledge pertaining to the major principles, theoretical approaches and findings in psychology.

They should also understand and be able to use basic research and quantitative methods in psychology and be able to gather and synthesize psychological findings.

Finally, they should be able to understand the relevance and applicability of psychological principles, approaches and findings to individual, group and social issues. In so doing, they will be prepared as educated citizens to pursue productive
careers and engage on a daily basis their increasingly complex, information-rich world.

Program Requirement: The minor in psychology consists of completing the 22 credit hours of course work in the foundations of psychology and the breadth categories described below. Six credit hours of PGS/PSY courses must be completed at the ASU Tempe or Polytechnic campuses.

Required foundation courses:

- PGS 101 Introduction to Psychology
- PSY 230 Introduction to Statistics
- PSY 290 Research Methods

Take one course each from four of the following five clusters:

**Biological**
- PSY 325 Physiological Psychology

**Personality/Mental Health**
- PGS 315 Personality Theory and Research
- PGS 466 Abnormal Psychology

**Cognitive/Learning**
- PSY 320 Learning and Motivation
- PSY 323 Sensation and Perception
- PSY 324 Memory and Cognition

**Developmental**
- PGS 341 Developmental Psychology

**Social**
- PGS 306 Environmental Psychology
- PGS 350/351 Social Psychology/Honors Social Psychology

Note: If a non-psychology statistics course is approved by the Psychology Department to substitute for PSY 230, an additional psychology course (PGS or PSY prefix) must be taken to complete the 22 credit hours of required psychology course work. Internship credit and teaching assistant credit may not be used to satisfy this requirement. For more information, please contact a psychology advisor.

Enrollment Requirements: Students who wish to pursue a minor in psychology may do so with the permission of the department, school or college of their major as well
as the advisor in the Department of Psychology. An ASU student who is pursuing a degree at any ASU campus may elect to add a minor offered at any other ASU campus.

Contact Information:
Department of Psychology
http://psychology.clas.asu.edu/
psych.advisor@asu.edu
PSY 255
480/965-7258

Public Relations and Strategic Communications (Minor) HSPRSMIN

Description: The minor in public relations and strategic communication prepares professionals with highly effective communication skills—speaking, writing, cultural sensitivity, critical thinking, problem-solving, and conflict management—through a number of academic program options.

Program Requirement: The public relations and strategic communications minor will provide students with professional and academic expertise in persuasion and campaign communication, public relations, crisis communication, special events planning, marketing, professional writing and editing (among other areas). Additionally, students will have the opportunity to refine the presentation skills needed for public and community relations. The minor consists of 18 credit hours of upper-division course work, including nine credit hours of required course work and nine credit hours of electives.

Required Core Courses

Choose three of the following courses, for a total of nine credits:

- CMN 320 Communication and Consumerism, SB (3)
- CMN 329 Persuasion (3)
- CMN 353 Professional Communication (3)
- CMN 454 Rhetorical and Critical Approaches to Public Relations (3)
- Electives (9)

Enrollment Requirements: The minor in public relations and strategic communications is open to all undergraduate majors. However, students should consult with the advisors in the department of their major to determine if the minor is consistent with their educational goals. Students are encouraged to take courses outside their major and college. Please contact the department for more information.

Contact Information:
Division of Social and Behavioral Sciences - W
http://newcollege.asu.edu/programs/comm_studies/minor/
Recreation Management (Minor) PPXECMIN

Description: The minor in recreation management introduces students to community recreation programming and planning for a variety of populations. The minor allows students enrolled in other undergraduate programs at ASU to broaden their educational experiences. Students from such various disciplines including business, education, nursing, public affairs, social work and many others might find this program a beneficial supplement to their existing program. Students interested in the recreation management minor may also be interested in the school's therapeutic recreation program.

Program Requirement: Completion of a recreation management minor in the School of Community Resources and Development requires the following:

1. PRM 120.
2. PRM 424.
3. Fifteen hours of graded classroom course work (no internship, no independent study).
4. A minimum of nine hours of course work at the upper-division level, from the approved list.
5. A minimum grade of “C” (2.00) is required for all classes in the minor.
6. No double counting of courses for both a major and the minor.

Standards:

1. A minimum GPA of 2.00 for those pursuing the minor, a major, or pre-major, other than nonprofit leadership and management, parks and recreation management or tourism development and management.
2. Must be a junior to take 400-level courses.

Course Selection (approved list)

Required Courses:

PRM 120 Leisure and the Quality of Life, SB (3)
PRM 424

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information: http://scrd.asu.edu/portal/programs/undergraduate/parks-recreation-management-prm/minor-in-recreation-management.

**Contact Information:**
School of Community Resources and Development
http://scrd.asu.edu
scrd@asu.edu
UCENT 550
602/496-0550

**Religious Studies (Minor) ASRELMIN**

**Description:** The minor in Religious Studies introduces students to the world's religious traditions and how they are used by humans to interpret experiences and find meaning. Students learn to think critically about religious worldviews and presuppositions, and explore the relation to contemporary challenges in the world.

**Program Requirement:** The minor in religious studies consists of 21 credit hours of religious studies course work, of which 18 must be upper-division hours. Fifteen credit hours of campus resident credit is required. Only courses in which the student earns a minimum grade of “C” (2.00) can be counted toward the minor. Courses are to be selected in consultation with the religious studies advisor to create a coherent and complete program of study for the minor.

Choose one from the following courses, for a total of three credits:

- AMS 417 Religious Traditions of the American Southwest, C (3)
- REL 320 Religion in America, HU, H (3)
- REL 321 Religion in America, L/HU, H (3)
- REL 420 Religion in American Life and Thought (3)

Choose two from the following courses for a total of six credits:
Choose at least one special topics course, for a total of three credits:

Select from the following prefixes: AMS, CMN, IAS, REL, WST. Examples of topics may include spiritual narratives, communication as theology, testimony in a post-metaphysical world, the goddess religions and gender and the environment.

Choose three additional religious studies courses, for a total of nine credits:

These courses, or other approved courses, must be chosen in consultation with the director and may include REL 484 Internship and/or REL 499 Individual Instruction.

Enrollment Requirements: The minor in religious studies is open to all undergraduate majors. However, students should consult with the advisors in the department of their major to determine if the minor is consistent with their educational goals. Students are encouraged to take courses outside their major and college. Please contact the department for more information.

Contact Information:
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/programs/integrative_studies/minor_cert/religious.shtml
harcs.dept@asu.edu
FAB N 290
602/543-4444
well as the advisor in the School of Historical and Critical Inquiry. An ASU student who is pursuing a degree at any ASU campus may elect to add a minor offered at any other ASU campus.

Please contact the school for more information and see http://www.asu.edu/clas/religious_studies/undergraduate/major_minor.html.

Contact Information:
School of Historical and Critical Inquiry
http://www.asu.edu/clas/religious_studies/
religious.studies@asu.edu
ECA 377
480/965-7145

**Romanian (Minor) LAROMMIN**

*Description:* The minor in Romanian provides students with the means to develop their interests in social cultural and political matters that are marked by a strong language dimension.

*Program Requirement:* The Romanian minor consists of 18 semester hours of ROM courses beyond ROM 201. This minor is structured so that it requires all ROM courses to be at the upper division (300 and above) level.

Required courses include:

- ROM 313 Intermediate Composition and Conversation I, G (3)
- ROM 314 Intermediate Composition and Conversation II, G (3)
- ROM 411 Advanced Spoken and Written Romanian I, G (3)
- ROM 412 Advanced Spoken and Written Romanian II, G (3)
- ROM 494 Advanced Romanian Grammar (3)
- ROM 499 Individualized Instruction (3)

Additional notes: A grade of C or better is required in all courses to be counted toward the minor.
A minimum of 6 upper division hours in the minor must be taken in residence at ASU.
Pass/Fail courses cannot be used for the minor.
ROM 101 through 201 are not applicable to the minor.
Course substitutions are permitted for Heritage speakers and other advanced speakers of Romanian.

*Enrollment Requirements:* Students who wish to add a minor in Romanian to the bachelor's degree program they are pursuing may do so if approved by the department, college, or college of the major. Please contact the school for more information.
Russian (Minor) LARUSMIN

Description: Students pursuing a minor in Russian gain an understanding of the language, literature, and cultures of Russian speaking peoples and regions. There are opportunities to partake in study abroad programs, which can serve to enhance a student’s minor experience and education.

Program Requirement: Required courses include:

- RUS 211 Basic Russian Conversation, G (3)
- RUS 212 Basic Russian Conversation, G (3)
- RUS 311 Russian Composition and Conversation, G (3)
- RUS 312 Russian Composition and Conversation, G (3)
- Six credit hours of upper-division RUS courses

Course substitutions with other upper-division RUS course are allowed. Students are encouraged to contact an advisor with any questions.

Enrollment Requirements: Students who wish to add a minor in Russian to the bachelor’s degree program they are pursuing may do so if approved by the department, college, or college of the major. Please contact the school for more information.

Science, Technology and Society (Minor) ECSTSMIN

Description: The Science, Technology and Society Program offers a minor to students outside the science, technology and society major, regardless of their major field of specialization, and a certificate to nondegree-seeking students and practicing professionals. Living in a 21st-century world is characterized by rapid technological change and uncertainty. Mastering the intricacies of the interrelationship between technology and human systems will enhance a degree in any area and arm graduates with the insights and skills required for success in any endeavor.
Program Requirement: The minor in science, technology and society (STS) requires 18 credit hours of course work, 12 hours of which must be STS upper-division courses. Students who minor in STS must have a minimum GPA of 2.00 for all courses that count toward the minor. Courses that count toward the minor must have a grade of “C” (2.00) or higher. A minimum of six upper-division hours in the minor must be taken in residence at the Polytechnic campus.

The following courses are required to complete the minor in STS:

- STS 101 Introduction to Science, Technology and Society or STS 304 Science, Technology and Society
- STS 110 Global Technology and Development or STS 317 Science, Technology and Global Engagement

The following courses are available to complete the STS minor:

- STS 301 Research in Science and Technology Studies
- STS 302 Philosophy of Science and Technology
- STS 303 History of Science and Technology
- STS 305 Science and Social Theory
- STS 306 Social Effects of Science and Technology
- STS 318 Science, Technology and Government
- STS 325 Science, Technology and Public Policy
- STS 328 Science, Technology and Culture
- STS 329 Cultivating Technology in Newly Industrialized Countries
- STS 330 Information Technology and Globalization
- STS 331 Ethical Issues in Science and Technology
- STS 332 Seminar: Global Issues in Science and Technology
- STS 364 Science, Technology and National Security
- STS 401 Statistics in Science and Technology Studies
- STS 425 Law, Values, and Science and Technology

Enrollment Requirements: A GPA of 2.00 or higher is required for all resident applicants and of 2.50 for nonresident applicants.

Contact Information:
School of Letters and Sciences
http://www.poly.asu.edu/saas/socialbehavioral/
sbscpoly@asu.edu
SANCA 252
480/727-1716

Small Business (Minor) AGSMBMIN
Description: The minor in small business is available to nonbusiness majors and consists of 18 credit hours, with five required courses and one business-related area course.
**Program Requirement:** A total of 18 credit hours must be completed from the following required courses:

- BUA 380 Small Business Leadership (3)
- BUA 381 Small Business Accounting and Finance (3)
- BUA 382 Small Business Sales and Market Development (3)
- BUA 383 Small Business Working Relationships (3)
- BUA 384 Small Business Operations and Planning (3)
- Business-related area course (3)

**Enrollment Requirements:** Please contact the department for more information:
http://www.poly.asu.edu/msma/bua/minor/.

**Contact Information:**
Morrison School of Management and Agribusiness
http://www.poly.asu.edu/msma/undergrad/
morrisonchool@asu.edu
PRLTA 330
480/727-1585

**Small Business (Minor) ECSMBMIN**
Program information not available at time of publication.

Not accepting new students.

**Contact Information:**
W. P. Carey School of Business
http://wpcarey.asu.edu/

**Social and Behavioral Sciences (Minor) ASSBSMIN**

*Description:* The minor offers students an interdisciplinary focus across several fields of the social and behavioral sciences, including sociocultural anthropology, geography, political science, psychology and sociology.

*Program Requirement:* The minor consists of 18 credit hours, at least 12 credit hours of which must be in upper-division courses. All courses must be completed with a minimum grade of “C” (2.00). Students wishing to pursue a minor must meet with an SBS department advisor to construct a minor that reflects a particular area of specialty and interest.

**Required Courses**

- SBS 300 Interdisciplinary Approaches to Social and Behavioral Sciences, SB (3)
- SBS 302 Qualitative Methods (3) or SBS 303 Quantitative Methods (3)
- Electives* (12)
*Choose courses from at least two fields of social and behavioral sciences, including SBS and excluding internships or individualized instruction.

*Enrollment Requirements:* The minor in social and behavioral sciences is open to all undergraduate majors. However, students should consult with the advisors in the department of their major to determine if the minor is consistent with their educational goals. Please contact the division for more information and see http://newcollege.asu.edu/programs/sbs/minor_certs/minor.shtml.

*Contact Information:*
Division of Social and Behavioral Sciences - W
http://newcollege.asu.edu/divisions/sbs/
SBS.Dept@asu.edu
FAB N 251
602/543-6058

**Social Welfare (Minor) LASSWMIN**

*Description:* The social welfare minor prepares students for work in human service settings where a fundamental knowledge of human relations is required, complements careers in journalism, communications, public administration, nursing and related fields and provides a foundation for students who seek to pursue an M.S.W. The minor enhances and broadens the ability of students to analyze complex family, individual and societal problems in the context of societal values, cultural diversity and other social and economic variables. The minor also contributes to students' understanding of society and social behavior, encourages critical thinking and helps develop communication skills.

*Program Requirement:* Students should:

1. Meet with a social welfare advisor prior to registration.
2. Complete 18 credit hours of graded course work (internship or independent study not applicable).
3. Take a minimum of 12 credit hours of upper division course work from the approved list.
4. Earn a grade of &ldquo;C&rdquo; (2.00) or higher for all classes in the minor.
5. Complete a minimum of 12 credit hours of resident credit at ASU.
6. Complete SWU 171 as the prerequisite for all upper-division SWU courses.
7. Maintain a cumulative GPA of 2.00 or higher.
8. Be at sophomore standing to take 300- or 400-level course.

**Required courses:**

- SWU 171 Introduction to Social Work (3)
- SWU 291 Social Service Delivery Systems (3)
- SWU 432 Social Policy & Services (3)

Select three credit hours from the list below:
SWU 374 Diversity and Oppression in Social Work Context (3)
SWU 498 Border Family and Community Asset Building Policies (3)
SWU 457 Southwest Borderlands Immigration Issues (3)
SWU 494 Immigrants and Refugees (3)
SWU 494 Spanish for Human Services (3)
SWU 455 Social Work Practice Skills with Latinos (3)
SWU 498 Lesbian/Gay Issues (3)

Select six credit hours from the following list*:

SWU 303 Micro Human Behavior Social Environment (3)
SWU 340 Macro Human Behavior Social Environment (3)
SWU 394 Arizona/National Government: A Policy Practice Perspective (3)
SWU 498 Pro-Seminar (3)

* Note: Student may select one additional course from the cultural diversity options above.

Lower-division credit hours required: 6
Upper-division credit hours required: 12

Total credit hours required: 18

Contact Information:
School of Social Work
http://ssw.asu.edu
social.work@asu.edu
UCENT 800
602/496-0800

Sociocultural Anthropology (Minor) ASASBMIN

Description: The minor is designed to provide students with a substantive understanding of the theoretical assumptions and methodological techniques underlying the field of sociocultural anthropology. Courses provide students with knowledge about and theoretical approaches to cross-cultural studies and transnational research, emphasizing culture and political economy in historical context. Specifically, students minoring in sociocultural anthropology will be expected to demonstrate knowledge and skill in the following areas:

- Critical thinking and analytical reasoning.
- Interpretation of cultural practices, social theory and social texts.
- Effective oral presentation and written communication.
- Qualitative research methods in anthropology and other social sciences and interpretive humanities, including ethnographic field research and library research.
- Anthropological approaches to and explanatory frameworks for the study of social issues in culture and political economy.
• Awareness of cultural, ethnic, gender, sexual, class and age differences and commonalities across world social formations.
• Application of theoretical knowledge to understanding sociocultural practices across local and global contexts.
• Development of their own anthropological perspective for use in their everyday lives and future studies or employment.

Program Requirement: The minor requires 18 credit hours, at least 12 of which must be in upper-division courses. Two courses, ASB 311 and SBS 302, are required. The remaining 12 credit hours may be drawn from ASB courses and from several key SBS courses in the interdisciplinary social science degree. All courses must be passed with a minimum grade of “C” (2.00) or higher. Up to six credit hours of lower-division courses and three credit hours of ASB 499 Individualized Instruction may also be applied toward the minor.

Required courses:

ASB 311 Principles of Social Anthropology, SB, G, H (3)
SBS 302 Qualitative Methods (3)

Choose four from the following, for a total of 12 credits:

ASB 102 Introduction to Cultural and Social Anthropology, SB, G (3)
ASB 211 Women in Other Cultures, HU/SB, G (3)
ASB 311 Principles of Social Anthropology, SB, G, H (3)
ASB 319 Indigenous Peoples of North America (3)
ASB 339 Introduction to Social Movements, SB (3)
ASB 340 Migration and Culture, SB, G (3)
ASB 342 Mexico-U.S. Borderlands, SB (3)
ASB 346 Marriage and Family Diversity, SB, C (3)
ASB 350 Anthropology and Art, HU (3)
ASB 353 Death and Dying in a Cross-Cultural Perspective, HU/SB, G (3)
ASB 354 Culture and Politics of the Internet (3)
ASB 356 Central American Studies, SB, G (3)
ASB 389 Ethnographic Field Lab (1-6)
ASB 394 Special Topics (1-4)
ASB 411 Kinship and Social Organization (3)
ASB 440 Women in the Global Factory, SB, G (3)
ASB 441 Sexuality and Culture, SB, G (3)
ASB 442 Urban Anthropology, SB (3)
ASB 445 Globalization, Development, and Resistance, SB, G (3)
ASB 447 Citizenship, Nationalism, and Identity, SB, G (3)
ASB Electives (3)
SBS 301 Cultural Diversity, L/SB, C (3)
SBS 410 Topics in Identity/Difference, (3)
SBS 430 Topics in Power/Knowledge, SB (3)
SBS 450 Topics in Local/Global, SB, G (3)
SBS 460 Urban Studies SB (3)

Enrollment Requirements: The minor in sociocultural anthropology is open to all undergraduate majors. However, students should consult with the advisors in the department of their major to determine if the minor is consistent with their educational goals. Please contact the division for more information and see http://newcollege.asu.edu/programs/sociocultural_anthropology/.

Contact Information:
Division of Social and Behavioral Sciences
http://newcollege.asu.edu/divisions/sbs/
SBS.Dept@asu.edu
FAB N 251
602/543-6058

Sociology (Minor) ASSOCMIN

Description: The sociology program provides students with an understanding of theory, practice, and policy underlying issues of social change and of inequality and diversity from multiple perspectives, including race/ethnicity, gender, economic position, age, geographic location and position in the global political economy. The student minoring in sociology will learn how it enhances one’s understanding of social realities and institutions at local, national and international levels, and how sociology contributes to the other social sciences and to the humanities. Students gain a basic understanding of the assumptions underlying the discipline of sociology and develop the research skills necessary for analysis of complex social issues. These objectives are met by offering a flexible program and by providing the student with individual and group experiences in working with faculty on concrete intellectual and policy issues.

Program Requirement: The minor in sociology requires 21 credit hours in sociology, nine of which must be upper-division.

Required Core

SOC 101 Introductory Sociology, SB (3) or SOC 301 Principles of Sociology, SB (3)
SBS 303 Quantitative Methods (3)
SBS 304 Social Statistics I, CS (3) or SOC 486 Contemporary Theory, SB (3)

Sociology Electives (12)

Courses must be chosen in consultation with the student’s advisor.

Enrollment Requirements: The minor in sociology is open to all undergraduate majors. However, students should consult with the advisors in the department of their major to determine if the minor is consistent with their educational goals.
Please contact the division for more information and see http://www.newcollege.asu.edu/programs/sociology/minor_cert/

**Contact Information:**
Division of Social and Behavioral Sciences
http://newcollege.asu.edu/divisions/sbs/
SBS.Dept@asu.edu
FAB N 251
602/543-6058

**Sociology (Minor) LASOCMIN**

*Description:* A minor in sociology from the School of Social and Family Dynamics exposes students to the basic course work and issues within the discipline. This program provides an exceptional balance to studies in psychology, communication, education, business and nursing.

*Program Requirement:* The minor in sociology requires 18 hours, of which 12 hours must be upper-division courses, with at least six upper-division hours completed at the Tempe campus. Required courses are:

- SOC 101 Introductory Sociology, SB (3)
- SOC 391 Sociological Research, SB (3) or SOC 483 History of Social Thought, SB (3) or SOC 486 Contemporary Theory, SB (3)
- Four sociology electives

*Enrollment Requirements:* Students who wish to pursue a minor in sociology may do so with the permission of the department, school or college of their major as well as the advisor in the School of Social and Family Dynamics. An ASU student who is pursuing a degree at any ASU campus may elect to add a minor offered at any other ASU campus.

Please contact the school for more information and see http://ssfd.clas.asu.edu/socminor.

**Contact Information:**
School of Social/Family Dynamics
http://ssfd.clas.asu.edu/
ssfd@asu.edu
SS 144
480/965-6978

**Spanish (Minor) ASSPAMIN**

*Description:* The Spanish program consists of three emphases: language, literature and cultures. These emphases are integrated within the discipline and with other disciplines within the New College of Interdisciplinary Arts and Sciences. Spanish classes are taught through an intensive language approach using the most recent
electronic technologies, including videos, CD-ROMs, electronic chat groups and news groups devoted to Hispanic literature and culture.

The program also allows credit for internships in social and business agencies. This school-to-work experience, in addition to offering the student possible entry-level job opportunities, provides stimulating linguistic and cultural rewards outside of the campus environment.

**Program Requirement:** The minor in Spanish consists of 20 credit hours of Spanish course work, of which 12 credit hours must be in the upper division. All Spanish course work must be completed with a minimum grade of “C” (2.00) or higher.

Complete the following courses, eight credits total:

- **SPA 201 Intermediate Spanish, G (4)**
- **SPA 202 Intermediate Spanish, G (4)**

Electives, 12 credits total:

The SPA elective courses must be at the 300 or 400 level and chosen in consultation with a department program advisor.

**Enrollment Requirements:** Students wishing to pursue the Spanish minor should consult an academic advisor in the unit offering that minor to ensure that the appropriate set of courses is taken, to sign the minor check sheet, and to have the minor added to their program of study. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major recognizes the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student’s major. Please contact the department for more information.

**Contact Information:**
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/programs/spanish/minor_cert/minor.shtml
harcs.dept@asu.edu
FAB N 290
602/543-4444

**Spanish (Minor) LASPAMIN**

**Description:** Students pursuing a minor in Spanish gain an understanding of the language, literature, and cultures of Spanish speaking peoples and regions. There
are opportunities to partake in study abroad programs, which can serve to enhance a student’s minor experience and education.

Program Requirement: The minor in Spanish requires a minimum of 18 upper-division credit hours. Course substitutions are allowed for heritage and advanced speakers of the language.

Required courses are:

- SPA 325 Introduction to Hispanic Literature, HU (3)
- SPA 412 Advanced Conversation and Composition, G (3)

Choose two of the following courses (6):

- SPA 425 Spanish Literature (to 1700), HU (3)
- SPA 426 Spanish Literature (from 1700), HU (3)
- SPA 427 Spanish American Literature (to 1880), L (3)
- SPA 428 Spanish American Literature (from 1880), L, G (3)
- SPA 464 Mexican American Literature, HU (3)

Choose one of the following courses (3):

- SPA 471 Civilization of the Spanish Southwest, L/HU, C (3)
- SPA 472 Spanish American Civilization, HU, G, H (3)
- SPA 473 Spanish Civilization, HU/SB, G (3)

Choose one from the following courses (3):

- SPA 394 Special Topics (3)
- SPA 413 Advanced Spanish Grammar (3)
- SPA 429 Mexican Literature (3)
- SPA 434 Drama of the Golden Age (3)
- SPA 435 Cervantes (3)

Enrollment Requirements: Students who wish to add the minor in Spanish to the degree they are currently pursuing may do so if approved by the major department, school or college. Please contact the School of International Letters and Cultures for more information.

Contact Information:
School of International Letters and Cultures
http://silc.asu.edu/undergraduate/majors-minors-certs
silcadvising@asu.edu
LL 440
480/965-6281

Spanish for Native Speakers (Minor) LASPANMIN
Program information not available at time of publication.
Not accepting new students.

Contact Information:
http://clas.asu.edu

Special Events Management (Minor) HSEVNMIN

Description: The minor in special events management is designed to offer students a solid understanding of special event programming and management. In addition to the two-tiered special event courses, which provide basic and advanced instruction, as well as experiential learning opportunities through event production, each student will be able to select electives to meet his or her specific interests.

Program Requirement: The minor consists of six credit hours of required courses and 12 credit hours of electives, selected in consultation with a faculty advisor. To earn the minor, students must complete all course work in the minor with a minimum grade of “C” (2.00) or higher. Recreation and tourism management majors are not eligible to earn the minor in special events management.

Required Core Courses

- RTM 486 Special Events Management (3)
- RTM 487 Special Events Management, Advanced (3)

Electives*

Choose four courses from the following, for a total of 12 credits:

- RTM 301 Leadership in Recreation and Tourism (3)
- RTM 303 Programming Recreation and Tourism Services (3)
- RTM 304 Recreation and Tourism Areas and Facilities Management, L (3)
- RTM 373 Leisure Travel and Tourism, SB (3)
- RTM 394 Meeting and Convention Planning (3) or D TDM 345 Meeting and Convention Planning (3)
- RTM 403 Professional Development Seminar (3)
- RTM 404 Marketing Recreation and Tourism (3)
- RTM 451 Grant Writing for Human Service Professionals (3)
- RTM 453 Volunteer Management in Human Service Organizations (3)
- RTM 458 International Tourism, G (3)
- RTM 475 Entrepreneurial Recreation and Tourism (3)
- RTM 484 Senior Internship (3)

* Select from these or other approved courses in consultation with the minor advisor.

Enrollment Requirements: Please contact the department for more information.
Contact Information:
School of Community Resources and Development
http://scrd.asu.edu
scrd@asu.edu
UCENT 500
602/496-0550

Speech and Hearing Science (Minor) LASHSMIN
Description: The Department of Speech and Hearing Science offers an undergraduate minor in speech and hearing science. This is an academic program with emphasis on normal aspects of speech, language and hearing.

Program Requirement: For your information, the required courses are listed below, but students are strongly encouraged to visit an advisor from the Department of Speech and Hearing Science at ASU. The minor in speech and hearing science consists of 24 credit hours with the following classes required:

- SHS 105 Introduction to Human Communication Disorders (3)
- SHS 250 Introduction to Phonetics (3)
- SHS 310 Anatomical and Physiological Bases of Speech (3)
- SHS 311 Physical and Physiological Bases of Hearing (3)

Choose one from the following:

- SHS 367 Language Science, SB (3)
- SHS 375 Speech Science (3)
- SHS 376 Psychoacoustics (3)

The remainder of the credits must come from the following courses:

- SHS 401 Introduction to Audiology (3)
- SHS 402 Modifying Communicative Behavior (3)
- SHS 465 Speech and Language Acquisition, SB (3)
- SHS 470 Developmental Speech and Language Disorders (3)
- SHS 485 Acquired Speech and Language Disorders (3)
- SHS 496 Aural Rehabilitation (3)

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.
A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student’s major.

Please contact the department for more information at http://shs.asu.edu/ug-minor.

**Contact Information:**
Department of Speech and Hearing Science
http://shs.asu.edu/
shsadvise@asu.edu
COOR 2211
480/965-2374

**Statistics (Minor) LASTAMIN**

Description: The minor in statistics is recommended for students majoring in a variety of disciplines such as physics, engineering applications, business, economics, and in the life and social sciences where the need for quantification in the analysis of phenomena is strong.

Program Requirement: The minor in statistics consists of a minimum of 18-20 credit hours. Required courses include:

- MAT 271 Calculus with Analytic Geometry II, MA (4) or MAT 266 Calculus for Engineers II (3)
- MAT 272 Calculus with Analytic Geometry III, MA (4) or MAT 267 Calculus for Engineers III (3)
- MAT 300 Mathematical Structures (3)
- STP 420 Introductory Applied Statistics (3)
- STP 421 Probability (3)
- STP 427 Mathematical Statistics (3) or STP 429 Experimental Statistics CS (3)

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student’s major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student’s major. Please contact the department for more information.

**Contact Information:**
School of Mathematical and Statistical Sciences
http://math.asu.edu/
math@asu.edu
PS A 211
480/965-7195

**Theatre (Minor) FATHEMIN**

*Description:* Students pursuing the theatre minor will study the literatures, histories and basic production practices of theatre while having opportunities to concentrate in an area such as theatre and performance studies, directing and performance, design and production, new work development or theatre for youth.

*Program Requirement:* The school offers a minor in theatre consisting of 22 credit hours of course work. A grade of “C” (2.00) or higher is required for all courses in the minor. All prerequisites for the minor courses must be met (see course listings). Transfer students may transfer up to nine credit hours toward the minor.

The following courses are required, for a total of 13 credit hours:

- FMP 201 Film: The Creative Process I, HU (3)*
- THE 100 Introduction to Theatre, HU (3)
- THE 322 Theatre History and Culture, HU, H (3)
- THP 101 Acting: An Introduction (3)
- THP 201 Theatre Production Crew (1)

Also required are nine credit hours of course work within the same curricular area. Contact the school for options and course requirements.

* Students considering a minor in film concurrently must complete an additional course in theatre or film to make up for the overlapping FMP 201 course.
Courses ordinarily limited to majors only are available to minors on a second-priority basis; that is, minors may not register for these courses early, but are allowed to register after all majors’ needs have been met.

*Enrollment Requirements:* Contact the Herberger Institute for Design and the Arts advising office for information at http://theatre.asu.edu/students/current/undergrad-minors.php.

*Contact Information:*
School of Theatre and Film
http://theatrefilm.asu.edu
theatre@asu.edu
GHALL 232
480/965-5337

**Tourism (Minor) PPTRMMIN**
Program information not available at time of publication.

Not accepting new students.

*Contact Information:*
College of Public Programs
http://copp.asu.edu/

**Tourism Development and Management (Minor) PPTDMMIN**
*Description:* The minor in tourism development and management program provides students with the planning and development skills needed to enter the largest industry in the world. Exposure to the businesses of nature-based tourism, heritage tourism and meeting and convention planning will begin to prepare students for successful careers in the fast-growing travel and tourism industry. According to both the World Tourism Organization and the World Travel Tourism Council, the travel and tourism industry is the largest industry and employer in the world. It is the third largest industry in the United States and ranks as the second largest industry in Arizona.

The minor allows students enrolled in other undergraduate programs at ASU to broaden their educational experiences. Students from such various disciplines including business, communication and many others find this program a beneficial supplement to their existing program. Having completed the minor in tourism development and management, a student may also complete a certificate in convention sales and meeting planning. For more information, access the school’s Web site at http://scrd.asu.edu/portal/ia/certificate-programs-1/. Students may also choose to complete a study abroad program.
Program Requirement: Completion of a tourism minor in the School of Community Resources and Development requires following:

1. TDM 205.
2. TDM 325.
3. TDM 415.
4. Fifteen hours of graded classroom course work (no internship, no independent study).
5. Nine hours of course work at the upper division level, from the approved list.
6. A minimum “C” (2.00) grade required for all classes in the minor.
7. No double counting of courses for both a major and the minor.

Standards:

1. A minimum GPA of 2.00 for those pursuing the minor, a major or pre-major, other than tourism development and management.
2. Must be a junior to take 400-level courses.

Course Selection (approved list)

Required courses

1. TDM 205 Introduction to Travel and Tourism, G (3).
2. TDM 325 Tourism Accommodations, prerequisites: must have completed REC305 or TDM205 with a grade of “C” (2.00) or higher or be currently enrolled (3).
3. TDM 415 Tourism Transportation Systems, prerequisites: must have earned grade of “C” (2.00) or higher in REC 305 or TDM 205 or be currently enrolled (3).

Choose two courses from the list below:

PRM 120 Leisure and the Quality of Life, SB (3)
TDM 345 Meeting and Convention Planning (3) (prerequisites: must have completed REC 305 or TDM 205 with a grade of "C" (2.00) or higher or be currently enrolled)
TDM 350 Tourism Marketing (3) (prerequisites: TDM 205 (or REC 305) with a grade of “C” (2.00) or higher or be currently enrolled; must have completed at least 45 hours)
TDM 386 Convention and Sales Management (3)
TDM 448 Heritage and Cultural Tourism (3) (prerequisites: must have completed PRM 120 or REC120 with a grade of “C” (2.00) or higher or be currently enrolled)
TDM 458 International Tourism (3)
TDM 480 Nature Based Tourism (3) (prerequisite: PRM 120 or TDM 205)
TDM 494 Special Topics (this course requires CRD advisor approval)
PRM 475 Entrepreneurial Recreation and Tourism (3) (prerequisites: must have earned grade of “C” (2.00) or higher in PRM 120 or REC 120 or be
Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student’s major. Students pursuing a B.S. in tourism development and management are not eligible to complete this minor.

Contact Information:
College of Public Programs
http://scrd.asu.edu
scrd@asu.edu
UCENT 550
602/496-0550

Tourism Management (Minor) HSTOUMIN
Description: The minor in tourism management is designed to provide students with fundamental knowledge in travel and tourism management. The minor may be useful to students pursuing degrees in communication studies, criminal justice and criminology, global business, interdisciplinary arts and performance and Spanish.

Program Requirement: The minor consists of 18 credit hours, of which 15 credit hours must be at the upper-division level. To earn the minor, students must complete all courses with a minimum grade of “C” (2.00). Recreation and tourism management majors are not eligible to earn the minor in tourism management.

Required Core Courses
Choose two from the following, for a total of six credits:

- RTM 373 Leisure Travel and Tourism, SB (3)
- RTM 458 International Tourism, G (3)
- RTM 475 Entrepreneurial Recreation and Tourism (3)

Electives

Choose four courses from the following, for a total of 12 credits:

- RTM 303 Programming Recreation and Tourism Services (3)
- RTM 304 Recreation and Tourism Areas and Facilities Management, L (3)
- RTM 360 Policy, Planning, Development of Recreation and Tourism Resources (3)
- RTM 401 Administration of Recreation and Tourism Services (3)
- RTM 404 Marketing Recreation and Tourism (3)
- RTM 458 International Tourism, G (3)*
- RTM 475 Entrepreneurial Recreation and Tourism (3)*
- RTM 486 Special Events Management (3)
- RTM 494 Sustainable Tourism Management (3)

Select courses in consultation with the minor advisor (an other approved course may be lower-division).

*Course may be taken as an elective if not selected to fulfill core requirement.

Enrollment Requirements: Please contact the department for more information.

Contact Information:
School of Community Resources and Development
http://scrd.asu.edu
scrd@asu.edu
UCENT 500
602/496-0550

Transborder Chicana/o & Latina/o Studies (Minor) LACCSMIN

Description: The Department of Transborder Chicana/o and Latina/o Studies offers an interdisciplinary degree program whose central mission is to provide a value-added environment that increases the direct participation of Chicana/o and Latina/o populations in the formation of human and capital development.

The program offers students a fundamental understanding of the many dimensions of transnational and transborder processes. These include giving students the knowledge necessary to understand the manner in which Chicana/o, Mexican and Latina/o populations are influenced by and also negotiate political, social, cultural and linguistic borders of multiple sorts.
An equally important dimension is the preparation of students to effectively function in transnational and transborder contexts and processes. Graduates will be able to traverse political borders because capital expansion is practically unlimited in time and space. Students gain skill at developing literary, policy and applied projects that benefit their communities and regions. The department’s intellectual mission embraces both material, cultural and applied approaches to the study of transborder and transnational phenomena.

_program requirement:_ The transborder Chicana/o and Latina/o studies minor requires 18 credit hours of TCL course work.

_core requirements:_
- TCL 201 Transborder Society and Culture of Mexican Origin and Latina/o Populations I (3) or TCL 202 Transborder Society and Culture of Mexican Origin and Latina/o Populations II (3)
- TCL 332 Mexican American History Since 1900 (3) or TCL 331 Mexican American History to 1900 (3)

It is recommended that students completing TCL 201 take TCL 332, and those completing TCL 202 take TCL 331.

Students must take the remaining 12 credit hours in upper-division TCL courses in concentrations of their choice.

_enrollment requirements:_ Students who wish to pursue a minor in transborder Chicana/o and Latina/o studies may do so with the permission of the department, school or college of their major as well as the advisor in the Department of Transborder Chicana/o Latina/o Studies. An ASU student who is pursuing a degree at any ASU campus may elect to add a minor offered at any other ASU campus.

Please contact the department for more information.

_contact Information:_
Department of Transborder Chicana/o & Latina/o Studies
http://transborder.clas.asu.edu
tcls.info@asu.edu
COOR 6633
480/965-5091

urban and Metropolitan Studies (minor) PPURBMIN
_DESCRIPTION:_ The minor in urban and metropolitan studies offers students interested in the urban environment the opportunity to explore the wide variety of issues that influence the quality of life in urban communities. Students are encouraged to learn about cities as historical, social, cultural, economic and political phenomena in order
to gain a strong understanding of the complex relationships that contribute to the problems and opportunities of urban living. As the population in the state’s urban areas continues to grow, so will the demand for leaders who are skilled in new and innovative ways with which to address the challenges such growth generates. The program allows students enrolled in other undergraduate programs at ASU to broaden their educational experiences. Students from such various disciplines including planning, business, political science, nonprofit management and leadership, communication, social work, geography and many others might find this program a beneficial supplement to their existing program.

Program Requirement:

1. Fifteen hours of course work with a “C” (2.00) or better in each course.
2. Nine hours of upper-division course work from the approved list.
3. Twelve hours of residence credit at ASU. Eligibility to pursue the minor requires a major or pre-major other than urban and metropolitan studies.

Required Courses

URB 100 Introduction to Urban and Metropolitan Studies (3) or URB 300 Urban and Metropolitan Studies (3)
URB 105 Introduction to Urban Governance (3) or URB 305 Urban Governance (3)

Core Courses (choose two of the following):

URB 220 Introduction to Urban America (3)
URB 240 Urban Policy (3)
URB 301 Urban Research (3)
URB 302 Urban Research II (3)
URB 410 Urban Leadership and Collaborative Skills (3)

Urban Electives (select a combination of the following)

Related Urban Topics and other approved courses (see below) (3)

Students will be able to choose from a variety of related urban topics classes offered by the School of Public Affairs. Possible topics include:

Leadership and Change
Leadership and Communication
Policy Analysis and Evaluation
Urban Economics
Political Economy
Computer Applications
Community Building and Development
Regionalism
In addition, students can choose related courses offered by the School of Public Affairs or other departments.

**Enrollment Requirements:** Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information at [http://spa.asu.edu/urban/minor.htm](http://spa.asu.edu/urban/minor.htm).

**Contact Information:**
College of Public Programs
http://spa.asu.edu
spa@asu.edu
UCENT 400
602/496-0450

**Urban Planning (Minor) ARPUPMIN**

*Description:* The planning minor introduces students to the field of urban planning. Students can select courses that include comprehensive planning, socioeconomic and environmental analysis, computer and analytical methods, planning law, site planning, urban design, and public-policy formulation and administration. Many students continue to specialize in planning at the graduate level. Students in planning are exposed to the theories, methods, and practices of the profession.

*Program Requirement:* A minimum of 18 credit hours are required for the minor, 12 of which must be from 300 or 400 level courses.
Required Course: PUP 301 Introduction to Urban Planning Select

The remaining 15 credit hours (nine of which must be from 300- or 400- level courses) must be chosen from the following courses:

- PUP 100 Introduction to Environmental Design, HU, G, H (3)
- PUP 190 Sustainable Cities, HU/SB, G (3)
- PUP 200 The Planned Environment, HU, H (3)
- PUP 363 History of Planning (3)
- PUP 412 History of the City (3)
- PUP 425 Urban Housing Analysis (3)
- PUP 430 Transportation Planning and the Environment (3)
- PUP 432 Planning and Development Control Law (3)
- PUP 442 Environmental Planning (3)
- PUP 444 Preservation Planning (3)
- PUP 445 Women and Environments, C (3)
- PUP 475 Environmental Impact Assessment (3)
- PUP 485 International Field Studies in Planning, G (3)

The minor is open to students of all majors. Students must, however, have an overall GPA of 2.50 or higher and achieve a minimum 2.50 GPA in minor classes to be awarded the minor.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major. Please contact the department for more information:
http://design.asu.edu/students/minors.shtml.
Wellness Foundations (Minor) ECWFNDMIN

Description: The Department of Exercise and Wellness offers this minor program to any ASU student interested in learning about health and wellness. Students will develop a greater understanding of wellness behaviors, healthy lifestyles and disease prevention.

Program Requirement: The minor in wellness foundations consists of 18 credit hours. The minor requires that students complete the following courses with a grade of “C” (2.00) or higher:

- EXW 300 Foundations of Exercise and Wellness (3)
- EXW 325 Fitness for Life (3)
- EXW 342 Health Behavior Change (3)
- EXW 450 Cultural and Social Issues in Exercise and Wellness (3)
- EXW electives: six credit hours must be selected from the approved list of electives available in the Department of Exercise and Wellness.

Enrollment Requirements: Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if:

1. The college and/or department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met.
2. The college (and, in certain colleges, the department) of the student’s major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

Note: Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student’s major. Please contact the department for more information.
Women and Gender Studies (Minor) LAWSTMIN

Description: The minor in women and gender studies provides students with an intensive interdisciplinary liberal arts education that enables them to write well, think critically and analyze problems effectively. Students take a variety of courses, including a capstone seminar requiring original research and writing and an internship that helps them prepare for life after college. Original undergraduate research is encouraged, and some courses involve students in studying community problems and formulating policy solutions.

Program Requirement: The women and gender studies minor consists of 18 credit hours, 12 of which must be in the upper division. Students take one of the following courses:

- WST 100 Women and Society, SB, C (3)
- WST 300 Women in Contemporary Society, SB, C (3)

Students choose one from the following courses:

- WST 377 History of American Feminist Thought, C (3)
- WST 378 Global Feminist Theory, L, C (3)
- WST 380 Gender, Race and Class, L or SB, C (3)

Twelve additional credit hours of approved women and gender studies courses must be taken after consultation with the women and gender studies advisor. Students pursuing a minor must register at least one semester before graduation and are encouraged to meet with the women and gender studies advisor early in their course of studies.

Enrollment Requirements: Students who wish to pursue a minor in women and gender studies may do so with the permission of the department, school or college of their major as well as the advisor in the School of Social Transformation. An ASU student who is pursuing a degree at any ASU campus may elect to add a minor offered at any other ASU campus.

Please contact the School of Social Transformation for more information.

Contact Information:
School of Social Transformation
http://wgs.asu.edu/
wgs.asutempe@asu.edu
WHALL 205
480/965-2358
Women's Studies (Minor) ASWSTMIN

Description: The minor in women’s studies within the New College of Interdisciplinary Arts and Sciences is an interdisciplinary program emphasizing intersectional approaches to the study of gender, race, class, ethnicity and sexuality in national and transnational contexts.

Program Requirement: The women's studies minor consists of 18 credit hours of course work. Students are required to choose three courses (nine credit hours) from the following core: WST 100 or WST 300; WST 350, WST 376, WST 457 or WST 498. Additionally, students are required to select one course in three of the following four areas:

- Global perspectives.
- Representation and culture studies.
- Gender studies.
- Applied women's studies.

Core Requirements:

WST 100 Women and Society, SB, C (3) or WST 300 Women in Contemporary Society, SB, C (3)

Choose two of the following courses, six credits total:

WST 350 Race, Class and Gender, SB, C (3)
WST 376 Feminist Theory, L, C (3)
WST 457 Women, Cultures and Societies, SB, G (3)
WST 498 PS: Theory and Method in Women’s Studies, L (3)

Additional Requirements (nine credit hours):

Select one course in three of the following four areas:

Global Perspectives Courses

WST 330 Women on the Borderlands (3)
WST 390 Women and World Religions, L/SB, G (3)
WST 475 Women of the Diaspora Across Cultures, HU, G (3)
WST 483 Women writers Across Cultures, HU, G (3)
WST 487 Gender and International Development, SB, G (3)

Representation and Culture Studies Courses

WST 320 Women in Popular Culture, HU, C (3)
WST 370 Chronicling Women’s Lives, HU, C (3)
WST 431 Women and Film, L, G (3)
WST 467 Ethnic Women Writers, L/HU, C (3)
WST 473 Latina/Chicana Representation, SB, C
Gender Studies Courses

WST 276 Feminist foundations: Going to the Sources, H (3)
WST 333 Critical Perspectives on Sexuality, SB, C (3)
WST 444 Women and Health, SB (3)

Applied Women's Studies Courses

WST 482 Gender Issues in Education, (3)
WST 484 Internship, (3)
WST 485 Women, Gender and Leadership, SB, C (3)
WST 499 Individualized Instruction (3)

Enrollment Requirements: The minor in women's studies is open to all undergraduate majors. However, students should consult with the advisors in the department of their major to determine if the minor is consistent with their educational goals. Students are encouraged to take courses outside their major and college. Please contact the department for more information.

Contact Information:
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/programs/womens_studies/minor_cert/
harcs.dept@asu.edu
FAB N279
602/543-4444

Youth Services Leadership (Minor) HSYSLMIN
Not accepting new students.

Description: The minor in youth services leadership is designed to explore the area of youth leadership from the perspective of those who work face-to-face with youth in a variety of settings.

Program Requirement: The minor consists of 12 credit hours of core courses and six hours of electives. To earn the minor, students must complete all course work in the minor with a minimum cumulative GPA of 2.00 or higher and all courses with a minimum grade of “C” (2.00) or higher.

Required Core Courses

RTM 301 Leadership in Recreation and Tourism (3)
RTM 303 Programming Recreation and Tourism Services (3)
RTM 394 ST: Recreation and Leisure Services for Youth Development (3)
RTM 454 Human Services for At-Risk Youth (3)
Electives

Choose two courses from the following, for a total of six credits:

- CRJ 340 Juvenile Justice (3)
- CRJ 441 Prevention of Crime and Delinquent Behavior (3)
- CRJ 462 Gangs (3)
- IAP 331 Performance, Acting, and the Individual (3)
- IAP 347 Movement in Education (3)
- PGS 341 Developmental Psychology (3)
- PGS 443 Abnormal Psychology (3)
- RTM 302 Recreation and Tourism for Diverse Populations, C (3)
- RTM 345 Team Building Strategies (3)
- RTM 451 Grant Writing for Human Service Professionals (3)
- RTM 484 Senior Internship (3)
- RTM 494 ST: Leadership and Professional Development in Youth Services (3)
- SOC 340 Sociology of Deviant Behavior, SB (3)
- SPE 222 Orientation to Education in Exceptional Children, SB (3)
- SPE 322 Behavior Management and Consultation (3), instructor approval required

Select courses in consultation with an recreation and tourism management faculty advisor. Courses may have prerequisites. See course description.

Enrollment Requirements: Please contact the department for more information.

Contact Information:
School of Community Resources and Development
http://scrd.asu.edu

Zoology (Minor) LAZOLMIN
Program information not available at time of publication.

Not accepting new students.

Contact Information:
College of Liberal Arts and Sciences
http://clas.asu.edu
**Undergraduate Programs**

**Undergraduate Certificates (Program Descriptions and Requirements)**

**African and African American Studies (certificate) LAAFRCERT**

*Description:* The African and African American Studies Program offers an interdisciplinary examination of the many ways in which African and African-descended peoples have created robust lives for themselves and, in turn, contributed to the creation of the modern world.

The program's mission is advanced by its core undergraduate curriculum that examines the culture, arts, history, politics, economics and current status of African Americans, Africans and the African Diaspora everywhere, especially in the Caribbean, Central America and South America.

The curriculum combines a research-based understanding of the humanities, social and behavioral sciences and the arts with practical applications (internships, community/civic engagement and research projects) to prepare students for lifelong learning, advanced study in a variety of fields, and successful careers and productive public service in an increasingly diverse society, especially in Arizona.

*Program Requirement:* The certificate requires 24 credit hours. Fifteen core hours must be taken from the following courses:

- AFH 353 African American Literature: Beginnings Through the Harlem Renaissance, L/HU, C (3) or AFH 354 African American Literature: Harlem Renaissance to the Present, L/HU, C (3)
- AFR 210 Introduction to African American Studies, C (3)
- AFR 429 African American Studies Theory and Methods (3)
- AFS 363 African American History to 1865, SB, C, H (3)
- AFS 364 African American History Since 1865, SB, C, H (3)

In addition, one course from each of the three concentrations (i.e., social and behavioral sciences, humanities/arts, politics and society) must be taken. These courses are in addition to the required core courses. Courses should be selected in consultation with the major advisor.

*Enrollment Requirements:* Any student admitted to study at ASU may complete a certificate. To apply to the university, please complete the Office of Admissions online application. Please contact the School of Social Transformation for more information.

*Contact Information:*
School of Social Transformation
Arabic Studies (certificate) LAARBCERT

Description: The certificate in Arabic studies provides students with skills that will enable and qualify them to communicate effectively in Arabic in the four areas of language acquisition: speaking, listening, reading and writing. Simultaneously, students gain a broad knowledge and understanding of the culture, literature and traditions of the vast Arabic-speaking world.

The certificate provides critically needed educational and cultural diversity that will enrich students' undergraduate experience and prepare them for life as employees and employers.

Graduate students in the liberal arts, social sciences and humanities seeking academic or professional careers in any of the three disciplines or thematic concentrations are also expected to be attracted to this certificate because of the added advantage the program gives them in the job market given the demonstrably high need for graduates with Arabic knowledge.

Program Requirement: ASU students admitted to a degree program in any field of study would be eligible for the Arabic studies certificate program. In addition to the course work and examinations required in the major field of interest, students are responsible for fulfilling the minimum requirement of 18 hours to earn the Arabic studies certificate. These hours can be chosen in consultation with the certificate coordinator. A minimum grade of “C” (2.00) or higher is required in each course.

Enrollment Requirements: Students must first be accepted into an appropriate degree program at ASU and will then apply directly to the director of the Arabic studies certificate in the School of International Letters and Cultures for admission into the certificate program.

The application will consist of:

1. Name.
2. Address.
3. Phone number.
4. E-mail address.
5. Student ID number.
7. Year in college.
8. Anticipated graduation date.
9. Name of their major academic advisor.
Please contact the department for more information:
http://www.asu.edu/clas/silc/academics/.

Contact Information:
School of International Letters and Cultures
http://silc.asu.edu/undergraduate/certificates
silc@asu.edu
LL 440
480/965-6281

Asian Pacific American Studies (certificate) LAAPACERT
Description: Asian Pacific American studies is an interdisciplinary undergraduate curriculum in the School of Social Transformation that addresses the historical and contemporary experiences of Asian Americans and Pacific Islanders, what they have contributed to our society, and the complexity of racial formations in the U.S.

The curriculum is designed to help students of all ethnicities: to think critically, develop clear written arguments, and present their perspectives effectively, to learn about Asian American and Pacific Islander experiences and communities in Arizona, nationally, and within a larger global context, and to prepare students to participate in an increasingly diverse and global U.S. society.

The certificate program provides students with opportunities to think critically about interethnic cooperation and conflict in the formation of social institutions and communities. The certificate program also encourages students to learn about local Asian American and Pacific Islander communities and organizations through research, courses and community internships.

Program Requirement: Course Requirements: The certificate program requires 18 credit hours. Twelve core hours must be fulfilled by the following courses:

- APA 200 Introduction to Asian Pacific American Studies, HU/SB, C (3)
- APA 360 Asian Pacific American Experience, HU/SB, C (3)
- APA 450 Asian Pacific American Contemporary Issues, SB, C (3)
- APA 484 Internship (3) or APA 494 ST: Asian Pacific American Communities (3)

The remaining six credit hours must be filled by courses from an approved list, including any additional courses with an APA prefix, as well as COM 263 and MCO 460. Students must apply for the certificate program through the School of Social Transformation.

Enrollment Requirements: Students admitted to study at Arizona State University are eligible to pursue the requirements of a certificate. In order to be admitted to the university, complete the Office of Admission online application. Please contact the
Asian Studies (certificate) LAASNCERT

Description: The Asian studies certificate is offered through the Center for Asian Research. It supplements a bachelor's degree, demonstrating knowledge of an Asian language as well as genera knowledge of Asian history, art, culture and society. The certificate provides students with official transcript recognition of specialization in Asian Studies related to their major area of study. An earned certificate will appear on student transcripts as an Asian study emphasis.

Program Requirement: The certificate curriculum includes 24 credit hours of course work:

1. Fifteen credit hours of upper-division area studies course work in at least three disciplines outside of languages and literature courses (such as anthropology, art, geography, history, political science and religious studies).
2. Nine additional credit hours may be some combination of lower- and/or upper-division courses.
3. Six hours may be satisfied with language and literature courses limited to 321 and above.

In addition, certificate students must demonstrate proficiency in an Asian language at the intermediate level. The language requirement can be satisfied by completing the 201 and 202 sequence, one year of study abroad at the intermediate level, or satisfactory placement on a proficiency exam. Asian languages include Chinese, Hindu/Urdu, Indonesian, Japanese, Korean, Thai and Vietnamese.

Students pursuing an Asian studies certificate may apply courses in East, South and/or Southeast Asia to meet the certificate requirements. A minimum grade of “C” (2.00) is required for each course that is used to fulfill the certificate requirements.

Enrollment Requirements: There are no specific admission requirements other than a student's desire to learn about Asia. Please contact the department for more information and see http://www.asu.edu/clas/asian/certificate_undergrad.html.

Contact Information:
Dean, College of Liberal Arts and Sciences
http://www.asu.edu/clas/asian/
car@asu.edu
Automotive Entrepreneurs and Leaders (certificate) BADMGCERT

Description: Students gain the knowledge and basic skills necessary to enter a career in automotive management both at the corporate level and at retail dealerships. These skills include hiring and managing personnel, coordinating teams, understanding consumers and human behavior, managing financing and cash flow, handling vehicle inventory, managing customer service operations and managing automobile marketing efforts.

Program Requirement: Students must complete a bachelor’s degree from the W. P. Carey School of Business and complete a minimum of 15 credit hours of approved course work, including the following six hours:

- MGT 494 Special Topics: Dealership Management (3)
- MGT 494 Special Topics: Human Resources in the Automotive Industry; Customer Service and Loyalty in the Automotive Industry; and Accounting and Finance in the Automotive Industry (3)

To complete the certificate, students select at least nine additional hours of business courses, including a three-credit-hour internship. Courses must be approved in advance by the faculty director for the certificate program. The student must complete the 15 credit hours of course work with grades of “C” (2.00) or higher.

Enrollment Requirements: Although classes are not closed to other students, space in the certificate program is limited and based on available resources. Students must submit an application. Admission criteria include GPA, career goals and application materials. Please contact the department for more information and see http://wpcarey.asu.edu/cael.

Contact Information:
Dean, W.P. Carey School of Business
https://wpcarey.asu.edu
wpcareyug@asu.edu
BA 109
480/965-4227

Child Nutrition (certificate) ECNTRCERC

Description: This certificate program is directed toward current degree-seeking students, postbaccalaureate students and nondegree-seeking students who are seeking eligibility for the school nutrition specialist (SNS) credential offered by the School Nutrition Association.

Program Requirement: The certificate requires that students take the following courses, for a total of 31 credit hours:
BUA 381 Small Business Accounting and Finance (3)  
EXW 100 or 325 Intro to Wellness or Fit for Life (3)  
NTR 142 Applied Food Principles (3)  
NTR 343 Food Service Purchasing (3)  
NTR 344 Nutrition Services Management (3)  
NTR 345 Development of Healthy Cuisines (3)  
NTR 401 Field Experience (3)  
NTR 445 Management of Food Service Systems (3)  
NTR 448 Community Nutrition (3)  
NTR 450 Nutrition in the Lifecycle I (3)  
NTR 498 Seminar in Child Nutrition Programs (1)

**Enrollment Requirements:** To enroll in the certificate program, the applicant must be admitted to ASU as a degree-seeking or nondegree-seeking student in the Department of Nutrition. The curriculum committee of the Department of Nutrition will approve applications to the certificate program.

**Contact Information:**
College of Nursing & Health Innovation  
http://www.poly.asu.edu/saas/nutrition/  
nutrition@asu.edu  
HSC 1386  
480/727-1728

**Civic Education (certificate) LACVECERT**

**Description:** The civic education certificate is designed to contribute to the preparation of undergraduate students for careers in:

- Primary and secondary education (where the teaching of government and civics may be involved).
- Careers or voluntary participation in politics, public service, civic and social movements.
- Further education in law, journalism, business, history, sociology, political science and other fields where an understanding of questions of citizenship, leadership, community, democracy, public responsibility and ethics is crucial.

**Program Requirement:** The certificate does not substitute for degree requirements in any subject, including political science; rather, as a complement to the student’s chosen major, the certificate program is intended to guide students to a variety of courses whose successful completion indicates their special accomplishment in the area of civic education. Students majoring in any subject at the university may be awarded the civic education certificate upon completion of the following 15 credit hours of political science courses:
POS 210 Political Ideologies, SB (3)
POS 346 Problems of Democracy, HU (3)
POS 442 American Political Thought, HU (3)

Choose one from the courses below:
POS 340 History of Political Philosophy I, HU, H (3)
POS 341 History of Political Philosophy II, HU, H (3)
POS 443 Topics in Contemporary Political Theory, HU (3)

Choose one from the courses below:
POS 110 Government and Politics, SB (3)
POS 150 Comparative Government, SB, G (3)
POS 160 Global Politics, SB, G (3)
POS 270 American Legal System, SB (3)
POS 300 Contemporary Controversies in Global Politics, SB, G (3)
POS 313 The Congress, SB (3)
POS 314 The American Presidency, SB (3)
POS 315 The Supreme Court, SB (3)
POS 330 Contemporary Controversies in Domestic Politics, SB (3)
POS 332 American Political Parties, SB (3)
POS 333 Interest Groups, SB (3)
POS 370 Law and Society, SB (3)
POS 417 The Arizona Political System, SB (3)
POS 435 Women and Politics, SB, C (3)
POS 439 Minority Group Politics in America, SB, C (3)

Certificate students must have a minimum GPA of 2.00; only courses in which students have a grade of “C” (2.00) or higher count toward the certificate.

Enrollment Requirements: Any student admitted to study at ASU may complete a certificate. To apply to the university, please complete the Office of Admissions online application. Please contact the School of Government, Politics, and Global Studies for more information and see http://www.asu.edu/clas/polisci/undergraduate/civic-certificate.html.

Contact Information:
School of Government, Politics and Global Studies
http://www.asu.edu/clas/polisci
COOR 6797
480/965-8563

Classical Studies (certificate) LACLGCERT
Description: The classical studies program offers students a wide variety of opportunities to study the language, literature and culture of the ancient Greeks and Romans. The School of International Cultures and Letters offer a certificate in
classical studies for those students interested in pursuing a classical education in conjunction with another major or as part of their general studies.

Program Requirement: Students admitted to undergraduate degree programs in any field are eligible for the classical studies certificate program. In addition to the course work and examinations required in the student’s major, the student is responsible for fulfilling the following minimum requirements:

1. Five semesters of ancient Greek (17 credit hours; GRK 301 and 302 may be repeated for credit) or Latin (19 credit hours) language and literature instruction.
2. Two semesters (six credit hours) in courses related to classical studies (to be approved by coordinators of the certificate).
3. A thesis (three credit hours).
4. A Barrett, the Honors College thesis (six credit hours) or two additional courses at or above the 300 level (six credit hours).

A minimum grade of “C” (2.00) is required in each course leading to the certificate.

Enrollment Requirements: Students interested in the classical studies certificate program need to submit an application before being accepted into the program. Please contact the department for more information and see http://www.asu.edu/clas/silc/academics.

Contact Information:
School of International Letters and Cultures
http://silc.asu.edu/undergraduate/certificates
silc@asu.edu
LL 440
480/965-6281

Computer Gaming (certificate) ESSCICERT
Description: The computer gaming certificate is designed to provide a comprehensive game development skill set that the student can apply to their major. The goal is not to teach the student to create recreational video games, but to apply gaming technology to domain-specific problems.

The gaming certificate teaches skills that not only make the student attractive to the rapidly-growing video game industry, but also to a variety of other enterprises, including:

- Business.
- Medicine.
- Geography.
- Education.
- Biotechnology.
Program Requirement: Students completing the computer gaming certificate will take a total of 18 credit hours including:

1. Six credit hours of core courses.
2. Choose three courses (nine credit hours) from the specialty tracks.
3. A three-credit-hour capstone project.

The tracks include game programming, game art and gaming in education.

Enrollment Requirements: The computer gaming certificate is open to any student admitted to an undergraduate degree program at ASU and in good academic standing. This certificate can also be used by B.I.S. students as part of their degree program. Interested students should make an appointment with the School of Computing and Informatics advising office to determine initial eligibility. After approval from that advisor, the student must get permission from their home department. Once permission is obtained, the School of Computing and Informatics advisor will officially admit the student by attaching the certificate designation to their record. All students admitted to an undergraduate degree program at ASU and in good academic standing are eligible to take the first course in the Certificate, CPI 111 Game Development I. Students who would like to continue with the certificate must add the certificate by completing the undergraduate certificate form (BIS students can contact their advisor).

Contact Information:
Computing and Informatics Program
http://sci.asu.edu
sci.advising@asu.edu
BYENG 553
480/965-3190

Convention Sales and Meeting Planning (certificate) PPTDMCERT
Description: The U.S. meetings, conventions and exhibitions industry generates over $120 billion a year, supporting nearly two million jobs. Students can explore this exciting growth industry with the convention sales and meeting planning certificate. The demand for professionals is strong and we provide an excellent foundation for enhancing career opportunities nationally and regionally. Phoenix is a major convention and meeting destination.

The $600 million investment in the Phoenix Convention Center expansion, new hotel and other visitor-related product development, as well as corporate headquarters that continue to relocate to the greater Phoenix area have created the need for qualified professionals to service conventions and meetings. The certificate, which has been endorsed by the Greater Phoenix Convention and Visitors Bureau and the Arizona Sunbelt Chapter of Meeting Professionals International, will enhance a graduate’s career opportunities as a tourism professional.
Program Requirement: A student must successfully pass all courses within the certificate by attaining at least a grade of “C” (2.00) or “Y” in all courses within the certificate. All five of the required courses must be taken at ASU. Students will earn the certificate once the academic advisors have confirmed the completion of the required courses with satisfactory grades. This will be verified by the School of Community Resources and Development.

Required Course Work (15 credit hours)

- TDM 205 Introduction to Travel and Tourism, G (3)
- TDM 345 Meeting and Convention Planning (3) (prerequisites: must have completed REC 305 or TDM 205 with a grade of “C” (2.00) or higher or be currently enrolled)
- TDM 350 Tourism Marketing (3) (prerequisites: must have completed REC 305 or TDM 205 with a grade of “C” (2.00) or higher or be currently enrolled; must have completed 45 hours)
- TDM 386 Convention Management and Sales (3)
- PRM 486 Special Event Management (3)

Enrollment Requirements: Applications are accepted throughout the year. Please contact the department for more information: //scrd.asu.edu/portal/ia/certificate-programs-1/convention-sales-meeting-planning-certificate/.

To apply, please contact the school’s academic advisor for an application form:

Academic Advisor School of Community Resources & Development
University Center (mail code: 4020)
411 N. Central Ave., Suite 550
Phoenix, AZ 85004-0690
Fax: 602-496-0953

Contact Information:
School of Community Resources and Development
http://scrd.asu.edu
scrd@asu.edu
UCENT 550
602/496-0550

Creative City (certificate) PPURBCERC
Description: The creative city certificate prepares students to engage effectively in revitalizing cities and communities by tapping their inherent potential for cultural innovation, placemaking and social/economic entrepreneurship. Exploring best practices globally, students develop asset-based proposals for specific locales including implementation plans. The creative city certificate adds value to other majors as well as work/life experience for students aspiring to assume leadership roles in improving quality of life, specifically by enhancing quality of place.
Cities are centers of human creativity and cultural innovation. They both attract and breed these. Such creativity and innovation are apparent in the vitality of the arts, as well as that of businesses (both large and small), research (basic and applied) and the everyday life unique to any given locale. These are the ingredients that make our places sustainable—economically, socially and environmentally—by endowing a "sense of place" along with a "sense of community."

This certificate also serves professionals in the community working in the areas of urban governance, land-use law, public art, planning, parks and recreation, community development, philanthropy and others. Flexible class times and locations make the certificate a viable option for those unable to attend classes during the day.

Program Requirement: The five-course sequence comprising the certificate will enable students to build upon their own strengths in order to help cities and communities creatively build upon their capacities. The creative city certificate consists of a maximum of 15 credit hours of course work. All courses must be taken at ASU. Required courses and electives are shown below.

**Required core courses** (6 credit hours)
- URB 494 Urbanism: Placemaking and Community Building (3)
- URB 494 Public Administration and Community Development (3)

**Sample certificate electives** (9 credit hours)
- URB 410 Urban Leadership and Collaborative Skills (3)
- GRA 401 Creating Environments, this course develops individual creativity to apply in collaborative settings to urban and environmental issues (3)
- URB 494 Internship (3)

**Other electives:**
- Sustainable Communities (PRM 301, NLM 301, TDM 301)
- Urban Research (URB 301)
- Urban Theory (URB 302)
- Urban and Metropolitan Studies (URB 300)
- Urban Governance (URB 305)
- Senior Professional Seminar (URB 400)
- Public Leadership (PAF 420)
- Introduction to Urban America (URB 220)
- Urban Policy (URB 240)
- Heritage and Cultural Tourism (TDM 448)
- Leisure and the Quality of Life (PRM 120)
- Introduction to Nonprofit Organizations (NLM 220)
- Fund Raising and Resource Development (NLM 300)
- Assessment and Evaluation of Community Services (NLM 402, TDM 402)
Inclusive Community Development (PRD 302, NLM 302, TDM 302)—community resources and development majors only
Voluntary Action and Community Leadership (NLM 160)
Community Resources and Services (REC 210)
Living the Arts Downtown (URB 494)
Contemporary Issues—Civic Enterprise (PAF 494, APA 450)

Note: Some courses may require prerequisites or may be for majors only. Other courses may be substituted with approval from School of Public Affairs.

Enrollment Requirements: The creative city certificate is available to all admitted undergraduate students (regular or nondegree) at ASU. Nondegree students are required to apply to ASU (as a nondegree student) and once admitted, contact the School of Public Affairs to be admitted into the certificate program. Students may begin taking courses before they formally apply for the certificate; however, they should apply for admission as soon as possible.

Contact Information:
School of Public Affairs
http://spa.asu.edu/new/undergrad/creative_city.htm
spa@asu.edu
UCENT 400
602/496-0450

Dietetics (certificate) ECNTRCERD
Description: This certificate program is directed toward postbaccalaureate students who are seeking eligibility for registration as a dietitian. The certificate provides students with documentation that they have completed a limited curriculum and achieved a standardized level of competence in dietetics. The certificate requires 79 hours of specific course work. The program will be administered by the Department of Nutrition curriculum committee. Completion of the certificate will enable students to receive a verification statement from the Commission on Accreditation for Dietetics Education’s (CADE) Didactic Program in Dietetics (DPD), which will allow students to apply to dietetic internship programs to obtain the registered dietitian (RD) credential.

Program Requirement: Required course work includes:

BCH 361 and 367 Biochemistry with lab (or equivalent)
BIO 201 Human Anatomy/Physiology I with lab (or equivalent)
BIO 202 Human Anatomy/Physiology II with lab (or equivalent)
CHM 113 General Chemistry I with lab (or equivalent)
CHM 116 General Chemistry II with lab (or equivalent)
CHM 231 and 235 Organic Chemistry with lab (or equivalent)
ENG 301 Technical or Professional Writing (or equivalent)
MIC 205 and 206 Microbiology with lab (or equivalent)
Enrollment Requirements: To enroll in the certificate program, the applicant must be admitted to ASU as a nondegree graduate student or as an undergraduate student in the Department of Nutrition. The applicant must have already completed a bachelor’s degree not specific to dietetics. The curriculum committee of the Department of Nutrition will approve applications to the certification program. The DPD director will verify that the program of study has been successfully completed and that all grade requirements have been satisfied. Notification will then be sent to the graduation office to post the certificate on the student’s transcript.

Contact Information:
College of Nursing & Health Innovation
http://www.poly.asu.edu/saas/nutrition/
nutrition@asu.edu
HSC 1386
480/727-1728

East Asian Studies (certificate) LAEASCERT
Description: The certificate in East Asian studies can supplement a bachelor's degree, demonstrating knowledge of an Asian language as well as knowledge of Asian history, art, culture or society. This certificate helps prepares students for admission to graduate programs in Asian area studies or in an academic discipline with an Asian focus, or for professional programs in international law or business. Recent Asian studies graduates have gone on to enter medical school, law school, M.B.A. programs or Ph.D. programs. An earned certificate will appear on student transcripts as an East Asian studies emphasis.

Program Requirement: The certificate curriculum includes 24 credit hours of course work:
1. Fifteen credit hours of upper-division area studies course work in at least three disciplines outside of languages and literature courses (such as anthropology, art, geography, history, political science and religious studies).

2. Nine credit hours may be some combination of lower- and/or upper-division courses (six hours may be satisfied with language and literature courses limited to 321 and above).

3. In addition, certificate students must demonstrate proficiency in an Asian language at the intermediate level. The language requirement can be satisfied by one of the following:
   - Completing the 201 and 202 sequence
   - One year of study abroad at the intermediate level
   - Satisfactory placement on a proficiency exam.

Asian languages include Chinese, Hindu/Urdu, Indonesian, Japanese, Korean, Thai and Vietnamese. Students pursuing an East Asian studies certificate must fulfill the language requirement in either Chinese, Japanese or Korean, and the 15 hours of upper-division course work must be courses with significant focus on East Asia chosen in consultation with the Center for Asian Research advisor.

A minimum grade of “C” (2.00) is required for each course that is used to fulfill the certificate requirements.

Enrollment Requirements: There are no specific admission requirements other than a student’s desire to learn about East Asia. Please contact the department for more information and see http://www.asu.edu/clas/asian/certificate_undergrad.html.

Contact Information:
Dean, College of Liberal Arts and Sciences
http://www.asu.edu/clas/asian/
car@asu.edu
COOR 6th
480/965-7184

Entertainment and Technology (Certificate) LAFMSUERE

Description: The entertainment and technology certificate is for students who have completed a course of study that includes 18 credit hours of entertainment and technology history, theory and convergence studies. It certifies that the student has had the training to analyze industry changes over time, to identify current industry trends and to develop likely entertainment and technology models and scenarios for the future.

Program Requirement: ASU students admitted to a degree program in any field of study are eligible for the entertainment and technology certificate. In addition to the course work and examinations required in the major field of interest, students are responsible for fulfilling the requirement of 18 credit hours to earn the certificate.
The upper-division courses are a three-course sequence and are taken upon completion of three lower-division film and media studies courses. A minimum grade of "C" (2.00) or better is required in each course. Required certificate core courses (18 credit hours) are:

- FMS 100 Introduction to Film (3)
- FMS 110 New Media, New Worlds (3)
- FMS 200 Film History (3)
- FMS 481 Entertainment Technologies (3)
- FMS 482 Entertainment Industries (3)
- FMS 483 Techno-Entertainment Convergences (3)

**Enrollment Requirements:** Any student admitted to study at ASU may complete a certificate. To apply to the university, please complete the Office of Admissions online application. Please contact the department for more information and see http://film.asu.edu/entertech.

**Contact Information:**
Dean, College of Liberal Arts and Sciences
http://film.asu.edu/certificates
LL 641
fmsinfo@asu.edu
480/965-6747

**Environmental Humanities (Certificate) LAENHCERT**

*Description:* The environmental humanities certificate offers students who are interested in humanities-based approaches to the current global environmental crisis an option to focus in this vital area of study. Students take three ENG/ENH courses and four electives from selected programs that are in whole or large part focused on the human relationship to the environment and the relationship between nature and culture. To gain practical experience, certificate students also complete a required English internship in environmental activism, policy development, education or other pertinent areas.

**Program Requirement:** The environmental humanities certificate consists of 24 hours, of which at least 12 hours must be upper-division.

**Core Required Courses (9 hours)**

Complete three English courses from the list below. Note: other ENG courses may be approved by an English advisor depending on special- or variable-topics courses available in given semesters.

- ENG 345 Selected Authors or Issues (variable-topics course) (3)
- ENG 359 American Indian Literatures (3)
ENG 363/TCL 363 Transborder Mexican and Chicano/a Literature of Southwest North America (3)
ENG 394/370 Science, Ethics, and the Public (3)
ENG 469 Science and Literature (variable-topics course) (3)
ENH 372 Environmental Creative Nonfiction (3)
ENH 374 Environmental Issues in Literature and Film (3)
ENH 378 The American Southwest in Literature and Film (3)
ENH 475 Environmental Literary Criticism (3)

Internship (3 hours)

ENG 484 Undergraduate Internship: Environmental Humanities Certificate (3)

If an environmental internship is not feasible, a student may petition to substitute (a.) an ENG 499 Independent Study on an environmental studies applied project or literature/writing topic or (b.) an ENG 400-level course in environmental literature/writing.

Electives (12 hours)

Complete four additional courses (see advisor for approved list). Note: some courses are limited to students majoring in the discipline, have prerequisites or cannot be taken in combination with another course on the list. Additional courses may be approved by English advisor depending on special- or variable-topics courses available in given semesters.

Enrollment Requirements:

Contact Information:
Department of English
http://english.clas.asu.edu/
englishadvising@asu.edu
LL 542
480/965-3168

Ethics (certificate) LAETHCERT

Description: The ethics certificate is designed to give students a richer understanding of systematic philosophical thinking about ethics. Students with majors in business, nursing, journalism and public administration, among others, may well find that training in ethics is beneficial to their career goals. The certificate program permits some flexibility regarding course selection, thereby facilitating particular student interests.

Program Requirement: The certificate in ethics consists of 18 credit hours approved by the undergraduate advisor in the School of Historical and Critical Inquiry. The student must take PHI 305 or PHI 335. At least 15 credit hours must be chosen from
PHI 105, 304, 305, 306, 307, 309, 310, 320, 335 and (when its topic is within ethics) PHI 420. One course outside this list, and perhaps outside the school, may be used with written approval from the director of undergraduate studies. All courses must be passed with a minimum grade of "C" (2.00).

Enrollment Requirements: Any student admitted to study at ASU may complete a certificate. To apply to the university, please complete the Office of Admissions online application. Please contact the School of Historical and Critical Inquiry for more information.

Contact Information:
School of Historical and Critical Inquiry
http://www.asu.edu/clas/philosophy/phidev/devug_certificate.html
philosophy@asu.edu
COOR 3309
480/965-3394

Ethnic Studies (certificate) ASETHCERT
Description: The certificate program in ethnic studies explores the study of race and ethnicity in local and transnational contexts. Students take courses that introduce a general conceptual framework regarding race and ethnicity and how they intersect in the construction of social formations.

Specifically, courses in the ethnic studies certificate are designed to:

1. Address theoretical, analytical and practical issues relevant to understanding race, culture, and ethnicity in American society from a comparative and interdisciplinary perspective.
2. Enhance the student’s critical thinking and writing skills through the study of ethnicity in the U.S.
3. Develop more effective skills for working in diverse communities through integration of service-learning experiences in course content.
4. Create collaborations among faculty, students and community members to address concrete issues facing racial and ethnic groups in the United States.

This certificate is designed for students who plan to work and live in ethnically diverse communities and seek to acquire the skills for understanding the complexities of race, class and gender at a local or national level. It is expected that students in the certificate program will be able to think both analytically and creatively about ethnicity in the United States. The certificate is strongly recommended for students who plan to enter a wide variety of jobs in business, health professions, the criminal justice system, social services, education, public relations, community development, public policy or government. It is also valuable for students preparing for further graduate study.

Program Requirement: A certificate in ethnic studies is awarded for successful completion of 21 credit hours, including ETH 300 and 18 credit hours of elective
courses from the approved course list. The certificate program is recommended for graduate students, nondegree students and students majoring in professional programs.

Students must meet with the program academic advisor to review the requirements and sign the certificate check sheet. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major recognizes the certificate. All course work in the program must be completed with a grade of “C” (2.00) or higher.

Enrollment Requirements: The certificate in ethic studies is open to all undergraduate majors. However, students should consult with the advisors in the department of their major to determine if the minor is consistent with their educational goals. Students are encouraged to take courses outside their major and college. For more information, visit http://newcollege.asu.edu/programs/erfns/minor_cert/certificate.shtml/.

Contact Information:
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/programs/erfns/minor_cert/certificate.shtml/
harcs.dept@asu.edu
FAB N290
602/543-4444

Film and Video Studies (Certificate) ASVIDCERT

Description: The certificate in film and video studies explores theory and practice in the general field of the moving image. This interdisciplinary program provides students an opportunity to develop interests, skills and knowledge of the forms, channels, technologies and histories of the media arts. Students may pursue focused interests in film studies or adopt a more generalized approach to visual media through television, film and video.

The program is useful to students who may pursue careers in broadcasting, writing and public relations, and degrees in production, film studies, media studies, performance studies and communication studies. Courses in the certificate in film and video studies are designed to:

- Develop astute and discriminating critics and analysts of film and media arts.
- Strengthen critical thinking through an awareness of the philosophical, aesthetic, political and technological debates in film, media and video studies.
- Develop knowledge of the history of film, television and the video arts as dynamic forces of social, cultural and political expression.
- Develop practical skills that enable students to be competitive in film, video, television and media-related production industries.
**Program Requirement:** A certificate in film and video studies is awarded for the successful completion of the 21 credit hours required for the minor.

**Enrollment Requirements:** The certificate in film and video studies is open to all undergraduate majors. However, students should consult with the advisors in the department of their major to determine if the minor is consistent with their educational goals. Students are encouraged to take courses outside their major and college.

**Contact Information:**
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/
FAB N290
harcs.dept@asu.edu
602/543-4444

**Geographic Information Science (certificate) LAGISCERT**

**Description:** The geographical information science (GIS) certificate program is a structured interdisciplinary program. It is built on GIS course work currently being taught at ASU. Students who earn the certificate exit the program with standardized skill sets based on learning outcomes associated with each required course.

**Program Requirement:** The certificate is awarded to students completing the following 19 credit hours with a grade of “C” (2.00) or higher.

**Required courses**

- CSE 100 Principles of Programming with C++, CS (3) or CSE 110 Principles of Programming with Java, CS (3)
- GCU 495 Quantitative Methods in Geography, CS (3)
- GPH 370 Geographic Information Technologies, CS (3)
- GPH 373 Geographic Information Science I, CS (4)
- GPH 473 Geographic Information Science II, CS (3)

**Electives (3)**

- ABS 485 GIS in Natural Resources (3)
- ABS 586 Remote Sensing in Environmental Resources (4)
- GCU 361 Urban Geography, SB (3)
- GCU 441 Economic Geography, SB (3)
- GCU 442 Geographical Analysis of Transportation, SB (3)
- GPH 371 Introduction to Cartography and Georepresentation, CS (3)
- GPH 372 Air Photo Interpretation (3)
- GPH 471 Geographics: Interactive and Animated Cartography and Geovisualization, CS (3)
- GPH 481 Environmental Geography (3)
- GPH 483 Geographic Information Analysis (3)
GPH 484 Internship: GIS-Based (3)  
PLB 434 Landscape Ecological Analysis and Modeling (3)

Enrollment Requirements: Any student admitted to study at ASU may complete a certificate. To apply to the university, please complete the Office of Admissions online application. Please contact the school for more information.

Contact Information:  
School of Geographical Sciences and Urban Planning  
http://geography.asu.edu/undergrad-gis-certificate  
geographyadvising@asu.edu  
COOR 5650  
480/965-7533

Hazardous Materials and Waste Management (certificate) TSETMCERT  
Description: The certificate program in hazardous materials and waste management is designed to provide current and prospective employees of industry and government with a comprehensive and practical curriculum of study in hazardous materials management. The certificate program features instruction by ASU faculty, attorneys and professionals who work in the specific area in which they teach. Participation in the certificate program is available in three options: a certificate program for nondegree students, a B.S. in environmental technology management with a certificate in hazardous materials and waste management, and a M.S.Tech. with a certificate in hazardous materials and waste management.

Program Requirement: Students must complete seven selected courses (five required and two electives) and earn a grade of “C” (2.00) or higher to receive the certificate. Except for the introductory course, ETM 501 Principles of Hazardous Materials and Waste Management, the remainder of the courses may be taken in any sequence.

Enrollment Requirements: Please contact the department for more information:  
http://etmonline.asu.edu/.

Contact Information:  
Department of Technology Management  
http://etmonline.asu.edu/  
TECH 102  
480/727-1781

History and Culture (Certificate) ECHTYUERT  
Description: The history and culture certificate encourages students to develop their historical awareness and their ability to use historical knowledge to make informed decisions. The program stresses cultural and information literacy. It encourages the study of historical events in their cultural context and stresses the role of media and technology in historical study. The philosophy of the program in history and culture
that students should be offered an experience that integrates formal course work, independent and varied research, internships and service opportunities. The program goal is preparing independent and effective scholars and professionals who can transition seamlessly into careers in teaching, public policy, archival work and related fields and who are well prepared for graduate or further professional study.

Program Requirement: The certificate consists of 15-18 credit hours: nine credit hours of focus-area courses in their chosen track and six to nine credit hours of electives.

Enrollment Requirements: Contact advisors in the School of Letters and Sciences for admission to the certificate program. See http://sls.asu.edu/humpoly/hc/advising.html.

Contact Information:
School of Letters and Sciences
http://sls.asu.edu/humpoly/hc/advising.html
SANCA 233
hua@asu.edu
480/727-1526

History and Philosophy of Science (certificate) LAHPSCERT
Description: The School of Life Sciences offers an undergraduate certificate in the history and philosophy of science. This program is designed to give students an understanding of both traditional philosophic issues surrounding science and the historical development of concrete scientific theories and ideas.

The philosophic questions about how we understand nature through science and how scientific claims gain authority are enriched when they are considered in an historical context. Such philosophic and historical study will also often include the examination of contemporary sciences and their place within the larger society, including the study of bioethics, policy and law.

This certificate is a valuable addition for students in the sciences or the humanities. It crosses disciplines to help students engage in unfamiliar and familiar paths of inquiry in new and interesting ways.

Program Requirement:

1. The certificate requires 18 credit hours bearing a PHI or HPS prefix, of which 12 credit hours must be upper-division.
2. Within the 18 credit hours, at least nine must bear the HPS prefix.
3. PHI 314 Philosophy of Science is required.
4. All courses counting toward the certificate must be approved by an undergraduate advisor in the School of Life Sciences and passed with a grade of “C” (2.00) or higher.

Enrollment Requirements: Any student admitted to study at ASU may complete a certificate. To apply to the university, please complete the Office of Admissions online application. Please contact the School of Life Sciences for more information and see http://sols.asu.edu/cbs/programs.php.

Contact Information:
School of Life Sciences
http://sols.asu.edu/
sols.advising@asu.edu
LSC 206
480/727-6277

Honors Business Modeling and Analysis (certificate) BAECNUERT
Description: This certificate is designed to enhance your knowledge in a major while also adding to your understanding of business strategy in a global market. The required curriculum strengthens skills in critical thinking and problem solving, business judgment and conceptualization of strategic solutions.

Program Requirement: The program consists of at least 24 credit hours of course work distributed between economics and related fields as shown below. Only courses in which a student receives a grade of “C” (2.00) or higher may be used to meet the certificate requirements. Students must meet all pre-requisites and course requirements as listed in the catalog. At least 15 hours must be ASU credit.

Statistics (3 credit hours)

ECN 231 Honors Business Statistics
ECN 221 Business Statistics with a grade of “A-” (3.67) or higher
STP 226 Elements of Statistics with a grade of “A-” (3.67) or higher

Economic Theory (3 credit hours)

ECN 214 Honors Microeconomics
ECN 212 Microeconomics Principles with a grade of “A-” (3.67) or higher
ECN 312 Intermediate Microeconomics

Accounting (3 credit hours)

ACC 261 (ACC 303) Honors Fundamentals of Financial Accounting
ACC 231 (ACC 230) Uses of Accounting Information I with a grade of “A-” (3.67) or higher
ACC 315 Financial Accounting and Reporting
ACC 340 External Reporting I
**Honors Business Core** (6 credit hours)
Completion of at least 6 credit hours of approved 300-level honors business courses for which all prerequisites have been met. Approved courses include:

- ECN 303 Honors Managerial Economics
- FIN 303 Honors Finance
- MKT 303 Honors Marketing Theory and Practice
- MGT 303 Honors Organizational Strategies, Leadership and Behavior
- SCM 303 Honors Global Supply Operations

**Business Modeling and Analysis** (3 credit hours)

- SCM 415 (SCM 494) Business Decision Models

**Honors Directed Study and Creative Project** (6 credit hours)

- WPC 492 Honors Directed Study for Business Modeling
- WPC 493 Honors Creative Project for Business Modeling

*Enrollment Requirements:* The certificate in honors business modeling and analysis is limited to honors students in the W. P. Carey School of Business and honors students majoring in economics in the College of Liberal Arts and Sciences. Students must submit an application for admission. Please contact the department for more information and see [http://wpcarey.asu.edu/undergraduate/business‐degrees/honors‐modeling‐analysis.cfm](http://wpcarey.asu.edu/undergraduate/business‐degrees/honors‐modeling‐analysis.cfm).

*Contact Information:*
Department of Economics
http://wpcarey.asu.edu
wpcareyug@asu.edu
BA 109
480/965-4227

**Human Rights (Certificate) LAHRTSCERT**
*Description:* The certificate in human rights offers a model for educating and training ASU undergraduate students through socially embedded, transdisciplinary dialogue, research and practice. Course work in the social sciences, law and the humanities will prepare students to critically examine societal problems and to design culturally congruent and contextually specific solutions to human rights dilemmas in such areas as health, education, violence against women, child welfare, the environment, water and energy resources, and economic development. Human rights is a powerful framework that extends beyond political and civil rights to encompass social, cultural and economic rights including, for example, women's rights, indigenous rights, labor rights and rights discourse has been invoked to combat race-, gender- and class-based forms of discrimination.
The 18-credit-hour curriculum balances foundations and principles of human rights (theories, laws, institutions and norms) and their application in relation to specific domestic and international issues. The certificate program also will strengthen students' respect for fundamental freedoms and rights and promote cultural understanding, tolerance and civic engagement. It provides students with historical, legal and philosophical perspectives from which to think broadly and critically about human rights issues, and introduces students to social science and policy research on rights, conflict and governance; to human rights conventions, laws and treaties; and to the institutions that seek to uphold these agreements (e.g., international tribunals, nongovernment organizations, etc.). The goal is to provide students with the guidance, background and skills needed to work within those professions most closely aligned with human rights, including some aspects of law, nongovernment organizations and other nonprofits and policy development.

Geographically, ASU is an ideal location for an undergraduate human rights certificate. Situated in the Sonoran Desert, Arizona will increasingly face human rights issues related to environmental degradation (e.g., access to water and energy resources). Close proximity to Mexico also guarantees that human rights issues related to immigration will continue to dominate political discourse and policy decisions in Arizona for the foreseeable future. Similarly, with 21 American Indian tribes and nations in Arizona alone, indigenous rights will remain a central concern for residents of the Southwest. Undergraduate students engaged in a human rights dialogue will be well situated to develop appropriate models for improving conditions within local communities and to critically assess such frameworks locally and globally.

The certificate is not a substitute for degree requirements in any majors, including justice studies, but rather the course work is intended to supplement the student’s chosen major by adding a human rights dimension and focus.

**Program Requirement:** Students must complete 18 hours of qualifying course work, at least 12 hours of which must be from ASU. A minimum grade of "C" is required for a course to count towards the certificate. The same course may be used to satisfy multiple graduation requirements.

**Required Certificate Core Courses:**

1. Global Politics of Human Rights (3)
   Students must select one of the following courses:
   
   POL 494 International Human Rights
   JUS 352 The Global Politics of Human Rights

2. Human Rights Institutions and Organizations (3)
   Students must select one from the following options:
   
   POS 465 International Organization and Law
   SGS 394 International Institutions and Global Governance
3. Interdisciplinary Component (9)
Students must select three electives on current issues in human rights. Courses must be taken from at least two of the substantive areas listed below, and from two or more academic units. Any course listed below may count towards this requirement, as well as other courses as approved by the certificate program director. (Note: Some course numbers are changing; new numbers are listed within parentheses.)

**States and Conflict**
- HST 370 Eastern Europe in Transition
- HST 436 The Soviet Experiment
- JUS 394 (JUS 374) Holocaust, Genocide and Human Rights
- JUS 469 Political Deviance and the Law
- JUS 479 Law and Disputing
- JUS 467 Terrorism, War and Justice
- JUS 494 Justice in Times of Transition
- JUS 494 (JUS 452) Justice Issues in Israel/Palestine
- POS 369 War, Politics and Society
- POS 465 International Organizations and Law
- POS 368 Ethics and Human Rights in Global Politics
- REL 388 Religion, Ethics, and International Affairs
- REL 486 Holocaust in Film

**Social Stratification and Human Rights**
- AFH 305 The Global History of the Trans-Atlantic Slave Trade
- AFH 327 Human Rights in Africa
- AFS 494/WGS 598 Women's International Human Rights
- APA 394 Inequality and Diversity in Education
- APA 394 Asian Pacific American Immigration and Social Justice
- JUS 321 Wealth Distribution and Poverty
- JUS 325 Globalization and Socio-Economic Justice
- JUS 405 Economic Justice
- JUS 415 Gender and International Development
- JUS 477 Youth and Justice
- PHI 309 Social and Political Philosophy
- WST 394 Women and International Health

**Marginalization and Human Rights**
- AFS 301 Race and Racism in the African Diaspora
- AFS 304 Islands of Globalization
- AFS 394 (AFS 320) Race, Ethnicity and Politics in the African Diaspora
- APA 330 Asian Pacific American Genders and Sexualities
- APA 360 The Asian Pacific American Experience
- ASB/SBS/SOC/POL 339 Introduction to Social Movements
- JUS 430 Social Protest, Conflict and Change
- JUS 469 Political Deviance and the Law
JUS/REL 494 (JUS/REL 483) Religion, Violence and Conflict Resolution
POS 480 Global Justice
SGS 343 Religion, Nationalism and Ethnic Conflict
SOC 445 Globalization, Development and Resistance
WGS 410 Poverty, Social Justice and Global Health
WGS 498 Gender, Religion and Global Violence

4. Experiential Learning Component (3)
A central element of this certificate program will be the linkage of learning and doing by connecting theoretical and substantive learning about human rights with practical knowledge about the workings of organizations and institutions seeking to address human rights violations. To better connect classroom learning with practical experience, students will be required to participate in either a for-credit internship with a human rights organization in the U.S. or abroad or a Research Experience with Undergraduates (REU) under the supervision of a human rights faculty member (honors thesis may substitute). A written component to the internship or REU is required.

Students pursuing the certificate will also be invited (and expected) to attend events such as conferences, speaker series, etc. offered by affiliated departments, schools and centers.

Enrollment Requirements: Students who have attained junior standing (56 credit hours) in any undergraduate degree program in any field at ASU are eligible for admission to the certificate in human rights. There are no formal admissions procedures to begin certificate course work, but students should contact the certificate in human rights program director or an advisor as soon as they decide to begin pursuing the certificate. They should initiate this correspondence with a message containing their name, e-mail address, major, year of study and anticipated graduation date, as well as a general statement of interest.

In addition to the undergraduate advisors in the School of Justice and Social Inquiry, students will receive advising assistance from the certificate director or a member of the certificate program committee in developing a plan that will ensure successful completion of certificate requirements. To facilitate this process, each participating unit has a representative on the program committee. Students are responsible for consulting with an advisor in the School of Justice and Social Inquiry prior to graduation to request that the certificate be recorded on their transcripts.

Contact Information:
School of Social Transformation
http://sjsi.clas.asu.edu/
justiceinfo@asu.edu
WILSN 125
480/965-7682
Informatics (certificate) ESCPICERT

*Description:* The certificate in informatics will train students to use computer technology to gather, synthesize, store, visualize and interpret information. These skills are critical to a broad range of disciplines. This certificate is available to students in non-computing majors and will provide them with an understanding of the capabilities and technologies of informatics as it applies to domain specific problems in their field of study. Graduates should be in high demand within the software industry, but also in government, education, science, medicine, and other fields that make use of computer technology. The applied and user-oriented focus of the degree will make these graduates attractive to such employers.

*Program Requirement:* This program requires 21 total hours of course work. Students will take 15 hours of required courses and will choose six hours of elective course work.

*Enrollment Requirements:* The undergraduate certificate in informatics is available to students in noncomputing majors who are in good standing at ASU and may be used by B.I.S. students as part of their degree program.

*Contact Information:*
Computing and Informatics Program
http://sci.asu.edu
sci.advising@asu.edu
BYENG 208
480/965-3199

International Business (certificate) BAIBSCERT

*Description:* Students can expand their horizons and opportunities by learning about the global economy. The certificate is designed to:

- Provide an understanding of international business environments, principles and operations.
- Provide an awareness of global social processes.
- Develop sensitivity to foreign cultures.
- Develop competence in a foreign language.

Students seeking the certificate are strongly encouraged to obtain some international experience through study in a foreign country. The W. P. Carey School has partnerships with universities in Europe, Asia and Latin America so you can experience new cultures, visit new places and build intercultural and language skills. International internships also are offered in conjunction with the ASU Study Abroad Office.

*Program Requirement:* This certificate program requires a minimum of 18 credit hours.
At least nine credit hours of approved courses in international business are required. The upper-division courses specified for the certificate will be restricted to students with 56 earned credit hours, a minimum 2.50 ASU cumulative GPA and course prerequisite requirements met. Students must take either MGT 302 Principles of International Business or ECN 306 Survey of International Economics. Other international business courses from which the remaining hours are selected include:

- ECN 306 Survey of International Economics, SB, G* (3)
- ECN 331 Alternative Economics Systems, SB, G* (3)
- ECN 360 Economic Development, SB, G* (3)
- ECN 365 Economics of Russia and Eastern Europe, SB, G* (3)
- ECN 436 International Trade Theory, SB, G* (3)
- ECN 438 International Monetary Economics, SB, G* (3)
- FIN 456 International Financial Management, G* (3)
- MGT 302 Principles of International Business, G* (3)
- MGT 400 Cultural Factors in International Business*, C, G (3)
- MGT 459 International Management*, G (3)
- MKT 360 Seminar in International Business (3)
- MKT 425 International Marketing (3)
- SCM 463 Global Supply Chain Management (3)

*W. P. Carey School of Business students may not use this course to fulfill the 60 credit hours in school general education degree requirements.

At least 9 credit hours of nonbusiness global awareness hours are required. Any university-designated nonbusiness global awareness ("G") courses will meet this requirement.

To encourage participation in an international study experience, the nonbusiness global awareness hours may be satisfied by participating on an ASU or W. P. Carey School of Business education abroad program for one semester, which waives all 9 credit hours of nonbusiness global requirements. Participation on an ASU or W. P. Carey School of Business study tour or program of at least six weeks in duration waives 6 of the 9 credit hours of nonbusiness global requirements.

**Enrollment Requirements:** Students need to complete an application, which is available online or in BA 109. Please contact the department for more information and see http://wpcarey.asu.edu/undergraduate/current-students/academics/international-certificate.cfm

**Contact Information:**
Dean, W.P. Carey School of Business
http://wpcarey.asu.edu/
BA 109
International Studies (certificate) LAINSCERT

Description: The international studies certificate is designed to prepare students for careers in government agencies, international governmental and nongovernmental organizations, multinational firms and banks and for graduate studies in international relations or political science. The certificate is not a substitute for degree requirements in any subject, including political science; rather, the required courses add an international and comparative dimension to the student’s chosen major.

Program Requirement: Requirements for the certificate are intended to provide an understanding of international relations and comparative government, an awareness of global, social and political-economic processes and sensitivity to foreign political systems and cultures. These objectives are met by a sequence of political science courses in the areas of international relations, comparative politics and area studies. Students majoring in any subject at the university may be awarded the international studies certificate upon completion of the following 15 credit hours of political science courses.

Choose one from the courses below:

   POS 150 Comparative Government, SB, G (3)
   POS 160 Global Politics, SB, G (3)

Choose one from the courses below:

   POS 361 American Foreign Policy SB, G (3)
   POS 364 National Security, Intelligence and Terrorism SB (3)

Choose two from the courses below:

   POS 300 Contemporary Controversies in Global Politics, SB, G (3)
   POS 368 Ethics and Human Rights
   POS 465 International Organization and Law, SB, G (3)
   POS 467 International Security, SB, G (3)
   POS 486 International Political Economy, SB, G (3)

Choose one from the courses below:

   POS 350 Comparative Politics, SB, G (3)
   POS 355 Russia and Successor States, SB, G (3)
   POS 356 European Union, SB, G (3)
   POS 357 South Asia Politics, SB, G (3)
   POS 358 Southeast Asia, SB, G (3)
   POS 359 African Politics and Society, SB, G (3)
   POS 360 World Politics, SB, G (3)
Certificate students must have a minimum GPA of “C” (2.00); only courses in which students have a grade of “C” (2.00) or higher count toward the certificate.

Enrollment Requirements: Any student admitted to study at ASU may complete a certificate. To apply to the university, please complete the Office of Admissions online application. Please contact the School of Government, Politics and Global Studies for more information:

Contact Information:
School of Government, Politics and Global Studies
http://www.asu.edu/clas/polisci
COOR 6797
480/965-8563

Islamic Studies (certificate) LAISLCERT
Description: Students admitted to undergraduate degree programs in any field are eligible for the Islamic studies certificate program. Students who complete all the requirements of their major, their college and the certificate program receive the certificate plus transcript recognition of their particular emphasis. The certificate program is designed to prepare students for graduate programs in religious studies, Islamic studies and area studies or for any academic discipline (such as professional programs in international law and business) that focuses on global Muslim society.

Program Requirement: Students must complete a minimum total of 26 credit hours, chosen in consultation with the Islamic studies program coordinator. A minimum grade of “C” (2.00) is required in each course. To earn the certificate, students must complete these requirements:

5. Eight credit hours of Arabic, Indonesian or another language approved by the program coordinator; students who are native speakers of these languages or who otherwise have equivalent knowledge substitute two additional courses approved by the program coordinator.
7. Three credit hours taken from REL 394 or REL 460 Studies in Islamic Religion.
8. Six credit hours drawn from an approved list of courses in Arabic, anthropology, French, geography, history, religious studies, Spanish or from other courses approved by the program coordinator.

Enrollment Requirements: Any student admitted to study at ASU may complete a certificate. To apply to the university, please complete the Office of Admissions online application. Please contact the School of Historical and Critical Inquiry for more information.

Contact Information:
School of Historical and Critical Inquiry
http://www.asu.edu/clas/religious_studies/
religious_studies.advising@asu.edu
ECA 377
480/965-0642

Jewish Studies (certificate) LAJUDCERT

Description: The Jewish studies program is designed with the following goals in mind: to examine the history and culture of the Jews, to provide a model for interdisciplinary teaching and research, to generate and facilitate research on Judaica, to provide the community with programs, courses, and research furthering the understanding of Judaica, and to stand as an example of the university's commitment to a program of meaningful ethnic studies on a firm academic base.

Program Requirement: To complete the certificate in Jewish studies, a student must successfully complete seven approved courses in Jewish studies with a grade no lower than a "C" (2.00) in any course. Students should declare themselves as Jewish studies candidates as early as possible in their program of study, and accomplish the following prior to graduation:

1. Formal declaration of intent through the submission of the Certificate in Jewish Studies Application.
2. Completion of at least seven courses in Jewish Studies, including two semesters of Hebrew language or equivalent approved courses.
3. One course in three of the following five areas:
   - History.
   - Humanities.
   - Literature.
   - Religious studies.
   - Social studies.
4. Two courses of the student’s choice in any Jewish studies related subject.

Petition for receipt of the certificate by notifying the Jewish studies office upon completion of courses.
**Enrollment Requirements:** Please contact the department for more information at http://jewishstudies.clas.asu.edu/certificate.

**Contact Information:**
Dean, College of Liberal Arts and Sciences
http://jewishstudies.clas.asu.edu/
Jewish-Studies@asu.edu
COOR 4465
480/727-6906

**Latin American Studies (certificate) LALASCERT**

**Description:** The Latin American studies certificate program is designed to give students an understanding of culture, economies, political structures and the history of Latin American nations. The departments of economics, geographical sciences, history and political science, the School of Human Evolution and Social Change, the School of International Letters and Cultures (Spanish and Portuguese) and transborder Chicana/o and Latina/o studies offer courses that combine in the interdisciplinary certificate.

**Program Requirement:**

- Students must complete 30 credit hours of upper-division courses from the above departments/colleges with a concentration in Latin America, 15 credit hours in the major subject and 15 credit hours in other disciplines.
- The certificate requires Spanish or Portuguese proficiency through the 313 level of conversation and composition.
- Only language courses above 313 in literature and civilization count toward a major or interdisciplinary areas of preparation.
- Spanish and Portuguese courses above 313 in grammar and phonology do not count toward the major requirements. Students should meet with the certificate advisor regarding course questions.

**Enrollment Requirements:** Any student admitted to study at ASU may complete a certificate. To apply to the university, please complete the Office of Admissions online application. For more information, contact the School of International Letters and Cultures. Please see the school’s Web page for more information.

**Contact Information:**
Dean, College of Liberal Arts and Sciences
http://silc.asu.edu/undergraduate/certificates
silc@asu.edu
LL 440
480/965-6281
Leadership and Ethics (certificate) PPLDECERT

Description: The certificate in leadership and ethics is designed for undergraduate students who are interested in developing leadership skills or wish to enhance their degree in an existing major at ASU, working adults who may wish to further their education yet may not be looking for a degree program, or B.I.S. students who seek to combine certificates with their degree.

The certificate program provides a catalyst for students to become ethical leaders of organizational and community change. This certificate is designed to:

1. Prepare individuals for positions of leadership and responsibility in the university, student organizations, in their communities and throughout their careers in business, government and society.
2. Explore the relationship between leadership and the capacity for individuals to assume responsibility for their actions and to act with a sense of ethics and integrity.
3. Focus on understanding the broad interdisciplinary field of leadership and its application to various elements of society and community.

Program Requirement: The certificate in leadership and ethics consists of 15 credit hours of course work. Students take 12 hours of core classes and three hours of elective courses. The three hours of elective course work may be selected from an approved list of elective classes or upon the recommendation of the department.

All courses applied to the certificate must be completed with a grade of “C” (2.00) or better. The certificate in leadership and ethics requires four core courses, including a leadership capstone experience, and one elective, discipline-based course in leadership or ethics.

Core classes

- PAF 410 Building Leadership Skills (3)
- PAF 411 Leadership and Change (3)
- PHI 394 Ethics and Justice (3)
- PAF 494 Leadership Capstone (3)

All core courses and the leadership capstone must be taken at Arizona State University. Any course substitutions for the certificate are at the discretion of the School of Public Affairs.

Enrollment Requirements: There are different application requirements, depending on your enrollment status with ASU. Students are also encouraged to schedule an appointment with the undergraduate academic adviser in the School of Public Affairs.

Undergraduate Students Currently Enrolled at ASU
Current students interested in earning the certificate must complete a request to
add an undergraduate certificate and return it to the undergraduate academic advisor in the School of Public Affairs at the University Center on the Downtown Phoenix campus. Students may begin taking courses before they formally register for the certificate; however, they are encouraged to complete the paperwork as soon as possible.

Download the request to add an undergraduate certificate at http://spa.asu.edu/new/undergrad/Certificate%20Request%20Form_PPLDECERT.pdf.

**Individuals Not Currently Enrolled at ASU**

Individuals who are not currently enrolled as students at Arizona State University must complete an application to enroll as a nondegree seeking student before they may begin taking courses. For information on admissions and to complete an application, visit the university’s nondegree student admissions page at http://students.asu.edu/non-degree-student-admission.

Once students have been admitted, they are eligible to enroll in courses to complete the certificate program.

**Contact Information:**

School of Public Affairs
http://spa.asu.edu/new/undergrad/leadership&ethics.htm
spa@asu.edu
UCENT 400
602/496-0450

**Lesbian, Gay, Bisexual, and Transgender Studies (certificate) PPLGBTCERT**

*Description:* The undergraduate certificate in lesbian, gay, bisexual and transgender studies is offered by the Committee on Lesbian, Gay, Bisexual, and Transgender Studies, administered through the College of Public Programs. Advising is provided through University College. Lesbians, gay men, bisexuals and transgendered (LGBT) people play important roles as colleagues, clients, parents, children, siblings, neighbors, employees, employers, religious leaders and friends. Given the increasing visibility and changing political climate for LGBT people in the United States, all students—not only those who identify themselves as gay, lesbian, bisexual or transgender—are served well by learning about the histories, communities and contemporary social issues regarding people from LGBT backgrounds.

The educational experience is enhanced when students are introduced to complex intersections between and among sexual, racial, ethnic, religious, geographic and national identities. The philosophy of this certificate program is to promote intellectual and pedagogical diversity as one of the university’s greatest assets, in part by instilling in students sensitivity to cultures different from their own, but also...
through careful analysis of the self in historical, artistic and sociocultural contexts. The goals of the certificate program are to give students:

1. Knowledge about specific lesbian, gay, bisexual and transgendered communities.
2. Knowledge about the history and maintenance of the category, lesbians and gay men.
3. Theoretical perspectives on heterosexuality as a presumptive sexual identity.
4. An understanding of lesbian, gay, bisexual and transgender studies as an academic area of inquiry.
5. An understanding of community politics, dynamics and conflicts.
6. Use-inspired education that culminates in a public presentation.
7. Practical experience in utilizing coursework knowledge in the community through an internship or community service project.

Program Requirement: The certificate requires 15 credit hours; a minimum of 12 must be upper division. The two required courses are “Introduction to Lesbian, Gay, Bisexual, and Transgender Studies” and the capstone experience. The remaining nine hours are electives from an approved list.

Enrollment Requirements: Please contact University College or visit the college’s Web site for more information.

Contact Information:
College of Public Programs
http://uc.asu.edu/LGBT
UCENT 600
480/965-4464

Literature, Writing and Film (certificate) LAMRSCERT
Description: The literature, writing and film certificate offers students the opportunity to develop their skills in professional, academic and imaginative writing, as well as their interpretation of literary and non-literary texts and critical thinking. The focus of the program is on effective writing, critical thinking and sophisticated reading of literary and non-literary texts. The program stresses cultural and information literacy. It encourages the study of texts in their cultural context and stresses the role of media and technology in the reading process. The philosophy of the program is that students should be offered an experience that integrates formal course work, independent and varied research, internships and service opportunities. The program goal is to prepare independent and effective scholars and professionals who can transition seamlessly into careers in writing and teaching and who are well prepared for graduate or further professional study.

Program Requirement: The certificate in literature, writing and film consists of 15-18 credit hours: nine credit hours of focus-area courses in their chosen track and six to nine credit hours of electives.
**Enrollment Requirements:** Contact advisors in the School of Letters and Sciences for admission to the certificate program. See http://sls.asu.edu/humpoly/lwf/advising.html.

**Contact Information:**
School of Letters and Sciences
SANCA 233
hua@asu.edu
480/727-1526

**Medieval and Renaissance Studies (certificate) LAMRSCERT**

**Description:** An undergraduate certificate in medieval and renaissance studies is offered by the Arizona Center for Medieval and Renaissance Studies (ACMRS). In order to reflect the interdisciplinary nature of the field, the ACMRS has established a certificate program for undergraduate students in medieval and renaissance studies to reflect the interdisciplinary nature of the field.

The program provides students the opportunity to take classes from several disciplines, and to receive training in both Latin, the international language of the periods, and paleography, the study of the physical medium through which Latin and other languages were transmitted. Obtaining the certificate prepares undergraduate students for advanced study, and it augments the skills and knowledge necessary for graduates to succeed in academic positions in their field.

**Program Requirement:** In addition to the course work and examinations required in a student’s major field of interest, the following minimum requirements must be fulfilled to earn the certificate:

1. Six credit hours of classical Latin and six credit hours of Latin (classical and/or medieval) or of a vernacular language of the period (e.g., Old English, Old Norse, Old French, Renaissance Italian).
2. Six credit hours of course work in medieval and renaissance studies outside the major discipline.

Students must also complete a thesis writing within the major on a topic concerning the middle ages or renaissance. Student may earn three credit hours of independent study for the thesis. The thesis may be used to fulfill the honors college thesis requirement for students enrolled in the Barrett, the Honors College and a minimum of a “C” (2.00) average in all course work leading to the certificate.

**Enrollment Requirements:** Any student admitted to study at ASU may complete a certificate. To apply to the university, please complete the Office of Admissions online application. Please contact the center for more information: http://www.asu.edu/clas/acmrs/web_pages/academic_programs/ac_pro_certificates.html.

**Contact Information:**
Dean, College of Liberal Arts and Sciences
Multimedia Writing and Technical Communication (certificate) ECTWCCERT

Description: Through the Multimedia Writing and Technical Communication Program, students learn how to produce, design and manage information, using both traditional and developing technologies.

Program Requirement: The undergraduate certificate requires 18 hours. The following courses are required:

- TWC 301 General Principles of Multimedia Writing
- TWC 401 Principles of Technical Communication

Choose one of the following courses:

- TWC 411 Principles of Visual Communication
- TWC 421 Principles of Writing with Technology
- TWC 431 Principles of Technical Editing

Choose three other 400-level TWC courses, of which at least two must be genre or information courses, such as TWC 443 Proposal Writing or TWC 452 Information in the Digital Age.

Enrollment Requirements: Please contact the department for more information: http://techcomm.asu.edu/degrees.shtml.

Contact Information:
School of Letters and Sciences
http://techcomm.asu.edu/degrees.shtml
SAAS@asu.edu
SUTON 301
480/727-5100

Nonprofit Leadership and Management: American Humanities (certificate) PPNPYCERT

Description: The certificate program in nonprofit leadership and management. American humanities provides education and preparation for leadership and management positions in nonprofit youth and human service organizations. The program features professional affiliation with and certification by American Humanities, Inc., the nation’s leader in education for nonprofit careers. American humanities collaborates with a number of nonprofit organizations, including American Red Cross, America’s Second Harvest, AmeriCorps, the ARC, Big Brother

Program Requirement: The program includes active participation by nonprofit professionals who offer workshops, seminars, mentoring and field trips. American humanics national certification can be earned in conjunction with any bachelor’s degree.

Required Courses

- NLM 220 Introduction to Nonprofit Organizations (3)
- NLM 300 Fund Raising and Resource Development (3)
- NLM 310 Volunteer Management (3)
- NLM 320 Professional Development Seminar, which is taken four semesters, for one semester hour each term (4)
- NLM 420 American Humanics Institute (2)
- NLM 430 Managing Nonprofit Organizations (3)
- NLM 463 Senior internship (12)

Enrollment Requirements: Applications are accepted throughout the year. Please see the department Web page for more information at http://www.asu.edu/copp/nonprofit/edu/ah.htm. To apply, contact:

Senior Program Coordinator
American Humanics
School of Community Resources & Development
University Center (mail code: 4020)
411 N. Central Ave., Suite 550
Phoenix, AZ 85004-0690
Phone: 602-496-0550
Fax: 602-496-0953
E-mail: scrd@asu.edu

Contact Information:
School of Community Resources and Development
http://scrd.asu.edu
scrd@asu.edu
UCENT 550
602/496-0550
Philosophy, Politics and Law (certificate) HOPPLCERT

Description: Students enrolled in Barrett, The Honors College may pursue the certificate in philosophy, politics and law. This interdisciplinary program affords an opportunity to engage in a focused program of study that brings analytical rigor to bear on the philosophical issues involved in law and politics.

Program Requirement: The concentration comprises six courses (18 credit hours), two of which are offered through Barrett. One of these courses, normally taken in the student's second year at ASU, is a seminar on law, justice and morality (HON 310). The second course is a junior-senior seminar on theories of justice, or a related topic in philosophy, politics and law, that entails an extended paper (HON 410). The remaining four courses must be approved by the philosophy, politics and law council and selected from courses regularly offered in philosophy, political science and other areas.

Enrollment Requirements: Students must be in good standing with Barrett, The Honors College or be admitted upon nomination by a member of the philosophy, politics and law faculty and approval by the philosophy, politics and law council. Please contact the department for more information.

Contact Information:
The Barrett Honors College
IRISH A121
480/965-4033

Public Administration and Public Management (certificate) PPPAFCERT

Description: The certificate in public administration and public management prepares students for citizenship, leadership and careers in governmental and non-profit agencies. Students will learn the context and principles of public administration and how to apply these in a practitioner setting: the role of the public administrator in the design, implementation and evaluation of public policy; and how to lead change and address ethical issues in public service. It is designed for undergraduate students who are interested in developing leadership skills or wish to enhance their degree in an existing major at ASU, working adults who may wish to further their education yet may not be looking for a degree program, or B.I.S. students who seek to combine certificates with their degree.

The program is designed for students interested in public service who want to learn skills to:

- Deliver and manage public programs.
- Reform welfare.
- Provide public safety.
- Preserve natural resources.
• Improve the quality of life.
• Build and bridge communities.
• Strengthen democratic governance.
• Analyze critical issues.
• Lead change in public policy.

Program Requirement: The certificate in public administration and public management consists of 15 credit hours of course work. Students take 12 hours of core classes and three hours of elective courses. The three hours of elective course work may be selected from an approved list of elective classes, taken upon the recommendation of the department.

Core Courses

- PAF 300 Public Management and Public Administration
- PAF 340 Public Management and Policy
- PAF 420 Public Leadership
- PAF 460 Public Service Ethics

Enrollment Requirements: There are different application requirements, depending on your enrollment status with ASU. Students are also encouraged to schedule an appointment with the undergraduate academic adviser in the School of Public Affairs.

Undergraduate Students Currently Enrolled at ASU
Current students interested in earning the certificate must complete a request to add an undergraduate certificate and return it to the undergraduate academic advisor in the School of Public Affairs at the University Center on the Downtown Phoenix campus. Students may begin taking courses before they formally register for the certificate; however, they are encouraged to complete the paperwork as soon as possible. Download application from http://spa.asu.edu/new/undergrad/Certificate%20Request%20Form_PPAFCERT.pdf.

Individuals Not Currently Enrolled at ASU
Individuals who are not currently enrolled as students at Arizona State University must complete an application to enroll as a nondegree seeking student before they may begin taking courses. For information on admissions and to complete an application, visit the university’s nondegree student admissions page at http://students.asu.edu/non-degree-student-admission.

Once students have been admitted, they are eligible to enroll in courses to complete the certificate program.

Contact Information:
School of Public Affairs
Religion and Conflict (certificate) LARELCERT

Description: The certificate is open to students in any major, and may be of particular interest for students pursuing careers in journalism, law, policy work, diplomacy, the military, public advocacy, publishing, education, ministry or other fields in which an enhanced understanding of religion and conflict is increasingly vital.

Program Requirement: Students must complete 18 credit hours of qualifying course work (at least 12 hours from ASU), consisting of regional, political and cultural components. To ensure that students are exposed to a wide variety of approaches to the study of religion and conflict, an interdisciplinary component requires that at least six of the 18 hours be fulfilled with courses from the humanities and at least three hours from the social sciences. In many cases, the same course can be used to fulfill several component requirements simultaneously.

- Regional component (6 credits): courses in this category provide students specific regional knowledge of how religion has been implicated in human conflict. Required course work in at least two different regions fosters a comparative understanding of the dynamics of religion and conflict in historical and global contexts.
- Political component (3 credits): courses in this category explore how religion influences, or is influenced by, matters of state, law, government or other dimensions of political life.
- Cultural component (3 credits): courses in this category provide students with an understanding of how religion operates as a powerful force that impacts and intersects with expressions of human identity, thought and culture.
- Electives (6 credits): any approved/qualifying course may be used as an elective to fulfill remaining requirements toward the total number of credit hours and to meet the interdisciplinary requirement.

Religion and Conflict Course Offerings

A minimum grade of "C" (2.00) is required for a course to fulfill a certificate requirement. The following regularized courses may be taken to complete certificate requirements. Not all courses are offered each semester. However, each semester some special topics courses (usually designated 394, 494 or 498) may be taken to fulfill certificate requirements as approved by the certificate director.

Regional Component (6 credit hours representing two different regions)
Religion and Europe:
HST 350 Later Middle Ages
HST 352 Europe's Reformation
HST 355 Total War and the Crisis of Modernity
HST 361/REL 374 Witchcraft and Heresy in Europe
REL 377 Religion in Russia
REL 471 Reformation and Modern Christianity

Religion and the Middle East:
ARB 331 Arabic and Islamic Culture/Literature
ARB 341/REL 368 Quran Text and Women
GCU 328 Geography: Middle East/North Africa
HST 372 Modern Middle East

Religion and the United States:
HST 315 American Politics
REL 321 Religion in America
REL 327 American Jews in U.S. Politics
SOC 394/REL 386 America and the Holocaust*

Religion in Africa:
GCU 328 Geography: Middle East/North Africa
POS 359 Faith & Politics in Africa*

Religion in Asia:
HST 352 Chinese Cultural History
REL 357 Theravada Buddhism in South and S.E. Asia
REL 377 Religion in Russia

Political Component (3 credit hours)

HST 315 American Politics
HST 355 Total War and the Crisis of Modernity
HST 372 Modern Middle East
POS 359 Faith and Politics in Africa*
POS 364 National Security/International Terrorism*
REL 327 American Jews in U.S. Politics
REL 364 Islam and World Affairs
REL 379 Religion, Nationalism and Ethnic Conflict
REL 380 Theology of Terror: Bin Laden and others
REL 388 Religion, Ethics and International Politics
SGS 324/REL 480 Religion and Global Politics*

Cultural Component  (3 credit hours)

ARB 331 Arabic & Islamic Culture/Literature
ARB 341/REL 368 Quran Text and Women
FMS 474/REL 313 Anti-Semitism in Modern Times
HST 352 Europe's Reformations
HST 361/REL 374 Witchcraft and Heresy in Europe
HST 452 Chinese Cultural History
POR 497 Afro-Brazilian Maroon Poetry
REL 201 Religion and the Modern World
REL 321 Religion in America
REL 352 Modern Buddhism
REL 357 Theravada Buddhism: South/S.E. Asia
REL 366 Islam in the Modern World
REL 377 Religion in Russia
REL 381 Religion and Moral Issues
REL 392 Religious Encounters in Post-colonial and Globalized Space
REL 461 Different Voices within Contemporary Islamic Discourse
REL 471 Reformation and Modern Christianity
REL 481 Religion and Bioethics
REL 482 Religion, Violence and Conflict resolution
REL 483 Religion and Science
SOC 394/REL 386 America and the Holocaust*
WST 377 Women and Violence*

**Electives** (6 hours)

Remaining credit hours may be filled by taking courses listed above or other courses, including special topic courses, as approved by the certificate director.

Examples of special topics courses taught in the last few years include:

- POS 394/HEB 394 War and Peace in the Middle East*
- REL 394 Religion and the American Presidency
- SGS 394 Violence, Conflict, and Human Rights*
- WST 498 Women, Religion, and Global Violence*

**Interdisciplinary Requirement**

Of the 18 total credits taken to fulfill the certificate, at least three credits from the social sciences (SOC, POS, SGS or WST, noted with an "*" ) and six credits from the humanities (ARB, HST, POR or REL). The interdisciplinary requirement can be met through any course listed above, except GCU 328.

* Denotes social science course.

*Enrollment Requirements:* Any ASU student may pursue the religion and conflict certificate. Please complete the registration form, and e-mail it to the certificate director. Please direct questions about the program to the certificate director.
Russian and East European Studies (certificate) LAREECERT

Description: The certificate in Russian and East European studies encourages students to develop special competency in Russian or East European languages and area studies. Course work leading to the certificate is offered by the departments of agribusiness, anthropology, architecture, economics, geography, history, political science, religious studies, Russian, sociology and women’s studies, but the certificate program is open to all students, regardless of major.

Certificate holders enhance their prospects for study abroad fellowships and graduate admissions, and also qualify for unique entry-level government employment opportunities. Past certificate awardees have moved into positions of leadership in government, academia and the private sector.

Program Requirement: The requirements for the Russian and East European studies certificate comprise:

1. Three years (22 credit hours) of Russian or another Eurasian or East European language.
2. Thirty upper-division credit hours in Russian, East European and Eurasian area-related course work.

At least three disciplines must be represented in the area-related course work, and at least 12 credit hours must be outside the School of International Letters and Cultures (i.e., non-RUS and non-FLA courses). Fulfillment of these requirements is certified by the Russian and East European Studies Center and is recognized on the transcript as a certificate in Russian and East European studies. The purpose of this undergraduate certificate program is to encourage students majoring in a chosen discipline to develop special competency in Russian or East European language and area studies. A student with a major in any department may pursue this certificate.

Enrollment Requirements: Any student admitted to study at ASU may pursue a certificate program. In order to apply to study at ASU, complete the Office of Admission online application. Please contact the Melikian Center for more information.

Contact Information:
Dean, College of Liberal Arts and Sciences
http://melikian.asu.edu/
melikiancenter@asu.edu
COOR 4455
480/965-4188
Small Business and Entrepreneurship (certificate) BASMBCERT

Description: Students learn how to launch their own business or work with small or startup operations. Courses include small business and entrepreneurship and business plan development. Classroom work is complemented by frequent interaction with successful founders and leaders of entrepreneurial ventures.

Program Requirement: This certificate in small business and entrepreneurship is available only to business majors at ASU. The certificate requires 15 credit hours of classes, including the following six credit hours:

- MGT 440 Small Business and Entrepreneurship (3)
- MGT 445 Business Plan Development (3)

The remaining nine credit hours consist of three additional upper-division courses relevant to small business. A copy of the approved electives for business majors pursuing the certificate in small business and entrepreneurship is available in the undergraduate programs office, BA 109. To receive the certificate, students must complete the specified business courses with a grade of “C” (2.00) or higher.

Enrollment Requirements: Please contact the department for more information.

Contact Information:
Dean, W.P. Carey School of Business
https://wpcarey.asu.edu
wpcareyug@asu.edu
BA 109
480/965-4227

Southeast Asian Studies (certificate) LASALCERT

Description: The certificate in Southeast Asian studies can supplement a bachelor’s degree, demonstrating knowledge of a Southeast Asian language and knowledge of Southeast Asian history, art, culture and society.

This certificate prepares students for admission to graduate programs in Southeast Asian-area studies or in an academic discipline with a focus on Southeast Asia, or for professional programs in international law or business.

Recent graduates have gone on to enter medical school, M.B.A. programs and doctoral programs. An earned certificate will appear on student transcripts as a Southeast Asian studies emphasis.

Program Requirement: A certificate in Southeast Asian studies is available to any undergraduate student. The certificate program requires a simultaneous two-year sequence in a Southeast Asian language (Indonesian, Thai or Vietnamese) and 18 credit hours, including the courses listed below. The curriculum includes:
ASB/GCU/HST/POS/REL 240 Introduction to Southeast Asia
ASB 325 Peoples of Southeast Asia
HST 391 Modern Southeast Asia

Two electives, selected from an approved course list.

Enrollment Requirements: There are no specific admission requirements other than a student's desire to learn about Southeast Asia. A minimum grade of “C” (2.00) is required for each course that is used to fulfill the certificate requirements. Please contact the department for more information:

Contact Information:
Dean, College of Liberal Arts and Sciences
http://www.asu.edu/clas/asiatic/
car@asu.edu
COOR 6th
480/965-7184

Spa Management (certificate) ECEXWCERT
Description: The certificate in spa management was designed and implemented in response to a rapidly growing spa industry, which has identified a real need for more directors, assistant directors and supervisors, and for management candidates with formal education and training in spa administration.

Program Requirement: The spa management certificate program is a nondegree, 34-credit-hour program designed to prepare students for careers in spa administration. The required courses meet a comprehensive list of core competencies identified by the spa industry and an advisory committee of spa directors. This certificate is recognized by the International Spa Association, and it significantly enhances a graduate’s opportunity for placement and advancement within the industry.

The following are required courses, with a total of 34 credit hours:

- BUA 381 Small Business Accounting and Finance (3)
- BUA 382 Small Business Sales and Market Development (3)
- BUA 383 Small Business Working Relationships (3)
- EXW 325 Fitness for Life (3)
- EXW 400 Stress Management for Wellness (3)
- EXW 484 Exercise and Wellness Internship (6)
- EXW 498 Pro Seminar: Spa Management I (2)
- HHS 300 Overview of Complementary Health Systems (3)
- NTR 345 Development of Healthy Cuisines (3)
- OMT 494 Organizational Leadership (3)
- WED 165 Overview of Massage Therapy* (2)
*This course is offered through Chandler-Gilbert Community College. Students must receive a grade of “C” (2.00) or higher in every course to earn the certificate. Any course in which a student fails to earn a “C” (2.00) or higher must be repeated.

Enrollment Requirements: Admission to the spa management certificate program is limited. Each applicant is evaluated based on a rubric that includes:

1. Years of higher education completed and cumulative GPA.
2. Experience in the spa industry or a wellness-related field.
3. Resume.
4. Three references.
5. Letter of intent.

Please contact the department for more information at http://www.poly.asu.edu/saas/wellness/spa/.

Contact Information:
College of Nursing & Health Innovation
http://www.poly.asu.edu/saas/wellness
wellness@asu.edu
EAW 109
480/727-1945

Special Events Management (certificate) HSRTMUERT
Description: The special events management certificate is a career enhancement program offered to nondegree-seeking students or those who already have a degree from an accredited university in any major, or students currently pursuing a bachelor's degree in any major.

Program Requirement: The certificate requires a total of 21 credit hours, 15 credit hours of required core courses and six credits of electives. Courses taken as part of a university major may count towards both that degree and the certificate. To earn the certificate, students must complete all course work in the certificate with a minimum grade of "C" (2.00) or higher. An application to the program is required.

Required Core Courses, for a total of 15 credits:

- RTM 486 Special Event Management (3)*
- RTM 303 Programming Recreation and Tourism Services (3) or RTM 320 Talent and Entertainment Concepts (1)
- RTM 321 Event Protocol, Ethics and Etiquette (1)
- RTM 322 Special Event Programming (1)
- RTM 323 Special Event On-Site Operations (1)
- RTM 324 Festival Site Design (1)
- RTM 325 Working with Subcontractors and Vendors (1)
- RTM 326 Sponsorship (1)
- RTM 327 Creative Event Revenue Production (1)
RTM 328 Accounting for Special Events (1)
RTM 388 Business Practices for Special Events Management (3)

Electives, for a total of six credits:

RTM 373 Leisure, Travel and Tourism (3)
RTM 345 Meeting and Convention Planning (3)
RTM 404 Marketing Recreation and Tourism (3)
RTM 451 Grant Writing for Human Service Professionals (3)
RTM 453 Volunteer Management in Human Service Organizations (3)
RTM 475 Entrepreneurial Recreation and Tourism (3)
RTM 487 Special Events Advanced (3)

*RTM 486 must be taken prior to any other RTM core courses except 303.

Enrollment Requirements: Please contact the department for more information.

Contact Information:
School of Community Resources and Development
http://scrd.asu.edu/
UCENT 500
scrd@asu.edu
602/496-0550

Symbolic Systems (certificate) LAPHICERT
Description: The School of Historical and Critical Inquiry offers a certificate in symbolic systems. The certificate program takes an interdisciplinary approach to cognition, computation and meaning.

Course work is divided evenly between philosophy, psychology and computer science in order to expose students to the subject matter from a conceptual, empirical and practical point of view.

The certificate may interest students with majors in any of the three disciplines, or students who wish to add breadth to their degree through work in other disciplines, on topics of common interest.

Program Requirement: The certificate in symbolic systems consists of 28 credit hours approved by an advisor in the Department of Philosophy and divided evenly between computer science and engineering, psychology and philosophy as follows:

- CSE 200, 210 and 240
- PSY 230 and 290 and either PSY 323, 324 or 437
- One of either PHI 319 or 333
- Either PHI 315 or 317
- Either PHI 312 or 314
Students must satisfy the prerequisites for the listed courses. With written approval from the director of undergraduates studies in the school, one substitution course from outside this list may be allowed.

All courses must be passed with a minimum grade of “C” (2.00).

*Enrollment Requirements*: Any student admitted to study at ASU may complete a certificate. To apply to the university, please complete the Office of Admissions online application. Please contact the department for more information.

*Contact Information:*
School of Historical and Critical Inquiry
http://www.asu.edu/clas/philosophy/
philosophy@asu.edu
COOR 3309
480/965-3394

**Technology Entrepreneurship (certificate) ESTNECERT**

*Description*: Engineers and scientists around the globe launch high-tech companies to move their ideas to the market. Studies show that the majority of innovative products and services in the economy evolve from entrepreneurial ventures. By providing knowledge and skills important to the creation and leadership of such startups, the certificate program in technology entrepreneurship aims to train the founders and leaders of tomorrow’s high-tech ventures. The certificate program is designed specifically for engineers. Courses are approached from the perspective of the student whose primary interest is in technological innovation, whose primary concentration is engineering and who has little or no prior business education.

*Program Requirement*: This 15-credit-hour certificate program is limited to students in the Ira A. Fulton School of Engineering and is designed to help technically oriented students analyze, launch and operate an entrepreneurial venture. The certificate program in technology entrepreneurship requires that students enroll in and complete five courses. Admission to the cohort portion of the certificate program can only occur after successful completion of the introduction course, FSE 301 Entrepreneurship for Engineers (prerequisite: junior standing in a bachelor’s program in the Ira A. Fulton School of Engineering). Once admitted to the certificate program, students must also successfully complete the remaining certificate courses:

- FSE 400 Creating and Launching a Technology Venture
- FSE 401 Intellectual Property for a Technology Venture
- FSE 402 Operating a Technology Venture
- FSE 403 Entrepreneurship Practicum

*Enrollment Requirements*: The qualifications for admission to the certificate in technology entrepreneurship program are having junior standing in a bachelor’s
program in the Ira A. Fulton School of Engineering (Engineering) and successful completing the selection interview process.

The selection interview process consists of two parts:

1. A letter of intent written by the student to the selection committee.
2. A live interview with the selection committee, which consists of at least one faculty member, one entrepreneurship program advisory board member and one member of the regular engineering faculty.

Each selection interview is conducted according to a fixed format, with each certificate program candidate having the opportunity to respond to the same set of questions. Please contact the department for more information: http://www.fulton.asu.edu/fulton/school/entrepreneurship/epobusiness.php.

Contact Information:
Dean, Ira A. Fulton School of Engineering
http://www.fulton.asu.edu/entrepreneurship/
info.entrepreneur@asu.edu
BYENG 669
480/965-2825

Translation (certificate) LASPACERT
Description: The translation certificate program is designed to provide:

1. Advanced training required for professional translation in both public and private sectors.
2. Preparation for the rigorous examinations required by national and international agencies.
3. Training as an ancillary skill for professional fields, such as international business, public health, medicine and law, in accordance with guidelines recommended by the American Translators Association.

Program Requirement: The certificate program consists of the following requirements:

Prerequisites
SLC 400 Linguistics, SB (3) or SPA 400 Introduction to Spanish Linguistics (3) or equivalent SPA 412 Advanced Conversation and Composition, G (3)

Required
1. SLC 401 Translation Theory and Practice (3)
2. In-service practicum, SLC 484 Internship (2)
Also required are nine hours of applied translation electives in specialized areas chosen from the following courses:

- SLC 481 Technical and Scientific Translation (3)
- SLC 482 Business and Financial Translation (3)
- SLC 483 Medical and Legal Translation (3)
- SLC 485 Problems of Literary Translation (3)

Enrollment Requirements: Since entrance to professional translation is through work, cultural experience and examination, the entrance requirements to this certificate program are:

1. A written proficiency examination in the source and the receptor languages at the level of completion of an advanced composition course in Spanish (SPA 412) and English (ENG 301).
2. Extensive work experience using Spanish and English, or demonstrated bilingual writing competence in English and Spanish.

Please contact the school for more information.

Contact Information:
School of International Letters and Cultures
http://silc.asu.edu/undergraduate/certificates
silc@asu.edu
LL 440
480/965-6281

Women and Gender Studies (certificate) LAWSTCERC
Description: Women and gender studies, in the School of Social Transformation provides students with an intensive interdisciplinary liberal arts education that enables them to write well, think critically and analyze problems effectively. The certificate program is equivalent to an interdisciplinary minor.

Program Requirement: The certificate program consists of 18 credit hours, 12 of which must be upper-division courses. Students pursuing a certificate in women and gender studies must consult with the women and gender studies advisor to select appropriate courses and fulfill requirements. A certificate of concentration in women and gender studies is awarded for the successful completion of WST 100 (or WST 300) and WST 377, or WST 378 and an additional 12 credit hours from the list of approved women and gender studies courses.

Enrollment Requirements: Any student admitted to study at ASU may complete a certificate. To apply to the university, please complete the Office of Admissions online application. Please contact the women and gender academic specialist in the school for more information.
Women's Studies (certificate) ASWSTCERT

Description: The certificate in women's studies within the New College of Interdisciplinary Arts and Sciences is an interdisciplinary program emphasizing intersectional approaches to the study of gender, race, class, ethnicity and sexuality in national and transnational contexts. The women's studies certificate is recommended for graduate students, nondegree students and students majoring in professional programs.

Program Requirement: The women's studies certificate consists of 18 credit hours of course work.

Students are required to choose three courses (nine credit hours) from the following core: WST 100 or WST 300; WST 350, WST 376, WST 457 or WST 498. Additionally, students are required to a select total of nine credit hours from courses in the following areas:

- Global perspectives.
- Representation and culture studies.
- Gender studies.
- Applied women's studies.

Core Requirements:

WST 100 Women and Society, SB, C (3) or WST 300 Women in Contemporary Society, SB, C (3)

Choose two of the following courses, six credits:

- WST 350 Race, Class and Gender, SB, C (3)
- WST 376 Feminist Theory, L, C (3)
- WST 457 Women, Cultures and Societies, SB, G (3)
- WST 498 PS: Theory and Method in Women’s Studies, L (3)

Additional Requirements, nine credits:

Select nine credit hours from three of the four following areas:

Global Perspectives Courses:
WST 330 Women on the Borderlands (3)
WST 390 Women and World Religions, L/SB, G (3)
WST 475 Women of the Diaspora Across Cultures, HU, G (3)
WST 483 Women writers Across Cultures, HU, G (3)
WST 487 Gender and International Development, SB, G (3)

**Representation and Culture Studies Courses**

WST 320 Women in Popular Culture, HU, C (3)
WST 370 Chronicling Women’s Lives, HU, C (3)
WST 431 Women and Film, L, G (3)
WST 467 Ethnic Women Writers, L/HU, C (3)
WST 473 Latina/Chicana Representation, SB, C

**Gender Studies Courses**

WST 276 Feminist foundations: Going to the Sources, H (3)
WST 333 Critical Perspectives on Sexuality, SB, C (3)
WST 444 Women and Health, SB (3)

**Applied Women’s Studies Courses**

WST 482 Gender Issues in Education, (3)
WST 484 Internship, (3)
WST 485 Women, Gender and Leadership, SB, C (3)
WST 499 Individualized Instruction (3)

*Enrollment Requirements:* The certificate in women’s studies is open to all undergraduate majors. However, students should consult with the advisors in the department of their major to determine if the minor is consistent with their educational goals. Students are encouraged to take courses outside their major and college. Please contact the department for more information and see http://newcollege.asu.edu/programs/womens_studies/minor_cert/.

*Contact Information:*
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/programs/womens_studies/
harcs.dept@asu.edu
FAB N290
602/543-4444

**Writing (certificate) LAENGCERT**
*Description:* The writing certificate is a declaration from ASU that a student has completed 19 credit hours of advanced writing instruction. It certifies that the student has had the training to be a successful writer in his or her chosen profession.
**Program Requirement:** The writing certificate consists of 19 credit hours. Required courses are as follows:

- ENG 216 Persuasive Writing on Public Issues, L (3) or ENG 412 Creative Nonfiction (3)
- ENG 301 Writing for the Professions, L (3)
- ENG 372 Document Production, L (3)
- ENG 472 Rhetorical Studies, L (3)
- ENG 484 Internship: Writing Certificate (3)
- ENG 498 Pro-Seminar: Writing Certificate Portfolio (1)

Also required is an additional writing course in English (three hours) or a writing or design course (three hours) selected from an approved list of courses from across campus. All students are required to submit a portfolio before receiving the certificate.

**Enrollment Requirements:** Application to the program requires a minimum GPA of 3.00 in ENG 101 and 102, 105, or 107 and 108. Students must also have completed at least 30 hours of course work and must have a minimum cumulative GPA of 3.00. Please contact the department for more information.

**Contact Information:**
Department of English
http://english.clas.asu.edu/writingcertificate
englishadvising@asu.edu
LL 542
480/965-3168

**Writing Program (certificate) ASWRTCERT**

**Description:** The Division of Humanities, Arts, and Cultural Studies offers a program for students enrolled in any unit of any college at ASU leading to a certificate in nonfiction and disciplinary writing. Certification of advanced writing skills opens the way to a vast array of opportunities, from journalism and publishing to public advocacy, military and government careers, elementary and secondary education, business management, economic development, the law and high-tech industry. Ability to communicate clearly and directly is a key to career advancement in all aspects of business, government and community service.

**Program Requirement:** Comprised of a minimum of 19 credit hours, the Writing Certificate Program combines intensive course work, of which at least 12 credit hours must be upper-division, a possible internship, or a capstone project in the student’s major and an exit portfolio. Several special aspects make it possible to combine these credits with general studies or major requirements.

Capstone Project: A capstone writing project in the student's major (or AMS 498) or an approved course from the student’s major.
Exit Portfolio: Students will assemble a portfolio of writing that demonstrates their grasp of the skills presented during their course of studies, for which they will earn another credit hour.

Enrollment Requirements: To gain admission to the Writing Certificate Program, students must demonstrate fundamental writing skills through the completion of English composition (101/102, or 107/108, or 105) with grades of B”” (3.00) or higher. Students are required to submit an application, which includes at least three samples of writing from lower-division courses or independent writing projects. Applications must be submitted at least two months before the start of the semester they anticipate being admitted.

Contact Information:
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/programs/
harcs.dept@asu.edu
FAB N 290
602/543-4444
Undergraduate Programs

Undergraduate Degrees (Program Descriptions)

Business, W. P. Carey School of

Accountancy (BS) BAACCBS
W.P. Carey School of Business

Program Description: The accounting profession offers W. P. Carey students a dynamic environment and diverse career opportunities in public accounting, the private sector and in government agencies worldwide. The School of Accountancy’s state-of-the-art curriculum provides students with technical expertise in the field and develops critical thinking, teaming, communication and information technology skills that are crucial for a successful career. The faculty includes leaders who excel in the classroom, and our professional advisory board provides regular guidance on continuous improvement and strategic planning. The School of Accountancy is accredited by Association to Advance Collegiate Schools of Business International and is consistently ranked among the top programs in the nation in bachelor’s, master’s and Ph.D. programs.

Language Requirement: N | Program Fee: Y

Admission Requirements: Freshmen admission requirements: 1160 SAT Reasoning OR 25 ACT score, OR graduated in the top eight percent of high school class.

Freshmen should select an additional major when applying for admission. Additional choices may include any of the W. P. Carey’s Business BA programs or any other business or other degree program outside W. P. Carey School of Business. Students who are not admissible to a W. P. Carey Business BS major and who did not select a second major or are not admissible to their second major choice will be placed in a Business BA program in W. P. Carey School of Business.

Transfer admission requirements (30 or more semester hours of credit after high school): 3.00 transfer GPA AND 1160 SAT score OR 25 ACT score OR graduated in the top eight percent of high school class.

Transfer students should select an additional major when applying for admission. Additional choices may include any of the W. P. Carey’s Business BA programs or any other business or other degree program outside W. P. Carey School of Business.

Students with less than 45 transfer hours who are not admissible to a W. P. Carey School of Business major and who did not select a second major or are not admissible to their second major choice will be placed in Exploratory--Social and Behavioral Sciences in University College.

Academic Catalog Archive 2009-10  821
Students with more than 45 transfer hours who are not admissible to University College will be contacted to select an appropriate major.

**Career Opportunities:** The major in accountancy includes the essential academic preparation for students who are:

- Pursuing professional careers in public, corporate and governmental accounting.
- Seeking positions in personal financial planning and portfolio analysis.
- Seeking positions in consulting; planning to operate their own businesses.
- Planning to pursue a graduate degree or attend law school.

The job outlook for accounting graduates is excellent. The U.S. Bureau of Labor Statistics' Occupational Outlook Handbook (2008-2009) states that, "Employment of accountants and auditors is expected to grow by 18 percent between 2006 and 2016, which is faster than the average for all occupations."

**Contact:**
School of Accountancy
http://wpcarey.asu.edu/acc
wpcareyacc@asu.edu
BA 223Q
480/965-3631

**Agribusiness (Agribusiness Science) (BS) AGAGPBBS**
W. P. Carey School of Business

**Program Description:** A unique program offers students studying agribusiness an opportunity to prepare for admission to professional veterinary schools. Through the B.S. in agribusiness (with a concentration in preveterinary medicine) program, students can elect to apply to veterinary college at the end of their third year at ASU and use the first year credits at the veterinary college to complete their B.S. at ASU. While completing the courses needed for acceptance into veterinary school, the student is broadening his or her career potential with agribusiness courses. Should a preveterinary student decide not to apply to a veterinary school, this major provides alternative career paths into human or veterinary pharmaceutical industries or the food industry.

**Language Requirement:** N | **Program Fee:** Y

Minimum Math Requirement: MAT 210 - Brief Calculus.

**Career Opportunities:** Veterinarians have a vast spectrum of career opportunities, including private practice, biotechnology research and positions in federal and state governmental agencies.
Agribusiness (Global Agribusiness) (BS) AGAGBGBS
W.P. Carey School of Business

Program Description: The agribusiness major is an applied, industry-oriented curriculum. The study of the food and fiber system in the U.S. and around the world forms the basis of this particular program.

The general agribusiness concentration, under B.S. in agribusiness, is specifically designed to meet the needs of the urban student interested in business and agriculture. Students learn to analyze firms involved in input and output supply activities, commodity trading, food manufacturing and food distribution.

Language Requirement: N | Program Fee: Y

Career Opportunities: Agribusiness is a dynamic industry providing employment to about 23 percent of the U.S. labor force. Opportunities exist in management, marketing, finance and technical positions with private agribusiness firms and governmental agencies.

Contact: Morrison School of Management and Agribusiness
http://www.poly.asu.edu/msma/
morrisonschool@asu.edu
PRLTA 30
480/727-1585

Agribusiness (Professional Golf Management) (BS) AGAGBMBS
W.P. Carey School of Business

Not accepting applications.

Program Description: Pending approval of the Arizona Board of Regents and consultation with the ASU University Senate, this program will no longer accept applications.

The professional golf management concentration, under the B.S. in agribusiness, is designed to prepare students for management careers in the golf industry. This program is appropriate for students who are skilled players and want to pursue a career on the player side of the business, such as a club professional. Students develop business skills and competencies while also becoming Professional Golfers' Association Class A professionals.
Career Opportunities: Golf is a billion-dollar-a-year industry in Arizona. Nationwide, more than 400 new golf courses will be built annually in the next 10 years. As a result, management careers in the golf industry, such as club professional, are abundant and the salaries are attractive.

Contact:
Morrison School of Management and Agribusiness
http://www.poly.asu.edu/msma/
morrisonschool@asu.edu
PRLTA 330
480/727-1585

Business (Communication) (BA) BABUSCBA
W.P. Carey School of Business

Program Description: The B.A. in business with a communication concentration is an innovative, interdisciplinary program intended to prepare students for positions in a variety of professions where business and communication play an important role in ensuring success. Graduates of this program will have specific knowledge of business practices and the capacity to effectively communicate complex business information. Students in this program will complete rigorous courses within the communication concentration in addition to the skill and core courses required of all W. P. Carey School of Business majors.

Language Requirement: N  |  Program Fee: Y

Admission Requirements: Freshman and transfer students must submit either an SAT Reasoning test score or an ACT test score by the end of the first semester in the program (we do not require the writing portion of these tests). There is no minimum score requirement.

Freshman admission requirements for this program are the same as the university’s freshman admission requirements.

Transfer applicants must have a 3.00 GPA for all transfer work and meet university transfer admission requirements. Transfer students should select an additional major, which must be outside W. P. Carey School of Business, when applying for admission.

Students with less than 45 transfer hours who are not admissible to a W. P. Carey School of Business major and who did not select a second major or are not admissible to their second major choice will be placed in Exploratory--Social and Behavioral Sciences in University College.

Students with more than 45 transfer hours who are not admissible to University College will be contacted to select an appropriate major.
Career Opportunities: Business communication has exploded as a distinct professional field as companies require rapid and considered responses, from conveying ordinary information to crisis communications. Historically these positions have been staffed with people trained in communication, English, journalism or other fields who lack specific business knowledge. Graduates of this program will be qualified to enter these positions with knowledge that will be immediately useful to potential employers while advancing their careers.

Contact:
W. P. Carey School of Business
http://wpcarey.asu.edu
wpcareyug@asu.edu
BA 109
480/965‐4227

Business (Global Leadership) (BA) BABUSGBA
Program information not available at time of publication.

Not accepting applications.

Contact Information:
W. P. Carey School of Business
http://wpcarey.asu.edu/
BA 109
wpcareyug@asu.edu
480/965‐4227

Business (Sustainability) (BA) BABUSSBA
W.P. Carey School of Business

Program Description: The B.A. in business with a sustainability concentration is an innovative, interdisciplinary program intended to prepare students for positions in a variety of professions where business and sustainability play an important role in ensuring success. Finding ways to grow and prosper while reducing the stress on the global environment is a critical issue facing today’s society. Combining the latest trends in business with cutting-edge knowledge of sustainability prepares graduates to excel in a career area that will dramatically increase in demand. Students in this program will complete rigorous courses within the sustainability concentration in addition to the skill and core courses required of all W. P. Carey School of Business majors.

Language Requirement: N | Program Fee: Y

Admission Requirements: Freshman and transfer students must submit either an SAT Reasoning test score or an ACT test score by the end of the first semester in the program (we do not require the writing portion of these tests). There is no minimum score requirement.
Freshman admission requirements for this program are the same as the university’s freshman admission requirements.

Transfer applicants must have a 3.00 GPA for all transfer work and meet university transfer admission requirements. Transfer students should select an additional major, which must be outside W. P. Carey School of Business, when applying for admission.

Students with less than 45 transfer hours who are not admissible to a W. P. Carey School of Business major and who did not select a second major or are not admissible to their second major choice will be placed in Exploratory—Social and Behavioral Sciences in University College.

Students with more than 45 transfer hours who are not admissible to University College will be contacted to select an appropriate major.

Career Opportunities: Interest in sustainability issues is growing and, most likely, will be increasingly important to business in the next few years. Businesses all over the world are asking serious questions about how they can understand, evaluate and act on issues related to sustainability while making sensible business decisions for both the short and long run. They seek qualified individuals who understand the societal, scientific and business aspects of the issues. Graduates from this degree program will fill these needs.

Contact:
W. P. Carey School of Business
http://wpcarey.asu.edu
wpcareyug@asu.edu
BA 109
480/965-4227

Business (Tourism) (BA) BABUSTBA
W.P. Carey School of Business

Program Description: The B.A. in business with a tourism concentration is an innovative, interdisciplinary program intended to prepare students for positions in a variety of professions where business and tourism play an important role in ensuring success. Developing tourism and recreation opportunities requires an understanding of effective marketing techniques and the ability to interact with many different types of businesses that support those efforts. A solid academic preparation in business will help prepare you for success in the tourism industry and affiliated professions. Students in this program will complete rigorous courses within the tourism concentration in addition to the skill and core courses required of all W. P. Carey School of Business majors.

Language Requirement: N | Program Fee: Y
Admission Requirements: Freshman and transfer students must submit either an SAT Reasoning test score or an ACT test score by the end of the first semester in the program (we do not require the writing portion of these tests). There is no minimum score requirement.

Freshman admission requirements for this program are the same as the university's freshman admission requirements.

Transfer applicants must have a 3.00 GPA for all transfer work and meet university transfer admission requirements. Transfer students should select an additional major, which must be outside W. P. Carey School of Business, when applying for admission.

Students with less than 45 transfer hours who are not admissible to a W. P. Carey School of Business major and who did not select a second major or are not admissible to their second major choice will be placed in Exploratory--Social and Behavioral Sciences in University College.

Students with more than 45 transfer hours who are not admissible to University College will be contacted to select an appropriate major.

Career Opportunities: Tourism management and development combines marketing and economic development, with emphasis on managerial understanding to promote smooth operations. The combination of skills acquired from exposure to both business and tourism courses will make these graduates more marketable and productive in their careers.

Contact:
W. P. Carey School of Business
http://wpcarey.asu.edu
wpcareyug@asu.edu
BA 109
480/965-4227

Business (Urban Policy) (BA) BABUSUBA
W.P. Carey School of Business

Program Description: The B.A. in business with an urban policy concentration is an innovative, interdisciplinary program intended to prepare students for positions in a variety of professions where business and urban policy play an important role in ensuring success. Economic development and urban planning are inextricably linked. The urban policy concentration will prepare you to address many of the challenges of rapid urban growth. Students in this program will complete rigorous courses that focus on the complexity and range of issues affecting the quality of urban planning and development in addition to the skill and core courses required of all W. P. Carey School of Business majors.

Language Requirement: N | Program Fee: Y
Admission Requirements: Freshman and transfer students must submit either an SAT Reasoning test score or an ACT test score by the end of the first semester in the program (we do not require the writing portion of these tests). There is no minimum score requirement.

Freshman admission requirements for this program are the same as the university's freshman admission requirements.

Transfer applicants must have a 3.00 GPA for all transfer work and meet university transfer admission requirements. Transfer students should select an additional major, which must be outside W. P. Carey School of Business, when applying for admission.

Students with less than 45 transfer hours who are not admissible to a W. P. Carey School of Business major and who did not select a second major or are not admissible to their second major choice will be placed in Exploratory--Social and Behavioral Sciences in University College.

Students with more than 45 transfer hours who are not admissible to University College will be contacted to select an appropriate major.

Career Opportunities: Historically urban planners have had little business background, but function in a system where business success is a key ingredient in high-quality, dynamic, urban policy. Graduates with a B.A. in business with an urban policy concentration will be equipped to deal with the wide range of economic and business development issues.

Contact:  
W. P. Carey School of Business  
http://wpcarey.asu.edu  
wpcareyug@asu.edu  
BA 109  
480/965-4227

Business Administration (BS) AGBUABS  
W.P. Carey School of Business

Program Description: Business administration is the study of the fundamental functions and activities performed in profit-seeking and nonprofit organizations. The B.S. in business administration degree program enables students to gain essential business competencies, knowledge of business disciplines and methods and an appreciation for contemporary business environments and cultures.

Language Requirement: N | Program Fee: Y

Career Opportunities: Business graduates are prepared for careers that require broad background and general knowledge in the field of business is required. Graduates may choose to enter one of the areas of business or industry for which
their emphasis on business fundamentals prepares them, start their own businesses or pursue careers with local, state or federal government. Some graduates choose to continue their education by enrolling in graduate programs or law school.

**Contact:**
Morrison School of Management and Agribusiness
http://www.poly.asu.edu/msma/
morrisonSchool@asu.edu
PRLTA 330
480/727-1585

**Business Administration (Financial Services) (BS) AGBUAFBS**
W.P. Carey School of Business

**Program Description:** Students in the B.S. in business administration with a concentration in financial services gain an understanding of risk management, sales/sales management, industry analysis and financial management. Current and future national financial dialog all revolve around the essential need to plan and prepare personally for one's economic future. Individuals with an understanding of finance, risk assessment and financial marketplaces will be in very high demand.

**Language Requirement:** N | **Program Fee:** Y

**Career Opportunities:** The B.S. in business administration with a concentration in financial services is provides students with significant career potential. Graduates from the program are expected to grasp both business and financial industry fundamentals. Career opportunities exist domestically and internationally in fields such as financial services consulting, risk management, financial industry analysis and insurance.

**Contact:**
Morrison School of Management and Agribusiness
http://www.poly.asu.edu/msma/
morrisonSchool@asu.edu
PRLTA 330
480/727-1287

**Business Administration (Retail Management) (BS) AGBUARBS**
W.P. Carey School of Business

**Program Description:** The B.S. in business administration with a concentration in retail management is an exciting academic discipline that combines the interpersonal skills of marketing and sales with the analytical skills of finance. Successful food and nonfood retail managers should possess an understanding of customer service along with knowledge of customer analytics to enhance that service experience.

**Language Requirement:** N | **Program Fee:** Y
Admission Requirements:

Career Opportunities: Graduates with a B.S. in business administration with a concentration in retail management will understand the nuances of product placement, product availability, supply chain management, consumer behavior and sales management. This industry is one of the leading contributors to the economic activity of the United States. Career opportunities exist throughout the supply chain both domestically and internationally in fields such as retail, management, product buying, sales management and store/franchise/district management.

Contact:
Morrison School of Management and Agribusiness
http://www.poly.asu.edu/msma/
morrison.school@asu.edu
PRLTA 330
480/727-1287

Computer Information Systems (BS) BACISBS
W.P. Carey School of Business

Program Description: In today's world, it is hard to find a business that is not dependent on computers. Investing in a degree that teaches you about the exciting and innovative ways that information technology is used to help organizations succeed will position you to potentially earn a high starting salary at graduation. Currently there is an acute shortage of information systems professionals, and many more jobs than graduates. With the help of our dedicated faculty, you will learn how to design, build and maintain information systems that support both business operations and managerial decision-making. In particular, you will learn about:

- Business process analysis.
- Project management.
- Evidenced-based decision-making.
- The information value chain.
- Databases and data modeling.
- Application program development.
- Network deployment.
- Systems integration.

This is your opportunity to join a team of motivated students and become part of one of the nation's highest ranked computer information systems departments.

Language Requirement: N  |  Program Fee: Y

Admission Requirements: Freshmen admission requirements: 1160 SAT Reasoning OR 25 ACT score, OR graduated in the top eight percent of high school class.

Freshmen should select an additional major when applying for admission. Additional choices may include any of the W. P. Carey’s Business BA programs or
any other business or other degree program outside W. P. Carey School of Business. Students who are not admissible to a W. P. Carey Business BS major and who did not select a second major or are not admissible to their second major choice will be placed in a Business BA program in W. P. Carey School of Business.

Transfer admission requirements (30 or more semester hours of credit after high school): 3.00 transfer GPA AND 1160 SAT score OR 25 ACT score OR graduated in the top eight percent of high school class.

Transfer students should select an additional major when applying for admission. Additional choices may include any of the W. P. Carey’s Business BA programs or any other business or other degree program outside W. P. Carey School of Business.

Students with less than 45 transfer hours who are not admissible to a W. P. Carey School of Business major and who did not select a second major or are not admissible to their second major choice will be placed in Exploratory--Social and Behavioral Sciences in University College.

Students with more than 45 transfer hours who are not admissible to University College will be contacted to select an appropriate major.

Career Opportunities: A computer information systems degree offers job opportunities in a variety of industries, including entertainment, national defense, transportation, education, healthcare and finance. Information systems are a key component in the success of other functional business areas such as accounting, supply chain, finance and marketing. Entry-level information systems positions include database administrator, systems analyst, network administrator, project manager, systems administrator and consultant. Long-term career aspirations for a student with a computer information systems degree include chief information officer, chief technology officer, chief knowledge officer, chief security officer and chief executive officer.

Contact:
Department of Information Systems
http://wpcarey.asu.edu/is
wpcareyis@asu.edu
BA 301P
480/965-3252

Economics (BS) BAECNBS
W.P. Carey School of Business

Program Description: The economics department is committed to providing students a first-class educational experience. Faculty have received numerous teaching awards and their teaching evaluations from students are consistently high. The economics faculty is actively engaged in scholarly research leading to publication in the major economics journals.
Language Requirement: N | Program Fee: Y

Admission Requirements: Freshmen admission requirements: 1160 SAT Reasoning OR 25 ACT score, OR graduated in the top eight percent of high school class.

Freshmen should select an additional major when applying for admission. Additional choices may include any of the W. P. Carey’s Business BA programs or any other business or other degree program outside W. P. Carey School of Business. Students who are not admissible to a W. P. Carey Business BS major and who did not select a second major or are not admissible to their second major choice will be placed in a Business BA program in W. P. Carey School of Business.

Transfer admission requirements (30 or more semester hours of credit after high school): 3.00 transfer GPA AND 1160 SAT score OR 25 ACT score OR graduated in the top eight percent of high school class.

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Students with less than 45 transfer hours who are not admissible to a W. P. Carey School of Business major and who did not select a second major or are not admissible to their second major choice will be placed in Exploratory--Social and Behavioral Sciences in University College.

Students with more than 45 transfer hours who are not admissible to University College will be contacted to select an appropriate major.

Career Opportunities: A major in economics provides students with the analytical and quantitative skills needed to prepare them for careers in business, government or public policy. The program of study can also be tailored to prepare students for graduate programs in economics, business or law. Students interested in pursuing a Ph.D. in economics are strongly encouraged to minor or major in mathematics as well.

Graduates have taken positions:

1. As corporate economists who collect data and make forecasts relevant to the firm’s business.
2. As consultants who serve as advisers to state and federal governments as well as private corporations.
3. In banking and financial services firms.

Each year many graduates pursue studies at some of the best graduate schools in the country.

Contact:
Department of Economics
Finance (BS) BAFINBS
W.P. Carey School of Business

Program Description: The finance department has a rich tradition of educating leaders that excel in all aspects of the discipline of finance. Whether ascending to the top ranks of the venture capital industry, executing multimillion-dollar real estate deals, or becoming successful entrepreneurs with ideas and drive that are all their own, our graduates are equipped to succeed.

In particular, our Investment Banking Industry Scholars Program mentors students interested in going to Wall Street. Our student investment management fund provides undergraduates the opportunity to manage a real-world investment portfolio worth hundreds of thousands of dollars.

The faculty is considered among the top finance departments in the world. Our professional advisory board, comprised of leading professionals from the financial services, manufacturing, energy, investment banking and real estate sectors, provides a sounding board for new ideas and a source of jobs for our top graduates.

Language Requirement: N | Program Fee: Y

Admission Requirements: Freshmen admission requirements: 1160 SAT Reasoning OR 25 ACT score, OR graduated in the top eight percent of high school class.

Freshmen should select an additional major when applying for admission. Additional choices may include any of the W. P. Carey’s Business BA programs or any other business or other degree program outside W. P. Carey School of Business. Students who are not admissible to a W. P. Carey Business BS major and who did not select a second major or are not admissible to their second major choice will be placed in a Business BA program in W. P. Carey School of Business.

Transfer admission requirements (30 or more semester hours of credit after high school): 3.00 transfer GPA AND 1160 SAT score OR 25 ACT score OR graduated in the top eight percent of high school class.

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Students with more than 45 transfer hours who are not admissible to University College will be contacted to select an appropriate major.

**Career Opportunities:** Students majoring in finance are prepared for careers in:

- Corporate financial management.
- Investment banking.
- Consulting.
- Depository institutions.
- Portfolio analysis.
- Investment management.
- Financial services.

**Contact:**
Department of Finance
http://wpcarey.asu.edu/fin
wpcareyfin@asu.edu
BAC 519
480/965-3131

**Management (BS) BAMGTBS**
W.P. Carey School of Business

**Program Description:** The management major aims to prepare students to work effectively in organizations as team members and as managers through acquiring important knowledge and skills such as communication, teamwork, personal ethics and integrity, analytical research and problem-solving, global mindset and leadership.

Students in the major engage with community-based group projects in not-for-profit and for-profit business settings. The curriculum begins with immersion in the fundamentals of the global economy, the world of e-business and collaborative teams. Throughout the program, understanding of theory and concepts of management and ethical leadership are enhanced by experiencing and testing these concepts in skill-based exercises, case discussions and team-based project work in the classroom and in the community.

**Language Requirement:** N | **Program Fee:** Y

**Admission Requirements:** Freshmen admission requirements: 1160 SAT Reasoning OR 25 ACT score, OR graduated in the top eight percent of high school class.

Freshmen should select an additional major when applying for admission. Additional choices may include any of the W. P. Carey’s Business BA programs or any other business or other degree program outside W. P. Carey School of Business. Students who are not admissible to a W. P. Carey Business BS major and who did not select a second major or are not admissible to their second major choice will be placed in a Business BA program in W. P. Carey School of Business.
Transfer admission requirements (30 or more semester hours of credit after high school): 3.00 transfer GPA AND 1160 SAT score OR 25 ACT score OR graduated in the top eight percent of high school class.

Transfer students should select an additional major when applying for admission. Additional choices may include any of the W. P. Carey’s Business BA programs or any other business or other degree program outside W. P. Carey School of Business.

Students with less than 45 transfer hours who are not admissible to a W. P. Carey School of Business major and who did not select a second major or are not admissible to their second major choice will be placed in Exploratory—Social and Behavioral Sciences in University College.

Students with more than 45 transfer hours who are not admissible to University College will be contacted to select an appropriate major.

**Career Opportunities:** The management major prepares graduates for managerial leadership in a world characterized by:

- Corporate accountability.
- Cross-functional management.
- Demands for continuous process improvements to enhance the value chain.
- Ethical decision making.
- Growing technological sophistication.
- Racial, cultural and gender diversity in the workforce.
- The fast pace of e-business.

The need for skills in communicating and working with people, directing projects and managing change.

Graduates with skills in these areas are likely to be recruited by management consulting firms, high-tech firms, service and manufacturing firms, for-profit and not-for-profit organizations, and large and small organizations.

**Contact:**
Department of Management  
http://wpcarey.asu.edu/mgt  
wpcareymgt@asu.edu  
BA 323  
480/965-3431

**Management (Entrepreneurship) (BS) BAMGTEBS**  
W.P. Carey School of Business

**Program Description:** The entrepreneurship concentration prepares students to identify, evaluate and develop entrepreneurial opportunities, whether in existing companies or in new business ventures. The entrepreneurship concentration is grounded in the management major’s emphasis on collaboration, leadership,
communication and team building, but adds refined analytical, managerial and leadership skills appropriate for people who want to change the world through new product development and innovation.

Students in the entrepreneurship concentration frequently collaborate with students from across the university, in particular students in the College of Design and the School of Sustainability. Additionally, the topic of sustainability is strongly emphasized throughout the curriculum. Graduates have the option of starting their own businesses or working for companies that value their entrepreneurial abilities.

*Language Requirement: N | Program Fee: Y*

*Admission Requirements: Freshmen admission requirements: 1160 SAT Reasoning OR 25 ACT score, OR graduated in the top eight percent of high school class.*

Freshmen should select an additional major when applying for admission. Additional choices may include any of the W. P. Carey’s Business BA programs or any other business or other degree program outside W. P. Carey School of Business. Students who are not admissible to a W. P. Carey Business BS major and who did not select a second major or are not admissible to their second major choice will be placed in a Business BA program in W. P. Carey School of Business.

Transfer admission requirements (30 or more semester hours of credit after high school): 3.00 transfer GPA AND 1160 SAT score OR 25 ACT score OR graduated in the top eight percent of high school class.

Transfer students should select an additional major when applying for admission. Additional choices may include any of the W. P. Carey’s Business BA programs or any other business or other degree program outside W. P. Carey School of Business.

Students with less than 45 transfer hours who are not admissible to a W. P. Carey School of Business major and who did not select a second major or are not admissible to their second major choice will be placed in Exploratory—Social and Behavioral Sciences in University College.

Students with more than 45 transfer hours who are not admissible to University College will be contacted to select an appropriate major.

*Career Opportunities: The entrepreneurship concentration within the management major prepares students for leadership in a world characterized by rapid new product development, short product life cycles, demands for continuous change and improvement and the need to move quickly to capture value from fleeting opportunities. Embedded within the entrepreneurship concentration is a consistent focus on integrating skill sets from a wide range of business disciplines, as it is requisite of all entrepreneurs to be conversant across an ever-changing landscape of issues. Graduates with these skills are likely to be recruited by smaller and family-owned firms, high-tech firms, for-profit and not-for-profit organizations, as well as*
larger organizations with an entrepreneurial bent. Management graduates also often start their own businesses.

Contact:
Department of Management
http://wpcarey.asu.edu/mgt
wpcareymgt@asu.edu
BA 323
480/965-3431

Marketing (BS) BAMKTBS
W.P. Carey School of Business

Program Description: Students majoring in marketing gain an understanding of the science behind consumer behavior and the critical role that marketing plays in all organizations. In addition, they develop marketing skills that provide a competitive advantage in their careers. The nationally ranked and award-winning marketing faculty share a passion for teaching and mentoring undergraduate students. Faculty provide many productive ways for students to get involved in the life of our department and work with our business partners. The department is home to the Center for Services Leadership, the premier international center for the study of the science of services, and offers distinctive course work in professional sales, relationship management and sports business.

Language Requirement: N | Program Fee: Y

Admission Requirements: Freshmen admission requirements: 1160 SAT Reasoning OR 25 ACT score, OR graduated in the top eight percent of high school class.

Freshmen should select an additional major when applying for admission. Additional choices may include any of the W. P. Carey’s Business BA programs or any other business or other degree program outside W. P. Carey School of Business. Students who are not admissible to a W. P. Carey Business BS major and who did not select a second major or are not admissible to their second major choice will be placed in a Business BA program in W. P. Carey School of Business.

Transfer admission requirements (30 or more semester hours of credit after high school): 3.00 transfer GPA AND 1160 SAT score OR 25 ACT score OR graduated in the top eight percent of high school class.

Transfer students should select an additional major when applying for admission. Additional choices may include any of the W. P. Carey’s Business BA programs or any other business or other degree program outside W. P. Carey School of Business. Students with less than 45 transfer hours who are not admissible to a W. P. Carey School of Business major and who did not select a second major or are not admissible to their second major choice will be placed in Exploratory--Social and Behavioral Sciences in University College.
Students with more than 45 transfer hours who are not admissible to University College will be contacted to select an appropriate major.

*Career Opportunities:* Through the proper selection of course work and other educational experiences, a marketing student may prepare for a variety of careers in areas such as:

- Business development.
- Business-to-business marketing.
- Customer relationship management.
- International marketing.
- Market research and information management.
- Marketing communications.
- Professional sales and relationship management.
- Retail management.
- Sales management.
- Services marketing.

The degree program provides fundamentals, flexibility and specialization opportunities.

*Contact:*
http://wpcarey.asu.edu/mkt
wpcareymkt@asu.edu
BAC 460
480/965-3621

**Real Estate (BS) AGREABS**
W.P. Carey School of Business

*Program Description:* Students in the B.S. in real estate program gain an understanding of both residential and commercial real estate markets. The curriculum combines the study of finance and real estate and focuses on competencies in real estate law, structuring real estate transactions, real estate valuation techniques and an understanding of mortgages and mortgage markets. The program is organized around five aspects of real estate:

1. Brokerage/management.
2. Development.
3. Financing.
4. Investments.
5. Market analysis.

Emphasis is placed on team work and involvement in projects designed to develop analytical, communication and technology skills.

*Language Requirement: N | Program Fee: Y*
Career Opportunities: Graduates are prepared to pursue careers in land development, investment analysis, appraisal, property management, brokering and mortgage finance. Graduates may also choose to continue their education by enrolling in graduate degree programs or law school.

Contact:
Morrison School of Management and Agribusiness
http://poly.asu.edu/msma/
morrisonschool@asu.edu
PRLTA 330
480/727-1585

Supply Chain Management (BS) BASCMBS
W.P. Carey School of Business

Program Description: Our program prepares graduates to become excellent supply chain managers by focusing on planning, procurement, negotiations, logistics, execution systems and strategy development. Classes are small and use projects and case studies to bring the material to life.

Our program is consistently ranked as one of the top supply chain programs in the world, providing our students an opportunity to be recruited by many leading international companies. Supply chain management brings us an abundance of affordable, high-quality goods and services. Supply chain managers coordinate the purchase of raw materials, manufacturing and transportation of materials across multiple vendors and multiple countries to provide the services and finished goods sitting on your local store shelf or online retailer. It is a key reason that you can buy an ever-increasing variety of goods and services at remarkably low prices.

Language Requirement: N | Program Fee: Y

Admission Requirements: Freshmen admission requirements: 1160 SAT Reasoning OR 25 ACT score, OR graduated in the top eight percent of high school class.

Freshmen should select an additional major when applying for admission. Additional choices may include any of the W. P. Carey’s Business BA programs or any other business or other degree program outside W. P. Carey School of Business. Students who are not admissible to a W. P. Carey Business BS major and who did not select a second major or are not admissible to their second major choice will be placed in a Business BA program in W. P. Carey School of Business.

Transfer admission requirements (30 or more semester hours of credit after high school): 3.00 transfer GPA AND 1160 SAT score OR 25 ACT score OR graduated in the top eight percent of high school class.

Transfer students should select an additional major when applying for admission. Additional choices may include any of the W. P. Carey’s Business BA programs or any other business or other degree program outside W. P. Carey School of Business.
Students with less than 45 transfer hours who are not admissible to a W. P. Carey School of Business major and who did not select a second major or are not admissible to their second major choice will be placed in Exploratory--Social and Behavioral Sciences in University College.

Students with more than 45 transfer hours who are not admissible to University College will be contacted to select an appropriate major.

*Career Opportunities:* Career track progression can lead to the vice president level in supply-chain-related areas. Firms recruit ASU supply chain management graduates from around the world and in all sectors of the economy, including public and private, manufacturing, service, healthcare and retail. Students from our program are highly sought after, and we have excellent placements. The following are some positions that our graduates have been hired into:

- Planner or analyst.
- Buyer/planner.
- Production scheduler.
- Quality control specialist.
- Internet marketing analyst.
- Supply management analyst.
- Inventory specialist.
- Operations planner/analyst.
- Materials manager.
- Commodity manager.
- Logistics planner.
- Production coordinator.
- Distribution manager.
- Production line manager.
- Product forecaster.

*Contact:*
Department of Supply Chain Management
http://wpcarey.asu.edu/scm
wpcarey.scm@asu.edu
BA 446
480/965-6044

*Design and the Arts, Herberger Institute for*

*Architectural Studies (BSD) ARSTDBSD*
Herberger Institute for Design and the Arts

*Program Description:* Architects design buildings and environments that are useful, sustainable and aesthetically pleasing. This implies an understanding of people’s needs, of the science and technology of building, and of the concepts of aesthetics. The faculty in the School of Architecture and Landscape Architecture offer a B.S.D. in
architectural studies. In addition to developing knowledge and skills in architectural
design, building technology, landscape architecture and professional practice,
students are encouraged to select electives from a broad range of approved courses
both within the college and across the university. These electives may be selected to
devise a minor, to further professional study, or in some other fashion enrich the
student’s academic experience.

This is an eight semester program requiring sequential completion of studio course
work (or its approved equivalent) at any point of entry.

Language Requirement: N | Program Fee: N

Admission Requirements: Students are admitted to the major, but must pass a degree
milestone to continue in the major at the end of the first year.

Career Opportunities: Graduates of the bachelor's degree program who wish to
become licensed can complete their professional studies by attending graduate
school and earning the accredited professional master's degree. In Arizona, other
graduates work for registered architects for several years before taking their
licensing examination. Some begin their careers working for small offices of 10 to 20
people, others work for very large firms, industries, corporations or governmental
agencies.

Contact:
School of Architecture and Landscape Architecture
http://design.asu.edu/sala/index.shtml
design.advising@asu.edu
DS (Design South) 101
480/965-3536

Art (Art Education) (BFA) FAARTEBFA
Herberger Institute for Design and the Arts

Program Description: Art education involves the study of art, policy making in art,
how people learn about art, and how instructors or administrators can best
facilitate teaching art. The B.F.A. in art with a concentration in art education focuses
on:

1. Public and private K-12 instruction.
2. Art in higher education.
3. Educational programs in art museums.

Language Requirement: N | Program Fee: N

Admission Requirements: Students wishing to pursue art education or a studio art
major apply to the ASU Herberger Institute School of Art and enter as art
exploratory majors. There is no portfolio review process at the time of admission to
ASU for freshmen. Students must complete a series of requirements, including
successfully passing a portfolio review in order to be eligible for upper-division course work in the major. Students wishing to pursue art history, museum studies or art studies are considered for direct admission to the major.

Freshmen students applying to the Herberger Institute for Design and the Arts enter ASU as pre-art majors in the School of Art. There is no portfolio review process at the time of admission to ASU for freshmen.

Typically students in their second year interested in studio art and art education will submit a portfolio for review once they have completed their core requirements and are completing the last of the 12 hours of 200-level art requirements; or if they are interested in art history or museum studies, they must fulfill critical requirements to progress in their major.

Transfer students who have completed the foundational core and pre-art requirements may submit a portfolio for review before they have been admitted to ASU. To complete an undergraduate degree in four years, it is recommended that community college transfer students, who are completing a two year degree and have completed the foundational core and pre-art requirements apply and submit a portfolio in the semester they are completing their community college degree or the semester before they plan to enter Arizona State University. Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

1. the existence of parallel and equal courses in the college’s curriculum, and
2. departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor’s degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

Career Opportunities: Graduates who also complete the state certification requirements for an art specialist certificate can teach in public and private elementary schools, middle schools and high schools. Graduates who do not seek state certification may find opportunities for jobs with art museums and recreational or community service groups that offer art instruction.

Contact:
School of Art
http://art.asu.edu
DS (Design South) 101
480/965-3468

Art (Art History) (BA) FAARTHBA
Herberger Institute for Design and the Arts
Program Description: Art history students study the history of the visual arts and the theoretical and critical literature associated with the art of different cultures. The discipline of art history requires the development of critical writing skills, and use of such fields as history, philosophy, religious studies, literature and anthropology. The B.A. in art with a concentration in art history at ASU is one of the most rigorous undergraduate art degree programs in the U.S. Students must take courses in all major historical periods and also work in non-Western art traditions. Students are encouraged to take some coursework outside of art history, such as courses in museum studies, gallery exhibitions and studio work.

Language Requirement: Y | Program Fee: N

Admission Requirements: Students meeting the university requirements for admission may matriculate in the Herberger Institute for Design and the Arts. Separate admission procedures and approvals are required for some programs within the college. Students must contact specific departments or schools for details.

Freshmen students applying to the Herberger Institute School of Art enter ASU as art exploratory majors in the School of Art. There is no portfolio review process at the time of admission to ASU for freshmen.

Typically students in their second year interested in studio art and art education will submit a portfolio for review once they have completed their core requirements and are completing the last of the 12 hours of 200-level art requirements; or if they are interested in art history or museum studies, they will submit a declaration form in the semester in which they complete 30 hours.

Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

1. the existence of parallel and equal courses in the college’s curriculum, and
2. departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor’s degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

Career Opportunities: Graduates in art history at the bachelor’s level find employment opportunities in commercial art galleries, entry-level jobs with art publications and in museums. A graduate degree is essential for professional jobs; a master’s degree prepares individuals to teach at the community college level or to gain entry into museums, auction houses and publishing companies. The Ph.D. is a necessity for employment as a university or college teacher, and for responsible administrative posts in the museum and publishing world.
Art (Art Studies) (BA) FAARTSTDBA
Herberger Institute for Design and the Arts

Program Description: The art studies curriculum offers students a broad educational foundation in the arts and general studies. The B.A. in art with a concentration in art studies is an interdisciplinary program featuring course work in art history, studio art, performing arts and a range of arts-related courses from throughout the university. This concentration offers students a great deal of flexibility in planning course work. The scope of offerings in art and elsewhere on campus is unparalleled at smaller institutions. An art studies student can assemble an art-related curriculum focused on individual student needs, in consultation with a faculty advisor.

Language Requirement: N | Program Fee: N

Admission Requirements: Students meeting the university requirements for admission may matriculate in the Herberger Institute for Design and the Arts. Separate admission procedures and approvals are required for some programs within the college. Students must contact specific departments or schools for details.

Freshmen may apply directly to the Art Studies program; there is no portfolio review for this major.

Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

1. the existence of parallel and equal courses in the college’s curriculum, and
2. departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor’s degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

Career Opportunities: Graduates work in arts-related fields such as arts administration, service-related art fields and galleries. Career opportunities are also available with employers who seek graduates with a well-rounded humanities education.

Contact:
School of Art
Art (Ceramics) (BFA) FAARTCBFA
Herberger Institute for Design and the Arts

Program Description: Students in the ceramics program learn the widest possible range of technical skills and aesthetic concerns within the field. They are encouraged to express themselves in any direction their concepts dictate, through the medium of ceramics. The B.F.A. degree program in art with a concentration in ceramics has an extensive guest speaker program of nationally recognized ceramic artists. The University Art Museum contributes further to the student experience through its significant collection of contemporary ceramic art, a large collection of early-American pottery and Southwestern Native American ceramics. Both undergraduate and graduate students exhibit work in local, regional and national juried and invitational exhibitions.

Language Requirement: N | Program Fee: N

Admission Requirements: Students will be admitted to ASU as art exploratory majors. They must complete a series of requirements including successfully passing a portfolio review in order to be eligible for upper division coursework in the major.

Freshmen students applying to the Herberger Institute School of Art enter ASU as pre-art majors in the School of Art. There is no portfolio review process at the time of admission to ASU for freshmen.

Typically students in their second year interested in studio art and art education will submit a portfolio for review once they have completed their core requirements and are completing the last of the 12 hours of 200-level art requirements; or if they are interested in art history or museum studies, they will submit a declaration form in the semester in which they complete 30 hours.

Transfer students who have completed the foundational core and pre-art requirements may submit a portfolio for review before they have been admitted to ASU. To complete an undergraduate degree in four years, it is recommended that community college transfer students, who are completing a two year degree and have completed the foundational core and pre-art requirements apply and submit a portfolio in the semester they are completing their community college degree or the semester before they plan to enter Arizona State University.

Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

1. the existence of parallel and equal courses in the college’s curriculum, and
2. departmental or school evaluation of studio courses with respect to performance standards.
Every candidate for the bachelor’s degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

Career Opportunities: Graduates of the undergraduate and graduate programs work as artists in the field, selling their works through commercial galleries, commissions and to private collectors. Some artists work as designers and consultants to the commercial ceramic industry; others set up their own businesses, producing hand-crafted functional ware, architectural tiles and one-of-a-kind works.

Contact:
School of Art
http://art.asu.edu
DS (Design South) 101
480/965-3468

Art (Drawing) (BFA) FAARTDBFA
Herberger Institute for Design and the Arts

Program Description: The students within painting and drawing embrace a wide range of media, including acrylics, charcoal, graphite, oil and watercolor. The diverse faculty allow students to discover and explore a multitude of aesthetic and conceptual approaches in their artistic endeavors.

Language Requirement: N | Program Fee: N

Admission Requirements: Students are admitted to ASU as art exploratory majors. They must complete a series of requirements including successfully passing a portfolio review in order to be eligible for upper-division course work in the major. Freshmen students applying to the Herberger Institute School of Art enter ASU as pre-art majors in the School of Art. There is no portfolio review process at the time of admission to ASU for freshmen.

Typically students in their second year interested in studio art and art education will submit a portfolio for review once they have completed their core requirements and are completing the last of the 12 hours of 200-level art requirements; or if they are interested in art history or museum studies, they will submit a declaration form in the semester in which they complete 30 hours.

Transfer students who have completed the foundational core and pre-art requirements may submit a portfolio for review before they have been admitted to ASU. To complete an undergraduate degree in four years, it is recommended that community college transfer students, who are completing a two year degree and have completed the foundational core and pre-art requirements apply and submit a
portfolio in the semester they are completing their community college degree or the semester before they plan to enter Arizona State University.

Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

1. the existence of parallel and equal courses in the college’s curriculum, and
2. departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor’s degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

*Career Opportunities:* Graduates complete the program with drawing skills that enable them to apply for positions that require knowledge in drawing or two-dimensional conceptual skills. Further education, either formal or informal, is usually necessary to refine their skills in a very competitive marketplace. Many graduates continue their education in an M.F.A. graduate program, which allows them to develop their talent further and to teach. Some take jobs in related fields, such as galleries and museums, allowing them to continue producing their own creative work.

*Contact:*
School of Art
http://art.asu.edu
DS (Design South) 101
480/965-3468

**Art (Fibers) (BFA) FAARTFBFA**
Herberger Institute for Design and the Arts

*Program Description:* Students in the fiber arts curriculum explore nearly every process used for the construction and decoration of fabric. Part of the program covers processes from very basic carding, spinning, dyeing and felting of wool, to the use of the loom and the study of complex weave structures. The B.F.A. in art with a concentration in fibers degree program focuses on the history of fabric, clothing, shelter and on contemporary fiber artists and designers. Part of the uniqueness of this program is the location. The Southwest has a long history of textiles, beautiful museums, and many cultures still practicing their traditional textile methods, as well as contemporary galleries and art centers that combine to make this area a fertile ground for developing artists.

*Language Requirement: N | Program Fee: N*
Admission Requirements: Students are admitted to ASU as art exploratory majors. They must complete a series of requirements including successfully passing a portfolio review in order to be eligible for upper-division course work in the major.

Freshmen students applying to the Herberger Institute School of Art enter ASU as pre-art majors in the School of Art. There is no portfolio review process at the time of admission to ASU for freshmen.

Typically students in their second year interested in studio art and art education will submit a portfolio for review once they have completed their core requirements and are completing the last of the 12 hours of 200-level art requirements; or if they are interested in art history or museum studies, they will submit a declaration form in the semester in which they complete 30 hours.

Transfer students who have completed the foundational core and pre-art requirements may submit a portfolio for review before they have been admitted to ASU. To complete an undergraduate degree in four years, it is recommended that community college transfer students, who are completing a two year degree and have completed the foundational core and pre-art requirements apply and submit a portfolio in the semester they are completing their community college degree or the semester before they plan to enter Arizona State University.

Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

1. the existence of parallel and equal courses in the college’s curriculum, and
2. departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor’s degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

Career Opportunities: Graduates with a B.F.A. degree are prepared to establish their own studios and begin making art or design fabrics for use as interior fabrics or as one-of-a-kind garments. Students are also prepared to begin a graduate program. Some undergraduates have gone to New York City to work in the field of designing textiles. Others prefer to focus on their own art for exhibition. Graduates also setup their own studios and design wearable or fabrics for interior use, while others make their living by doing commissioned work for interior spaces.

Contact:
School of Art
http://art.asu.edu
DS (Design South) 101
480/965-3468
Art (Intermedia) (BFA) FAARTIBFA
Herberger Institute for Design and the Arts

Program Description: Intermedia is a conceptually-driven program with an interdisciplinary approach to art-making. The broad-based intermedia program embraces creative practices including installation, performance, sound, video, animation, composite, Web art and rapid prototyping. Intermedia builds on theories of social art practice and tactical media that carry the aims of social change and democratic engagement in a variety of contexts. Programs unique to the school’s intermedia curriculum include digital sculpture, time-based arts, animation and performance. Students work with experimental studio practices, performance and digital media to explore new avenues for self-expression, collaborative practice and community action.

Language Requirement: N | Program Fee: N

Admission Requirements: Freshmen students applying to the Herberger Institute School of Art enter ASU as art exploratory majors in the School of Art. There is no portfolio review process at the time of admission to ASU for freshmen. Typically students in their second year interested in studio art and art education will submit a portfolio for review once they have completed their core requirements and are completing the last of the 12 hours of 200-level art requirements; or if they are interested in art history or museum studies, they will submit a declaration form in the semester in which they complete 30 hours.

Transfer students who have completed the foundational core and pre-art requirements may submit a portfolio for review before they have been admitted to ASU. To complete an undergraduate degree in four years, it is recommended that community college transfer students, who are completing a two year degree and have completed the foundational core and pre-art requirements apply and submit a portfolio in the semester they are completing their community college degree or the semester before they plan to enter Arizona State University.

Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

1. the existence of parallel and equal courses in the college’s curriculum, and
2. departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor’s degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

Career Opportunities: Career opportunities depend on the emphasis selected. Possibilities include independent artist, media consultant, videography, computer
graphics and animation, museum or gallery installation, teacher, set designer and positions in the music/entertainment industry.

Contact:
School of Art
http://art.asu.edu
DS (Design South) 101
480/965-3468

Art (Metals) (BFA) FAARTMBFA
Herberger Institute for Design and the Arts

Program Description: The metals and jewelry program prepares students for a professional career in jewelry arts and related areas. The program emphasizes craft skills, attention to detail, critical thinking and creativity. The program boasts an extraordinarily well-equipped studio with a huge variety of metal-smithing tools. Students explore the close relationship with the school’s sculpture and foundry programs, learn important entrepreneurial skills and receive a strong foundation in technical vocabulary and skills for working with metal while being encouraged to experiment with alternative materials and techniques.

Language Requirement: N | Program Fee: N

Admission Requirements: Students are admitted to ASU as art exploratory majors. They must complete a series of requirements including successfully passing a portfolio review in order to be eligible for upper-division course work in the major.

Freshmen students applying to the Herberger Institute School of Art enter ASU as pre-art majors in the School of Art. There is no portfolio review process at the time of admission to ASU for freshmen.

Typically students in their second year interested in studio art and art education will submit a portfolio for review once they have completed their core requirements and are completing the last of the 12 hours of 200-level art requirements; or if they are interested in art history or museum studies, they will submit a declaration form in the semester in which they complete 30 hours.

Transfer students who have completed the foundational core and pre-art requirements may submit a portfolio for review before they have been admitted to ASU. To complete an undergraduate degree in four years, it is recommended that community college transfer students, who are completing a two year degree and have completed the foundational core and pre-art requirements apply and submit a portfolio in the semester they are completing their community college degree or the semester before they plan to enter Arizona State University.

Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:
1. the existence of parallel and equal courses in the college’s curriculum, and
2. departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor's degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

Career Opportunities: Graduates find opportunities in jewelry firms or work in independent production as one-of-a-kind jewelers in their own businesses. Many students further their opportunities by going on to complete the M.F.A.

Contact:
School of Art
http://art.asu.edu/
DS (Design South) 101
480/965-3468

Art (Museum Studies) (BA) FAARTMSBA
Herberger Institute for Design and the Arts

Program Description: Museum studies students explore art history, art museums, art galleries and visual arts organizations. The B.A. in art with a concentration in museum studies undergraduate program at ASU is one of the most rigorous in the U.S. The program develops students knowledgeable in art history, critical writing skills, foreign languages, museums, galleries and visual arts organizations. The curriculum includes art history courses taught by faculty with diverse specialties. Students must take courses in art history, small business, research, galleries and museums. Students must also demonstrate an ability to read at least one foreign language.

Language Requirement: Y | Program Fee: N

Admission Requirements: Students meeting the university requirements for admission may matriculate in the Herberger Institute for Design and the Arts. Separate admission procedures and approvals are required for some programs within the college. Students must contact specific departments or schools for details.

Freshmen students applying to the Herberger Institute School of Art enter ASU as art exploratory majors in the School of Art. There is no portfolio review process at the time of admission to ASU for freshmen.

Typically students in their second year interested in studio art and art education will submit a portfolio for review once they have completed their core requirements and are completing the last of the 12 hours of 200-level art requirements; or if they are interested in art history or museum studies, they will submit a declaration form in the semester in which they complete 30 hours.
Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

1. the existence of parallel and equal courses in the college’s curriculum, and
2. departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor’s degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

Career Opportunities: Museum studies graduates find employment possibilities in art galleries, art-based organizations and entry-level positions with art publications and museums. A graduate degree is necessary for professional positions. An M.A. prepares individuals to teach at community colleges and to gain entry into museums, auction houses and publishing companies. The Ph.D. is necessary for employment as a faculty member at a university or for administrative posts in museums and higher education.

Contact:
School of Art
http://art.asu.edu/
DS (Design South) 101
480/965-3468

Art (Painting) (BFA) FAARTPABFA
Herberger Institute for Design and the Arts

Program Description: The majors within painting and drawing embrace a wide range of media, including acrylics, charcoal, graphite, oil and watercolor. The diverse faculty allow students to discover and explore a multitude of aesthetic and conceptual approaches in their artistic endeavors.

Language Requirement: N | Program Fee: N

Admission Requirements: Students are admitted to ASU as pre-art majors. They must complete a series of requirements including successfully passing a portfolio review in order to be eligible for upper-division course work in the major.

Freshmen students applying to the Herberger Institute School of Art enter ASU as art exploratory majors in the School of Art. There is no portfolio review process at the time of admission to ASU for freshmen.

Typically students in their second year interested in studio art and art education will submit a portfolio for review once they have completed their core requirements and are completing the last of the 12 hours of 200-level art requirements; or if they
are interested in art history or museum studies, they will submit a declaration form in the semester in which they complete 30 hours.

Transfer students who have completed the foundational core and pre-art requirements may submit a portfolio for review before they have been admitted to ASU. To complete an undergraduate degree in four years, it is recommended that community college transfer students, who are completing a two year degree and have completed the foundational core and pre-art requirements apply and submit a portfolio in the semester they are completing their community college degree or the semester before they plan to enter Arizona State University.

Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

1. the existence of parallel and equal courses in the college’s curriculum, and
2. departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor’s degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

_Career Opportunities:_ Graduates complete the program with the painting skills that enable them to apply for positions that require knowledge in painting or two-dimensional conceptual skills. Further education, either formal or informal, is usually necessary to refine their skills in a very competitive marketplace. Many graduates continue their education in an M.F.A. graduate program, which allows them to develop their talent further and to teach. Some take jobs in related fields, such as galleries and museums, allowing them to continue their own creative work.

_Contact:_
School of Art
http://art.asu.edu/
DS (Design South) 101
480/965-3468

_Art (Photography) (BFA) FAARTPHBFA_
Herberger Institute for Design and the Arts

_Program Description:_ The photography program at ASU has earned an international reputation for the quality of its instruction and the broad range of course work offered. Students study the medium of photography as a means toward the creation of art and toward visual literacy. This involves the acquisition of technical skills, the development of a sound theoretical base and an immersion in photography’s history. Course work encompasses critiques of creative work, beginning and advanced criticism and theory, practice in gallery management as well as practice in black and white, color, digital, large format, portraiture and 19th-century processes.
Admission Requirements: Students will be admitted to ASU as art exploratory majors. They must complete a series of requirements including successfully passing a portfolio review in order to be eligible for upper-division course work in the major.

Freshmen students applying to the Herberger Institute School of Art enter ASU as pre-art majors in the School of Art. There is no portfolio review process at the time of admission to ASU for freshmen.

Typically students in their second year interested in studio art and art education will submit a portfolio for review once they have completed their core requirements and are completing the last of the 12 hours of 200-level art requirements; or if they are interested in art history or museum studies, they will submit a declaration form in the semester in which they complete 30 hours.

Transfer students who have completed the foundational core and pre-art requirements may submit a portfolio for review before they have been admitted to ASU. To complete an undergraduate degree in four years, it is recommended that community college transfer students, who are completing a two year degree and have completed the foundational core and pre-art requirements apply and submit a portfolio in the semester they are completing their community college degree or the semester before they plan to enter Arizona State University.

Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

1. the existence of parallel and equal courses in the college’s curriculum, and
2. departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor’s degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

Career Opportunities: A degree in the arts offers students a pathway to a rich and varied choice of careers. The B.F.A. is essential for advanced study leading to the terminal M.F.A. This advanced degree offers opportunities in university teaching, in history or studio areas, curatorial work in galleries, museums and historical collections and nonprofit arts organization management.

Contact:
School of Art
http://art.asu.edu/
DS (Design South) 101
480/965-3468
Program Description: Printmaking uses various graphic techniques to create visual art in printed, multiple form. The B.F.A. in art with a concentration in printmaking degree program is recognized nationally for excellence in its offerings. Many former graduates are working, teaching and producing actively in print studios and collegiate printmaking programs across the country. Processes include intaglio (e.g., etching, engraving, dry point, aquatint), lithography, relief (e.g., woodcut, linoleum cut, letterpress), screen-printing, photomechanical techniques, monoprint, papermaking and book arts media. Printmaking art is usually, but not always, two-dimensional and is often called the democratic art, since with multiple original copies, the artists visual ideas are available to a wider public. The university’s research and publication program, the Pyracantha Press, a book arts press, has been highly regarded for years.

Language Requirement: N | Program Fee: N

Admission Requirements: Students are admitted to ASU as art exploratory majors. They must complete a series of requirements including successfully passing a portfolio review in order to be eligible for upper-division course work in the major.

Freshmen students applying to the Herberger Institute School of Art enter ASU as pre-art majors in the School of Art. There is no portfolio review process at the time of admission to ASU for freshmen.

Typically students in their second year interested in studio art and art education will submit a portfolio for review once they have completed their core requirements and are completing the last of the 12 hours of 200-level art requirements; or if they are interested in art history or museum studies, they will submit a declaration form in the semester in which they complete 30 hours.

Transfer students who have completed the foundational core and pre-art requirements may submit a portfolio for review before they have been admitted to ASU. To complete an undergraduate degree in four years, it is recommended that community college transfer students, who are completing a two year degree and have completed the foundational core and pre-art requirements apply and submit a portfolio in the semester they are completing their community college degree or the semester before they plan to enter Arizona State University.

Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

1. the existence of parallel and equal courses in the college’s curriculum, and
2. departmental or school evaluation of studio courses with respect to performance standards.
Every candidate for the bachelor’s degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

**Career Opportunities:** Trained printmakers are working artists, practicing the expression of a personal understanding of their place in the world. They may find employment as artists or printmakers in schools of all levels teaching the execution and appreciation of visual art. They also work in fine art print studios, executing original prints for other artists. Printmaking skills such as screen-printing or photomechanical techniques, acquired for the production of art, also have commercial, nonart applications that may afford skilled employment. Artists with printmaking skills may also work with graphic designs, illustrations and signage or may work in museums, conservation, publishing, galleries and in other art-related activities. Additionally, their art may sell successfully in the open marketplace.

**Contact:**

School of Art  
http://art.asu.edu/  
DS (Design South) 101  
480/965-3468

**Art (Sculpture) (BFA) FAARTSBFA**  
Herberger Institute for Design and the Arts

**Program Description:** The B.F.A. in art with a concentration in sculpture degree program explores nearly all methods of 3-D expression, including modeling, metal casting, welding, woodworking, plastics, neon fabrication, carving and kinetic sculpture. ASU's sculpture program is one of the few in the country to include neon fabrication from start to finish.

**Language Requirement:** N | **Program Fee:** N

**Admission Requirements:** Students are admitted to ASU as art exploratory majors. They must complete a series of requirements including successfully passing a portfolio review in order to be eligible for upper-division course work in the major.

Freshmen students applying to the Herberger Institute School of Art enter ASU as pre-art majors in the School of Art. There is no portfolio review process at the time of admission to ASU for freshmen.

Typically students in their second year interested in studio art and art education will submit a portfolio for review once they have completed their core requirements and are completing the last of the 12 hours of 200-level art requirements; or if they are interested in art history or museum studies, they will submit a declaration form in the semester in which they complete 30 hours.
Transfer students who have completed the foundational core and pre-art requirements may submit a portfolio for review before they have been admitted to ASU. To complete an undergraduate degree in four years, it is recommended that community college transfer students, who are completing a two year degree and have completed the foundational core and pre-art requirements apply and submit a portfolio in the semester they are completing their community college degree or the semester before they plan to enter Arizona State University.

Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

1. the existence of parallel and equal courses in the college's curriculum, and
2. departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor’s degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

Career Opportunities: Graduates are prepared to embark on a lifetime exploration of the many aspects of 3-D art. Positions are available in teaching, the fabrication and design of exhibitions, set design, the motion picture industry, welding and 3-D design. Academic posts and positions with museums generally require advanced degrees. Many students also prefer to establish their own studios after graduation.

Contact:
School of Art
http://art.asu.edu/
DS (Design South) 101
480/965-3468

Arts (BA in the Arts) (BA) FAATSBA
Herberger Institute for Design and the Arts

Program Description: The BA in the Arts is a broad-based liberal arts degree program designed for students who are passionate about the arts but wish to explore alternatives to the Institute’s discipline specific degree programs. Students will gain an increased understanding of the theoretical, historical, and cultural forces that shape the arts through an open-ended path for exploration and development of a range of skills that will be valuable for advanced study in multiple disciplines.

The major includes a common core for all students and students choose a focus from: Historical and Theoretical Studies in the Arts, Arts Administration, Digital Culture or an Individualized focus designed by the student and subject to approval by the Herberger Institute’s Standards Committee and the Dean’s Office.
Career Opportunities: As the population in the state of Arizona grows, numerous arts organizations are developing to provide cultural and artistic experiences for our residents. These organizations will need and demand individuals with the necessary critical thinking skills who understand the impact the arts have on society and who will be passionate employees committed to the arts. This degree will provide the skill set necessary for careers as arts administrators, arts critics, public art specialists, media arts system developers, media arts educators, media arts authors and publishers, and museum curators and directors.

Contact:
Dean, Herberger Institute for Design and the Arts
http://herbergercollege.asu.edu/
DS (Design South) 101
480/965-4495

Dance (BFA) FADANBFA
Herberger Institute for Design and the Arts

Program Description: The School of Dance provides a dynamic and culturally diverse learning environment where students develop as creative artists, scholars and educators. The B.F.A. in dance degree provides an interdisciplinary curriculum promoting innovative collaborations and a holistic approach to acquiring skills for successful career transitions. Creativity and research, the core program values, are embedded in a broad range of academic experiences emphasizing movement and creative practices, artistic process, leadership and pedagogy. Studies in dance cultures, music, digital media, dance history, philosophy, criticism, movement science, somatics and stage and screen production enhance the rich educational setting.

Language Requirement: N | Program Fee: N

Admission Requirements: Students are admitted as dance interview majors and must successfully complete an interview before enrolling in major courses. More information on the interview process can be found at http://dance.asu.edu/undergraduate/interviews.htm.

Prospective students may attend the Prospective Interview Day in February or the Enrolled Student Interview held at the beginning of each semester.

Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

1. the existence of parallel and equal courses in the college’s curriculum, and
2. departmental or school evaluation of studio courses with respect to performance standards.
Every candidate for the bachelor’s degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

Career Opportunities: A comprehensive academic foundation prepares dance professionals for the 21st century by developing the expertise and broad experience to enable them to initiate artistic projects, perform and choreograph. Other graduates teach and design curriculum, produce dance media for performance or instruction, direct or manage a performing arts company, studio or dance-related organization facilitate community partnerships, conduct research and write scholarly publications or work in technical theatre and dance production.

Contact:
School of Dance T
http://dance.asu.edu/
DS (Design South) 101
480/965-1891

Dance (Dance Education) (BFA) FADANE BFA
Herberger Institute for Design and the Arts

Program Description: The B.F.A. in dance with a concentration in dance education prepares students to teach dance in elementary and secondary schools, private studio settings and in other community contexts. Creativity and research, the core program values, are embedded in a broad range of academic experiences emphasizing movement and creative practices, artistic process, leadership and pedagogy. Studies in dance cultures, music, digital media, dance history, philosophy and criticism, movement science, somatics and stage and screen production enhance the rich educational setting. A comprehensive academic foundation prepares students to teach and design curriculum. Students complete the initial teacher certification program in the Mary Lou Fulton Institute and Graduate School of Education to fulfill the degree requirements in the B.F.A. (dance education) and become certified to teach dance (K-12) in Arizona public schools.

Language Requirement: N | Program Fee: N

Admission Requirements: Students are admitted as dance interview majors and must successfully complete an interview before enrolling in major courses. More information on the interview process can be found at http://dance.asu.edu/undergraduate/interviews.htm.

Prospective students may attend the Prospective Interview Day in February or the Enrolled Student Interview held at the beginning of each semester.

Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:
1. the existence of parallel and equal courses in the college’s curriculum, and  
2. departmental or school evaluation of studio courses with respect to  
   performance standards.

Every candidate for the bachelor’s degree must earn a minimum of 30 semester  
hours in resident credit at ASU. Transfer students enrolled in the college must  
complete a minimum of 15 semester hours of resident credit in the major as  
approved by the faculty.

**Career Opportunities:** The concentration in dance education lays the foundation for a  
career in teaching in public and private settings. Students earn a state of Arizona  
teaching certification while pursuing the dance education degree and can expect to  
find employment in one of many thriving middle school and high school dance  
programs throughout the state, or in more informal community settings.

**Contact:**  
School of Dance T  
http://dance.asu.edu/  
DS (Design South) 101  
480/965-1891

**Design Studies (BA) ARDSNBA**  
Herberger Institute for Design and the Arts

**Program Description:** The general B.A. in design studies is a highly flexible program  
of study, much like a liberal arts degree, where students select design and design-  
related courses offered in the college and throughout the university. Students  
acquire a breadth of design knowledge via courses taken from three categories:  
general design, design history and communication for design. The degree is also  
offered in two more specific concentrations: design history, with a strong focus of  
the historical aspects of design as they pertain to the disciplines in the college, and  
design management, which offers a selection of courses in management and human  
communication that complement design.

**Language Requirement: N | Program Fee: N**

**Career Opportunities:** Although a specific career path is not the principal intention of  
the B.A. in design studies, recent graduates of the program have become involved in  
sales and marketing in the design sector, or have gone on to graduate studies in  
architecture and planning. Other possible career paths include journalism and  
education.

**Contact:**  
School of Design Innovation  
http://design.asu.edu/ba  
design.advising@asu.edu  
DS (DESIGN SOUTH) 101  
480/965-7007
Design Studies (Design History) (BA) ARDSNHBA
Herberger Institute for Design and the Arts

Not accepting applications.

Program Description: The B.A. in design studies, with a concentration in design history is a highly flexible program of study. This concentration places a strong focus of the historical aspects of design as they pertain to the disciplines in the college. Students also acquire a breadth of design knowledge via courses taken from three categories: general design, design history and communication for design. The degree is also offered in two other concentrations: a general path, where students select design and design-related courses offered in the college and throughout the university, and design management, which offers a selection of courses in management and human communication that complement design.

Language Requirement: N | Program Fee: N

Career Opportunities: Although a specific career path is not the principal intention of the B.A. in design studies, recent graduates of the program have become involved in sales and marketing in the design sector, or have gone on to graduate studies in architecture and planning. Other possible career paths include journalism and education.

Contact:
School of Design Innovation
http://design.asu.edu/ba
design.advising@asu.edu
DS (DESIGN SOUTH) 101
480/965-7007

Design Studies (Design Management) (BA) ARDSN MBA
Herberger Institute for Design and the Arts

Program Description: The B.A. in design studies, with a concentration in design management is a highly flexible program of study. This concentration offers a selection of courses in management and human communication that complement design. Students also acquire a breadth of design knowledge via courses taken from three categories: general design, design history and communication for design. The degree is also offered in two other concentrations: a general path, where students select design and design-related courses offered in the college and throughout the university, and design history, with a strong focus of the historical aspects of design as they pertain to the disciplines in the college.

Language Requirement: N | Program Fee: N

Career Opportunities: Although a specific career path is not the principal intention of the B.A. in design studies, recent graduates of the program have become involved in sales and marketing in the design sector, or have gone on to graduate studies in
architecture and planning. Other possible career paths include journalism and education.

Contact:
School of Design Innovation
http://design.asu.edu/ba/index.shtml
design.advising@asu.edu
DS (DESIGN SOUTH) 101
480/965-7007

Film (Film & Media Production) (BA) FAFLMBA
Herberger Institute for Design and the Arts

Program Description: The School of Theatre and Film offers a B.A. in film with a concentration in film and media production. The concentration provides students with a comprehensive practical knowledge of production, awareness of the impact of media and entertainment on the audience, and an understanding of the role of the artist in society. Students in the film and media production concentration have access to digital cameras, lighting and sound equipment in a new teaching studio. Post-production facilities include multiple computer editing stations. The curriculum’s course work in ethics in entertainment and dramatic analysis are two other unique components.

Language Requirement: N | Program Fee: N

Admission Requirements: All successful applicants interested in studying film in the Herberger Institute School of Theatre and Film begin their studies at ASU in the filmmaking practices concentration. All students complete the same 18-hour film core requirements in their first two years of study. There are no additional entrance requirements for the B.A. in film with a filmmaking practices concentration.

Students interested in pursuing the highly-selective studio-based film and media production concentration must achieve a 3.0 GPA or higher in the film core and a cumulative ASU GPA of 2.5 to interview for the concentration. They must also interview and submit a portfolio for review in the semester in which they are completing the core.

Career Opportunities: The film and media production concentration provides students with the knowledge and experience to prepare them to enter careers in media and entertainment as screenwriters, directors, cinematographers, editors or producers. The B.A. program is an excellent broad-based foundation for work in the profession or to prepare the student for further training at graduate schools or conservatories.

Contact:
School of Theatre and Film
http://theatrefilm.asu.edu
theatrefilm@asu.edu
Film (Filmmaking Practices) (BA) FAFPRBA
Herberger Institute for Design and the Arts

Program Description: The Herberger Institute School of Theatre and Film offers a B.A. in film with a nonstudio-based concentration in filmmaking practices. All successful applicants to the B.A. in film begin their studies at ASU in the filmmaking practices concentration.

Students pursuing the filmmaking practices concentration of the B.A. in film receive grounding in production practice, independent film producing, entertainment ethics and an understanding of the role of the artist in society. Students are encouraged to participate in the production-oriented environment of the Herberger Institute for Design and the Arts. The curriculum’s course work in ethics in entertainment and dramatic analysis are two unique components of the program. Students completing the degree will be prepared for entry-level positions in film production, producing and management, or advanced graduate-level education.

The School of Theatre and Film also offers a highly selective studio-based concentration in film and media production.

Language Requirement: N | Program Fee: N

Admission Requirements: Students interested in pursuing the highly-selective, studio-based film and media production concentration must achieve a 3.00 GPA or higher in the film core and a cumulative ASU GPA of 2.50 to interview for the concentration. They must also interview and submit a portfolio for review in the semester in which they are completing the core.

Career Opportunities: The filmmaking practices concentration provides students with the knowledge and experience to prepare them to enter entry level positions in media and entertainment production, producing and film management or to enter advanced graduate-level education.

Contact:
School of Theatre and Film
http://herbergercollege.asu.edu
GHALL 116
4809654495

Graphic Design (BSD) ARGRABSD
Herberger Institute for Design and the Arts

Program Description: Graphic designers are responsible for designing how information is communicated. Forms of communication include print, video, film
and electronic (Web). The faculty in the School of Design Innovation offers the B.S.D. in graphic design.

Graphic designers are concerned with how communication is transferred and received, choosing the appropriate mechanism for distinctness, clarity of information and appearance. This program places an emphasis on strategic communication, developed through a design process that includes research, analysis, conceptualization, planning and realization. The process leads to innovative visual communication design solutions for contemporary design problems that are local to global in scope.

This is an eight-semester program requiring sequential completion of studio course work (or its approved equivalent) at any point of entry.

Language Requirement: N | Program Fee: N

Career Opportunities: Based on a very diversified portfolio upon graduation, students opting for the graphic design profession gain employment in brand and corporate identity, interaction and interface design, broadcast (TV graphics), museum/exhibitions, publication and advertising. Specific examples of graphic designers’ work include environmental graphics, annual reports, publications, books, Web pages and multimedia presentations. Students may also pursue graduate studies leading to careers in design education and other fields of professional endeavor in design.

Contact:
School of Design Innovation
http://design.asu.edu/viscom/index.shtml
design.advising@asu.edu
DS (Design South) 101
480/965-8947

Housing & Community Development (BSD) ARHCDBSD
Herberger Institute for Design and the Arts

Program Description: The B.S.D. in housing and community development provides a professional-level education in residential and community development. Students enrolled in the program receive instruction in the development of a broad range of housing types and community environments. Cross-disciplinary instruction in design, real estate development, business administration and construction management is also emphasized. The program places a high value on innovative housing design, affordability, neighborhood creation and sustainable development.

Language Requirement: N | Program Fee: N

Career Opportunities: The majority of recent graduates have positions in the private, residential and land development industries. Others have chosen career paths with public and nonprofit housing and neighborhood redevelopment agencies.
Contact:
School of Architecture and Landscape Architecturehttp://design.asu.edu/hud
design.advising@asu.edu
CAM
480/965-7007

**Industrial Design (BSD) ARINDBSD**
Herberger Institute for Design and the Arts

*Program Description:* Industrial designers are responsible for the design of products and systems that people use in their work, play and daily lives. The industrial design program at ASU focuses on a new model of interdisciplinary product development called integrated innovation. The primary goal of integrated innovation is to produce design solutions that:

1. Meet user needs in unexpected ways.
2. Create value in the marketplace.
3. Improve society and the environment. This is an eight-semester program requiring sequential completion of studio course work (or its approved equivalent) at any point of entry.

*Language Requirement: N | Program Fee: N*

*Career Opportunities:* Graduates work for large corporations that have their own industrial design departments, such as automobile companies, computer hardware and/or software companies, consumer product companies and medical equipment companies. Opportunities also exist with consulting firms that design for a variety of different clients.

Contact:
School of Design Innovation
http://design.asu.edu/industrial/index.shtml
design.advising@asu.edu
DS (DESIGN SOUTH) 101
480/965-1767

**Interior Design (BSD) ARINTBSD**
Herberger Institute for Design and the Arts

*Program Description:* Course work in the B.S.D. in interior design examines the context in which individuals and groups live and work. Interior designers create environments within buildings that meet the physical and psychological needs of individuals and institutions to have useful, rich and rewarding contexts for their lives. Interior design involves the design of space, equipment and furniture. It requires substantial technical and organizational understanding, as well as sensibility to color, shape and form.
This is an eight-semester program requiring sequential completion of studio course work (or its approved equivalent) at any point of entry.

Language Requirement: N | Program Fee: N

Career Opportunities: Graduates find employment opportunities with interior design firms or architecture firms specializing in interior design. The scope of work undertaken by interior designers is expanding; career opportunities include historic restoration and working for large corporations or governmental agencies within their interior design and space-management offices.

Contact:
School of Design Innovation
http://design.asu.edu/interior/index.shtml
design.advising@asu.edu
DS (DESIGN SOUTH) 101
480/965-3571

Landscape Architecture (BSLA) ARPLABSLA
Herberger Institute for Design and the Arts

Program Description: Landscape architects are involved in the design, planning and management of the land. Landscape architects develop expertise in both the art of design and the environmental sciences. Landscape architecture students learn about:

- Bioengineering.
- Computer methods.
- Landscape construction.
- Planning and zoning law.
- Site planning.
- Urban design.

This is an eight-semester program requiring sequential completion of studio course work (or its approved equivalent) at any point of entry.

Language Requirement: N | Program Fee: N

Career Opportunities: Graduates in landscape architecture are able to pursue career opportunities in private landscape architecture companies, government environmental planning and management agencies. Some landscape architects elect to pursue graduate degrees to develop specialty skills and to enhance their opportunities for career advancement.

Contact:
School of Architecture and Landscape Architecture
http://design.asu.edu/sala/index.shtml
design.advising@asu.edu
Music (BA) FAMUSBA
Herberger Institute for Design and the Arts

Program Description: The B.A. in music is a broad cultural degree program with an emphasis on the concepts of music history and theory. These concepts are concerned with the intellectual study of music, its stylistic evolution and its place in the world of its time. This degree may be used as a first step toward a master’s or doctoral degree in music history or combined with other degree programs.

Language Requirement: Y | Program Fee: N

Admission Requirements: Students are admitted as music audition majors and must successfully complete an audition before enrolling in major courses.

Students wishing to pursue a major in the School of Music must successfully complete an audition before enrolling in major course work. Audition information can be found on the School of Music Web site at: http://music.asu.edu/students/prospective/undergrad/apply.php. The Web site details the enrollment and audition process.

Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

1. the existence of parallel and equal courses in the college’s curriculum, and
2. departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor’s degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

Career Opportunities: Music research, criticism, publishing and concert management are among the career opportunities. Many graduates pursue a master's or a doctorate in music or in another professional field.

Contact:
School of Music
http://music.asu.edu
ugradmusicadmissions@asu.edu
MUSIC E167
480/965-3371

Music Education (Choral-General) (BMUS) FAMUSCBMUS
Herberger Institute for Design and the Arts
**Program Description:** The B.Mus. in music education (choral-general) program is designed for students interested in pursuing careers as teachers of general or choral music in elementary and secondary schools. This program also prepares students for K-12 teaching certification.

**Language Requirement:** N | **Program Fee:** N

**Admission Requirements:** Students are admitted as music audition majors and must successfully complete an audition before enrolling in major courses.

Students wishing to pursue a major in the School of Music must successfully complete an audition before enrolling in major coursework. Audition information can be found on the School of Music Web site at: http://music.asu.edu/students/prospective/undergrad/apply.php. The Web site details the enrollment and audition process.

Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

1. the existence of parallel and equal courses in the college’s curriculum, and
2. departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor’s degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

**Career Opportunities:** Graduates teach in public school music programs that offer general music, choir, band, orchestra or some combination of musical activities. Graduates also teach privately, perform in community and professional ensembles and work in music-related industries.

**Contact:**
School of Music
http://music.asu.edu
ugradmusicadmissions@asu.edu
MUSIC E167
480/965-3371

Music Education (Instrumental) (BMUS) FAMUSIIBM
Katherine K. Herberger College of the Arts

**Program Description:** The B.Mus. in music education (instrumental) program is designed for students interested in pursuing careers as teachers of instrumental (band, winds) music in the public schools. The degree program also prepares students for K-12 teaching certification.

**Language Requirement:** N | **Program Fee:** N
Admission Requirements: Students are admitted as music audition majors and must successfully complete an audition before enrolling in major courses.

Students wishing to pursue a major in the School of Music must successfully complete an audition before enrolling in major course work. Audition information can be found on the School of Music Web site at: http://music.asu.edu/students/prospective/undergrad/apply.php. The Web site details the enrollment and audition process.

Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

1. the existence of parallel and equal courses in the college's curriculum, and
2. departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor’s degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

Career Opportunities: Graduates teach in public school music programs that offer general music, choir, band, orchestra or some combination of musical activities. Graduates also teach privately, perform in community and professional ensembles and work in music-related industries.

Contact:
School of Music
http://music.asu.edu
ugradmusicadmissions@asu.edu
MUSIC E167
480/965-3371

Music Education (String) (BMUS) FAMUSISBM
Herberger Institute for Design and the Arts

Program Description: The B.Mus. in music education (string) program is designed for students interested in pursuing careers as teachers of string and orchestra music in the public schools. The degree program also prepares students for K-12 teaching certification.

Language Requirement: N | Program Fee: N

Admission Requirements: Students are admitted as music audition majors and must successfully complete an audition before enrolling in major courses.

Students wishing to pursue a major in the School of Music must successfully complete an audition before enrolling in major course work. Audition information can be found on the School of Music Web site at:

Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

1. the existence of parallel and equal courses in the college’s curriculum, and
2. departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor’s degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

Career Opportunities: Graduates teach in public school music programs that offer general music, choir, band, orchestra or some combination of musical activities. Graduates also teach privately, perform in community and professional ensembles and work in music-related industries.

Contact:
School of Music
http://music.asu.edu
ugradmusicadmissions@asu.edu
MUSIC E167
480/965-3371

Music Therapy (BMUS) FAMUSTHBM
Herberger Institute for Design and the Arts

Program Description: The B.Mus. in music therapy program instructs students in the mental-health/special-education profession that uses carefully planned music activities to achieve desired changes in client behavior and functioning. Music therapy is a profession in which engagement in active music-making helps a client achieve nonmusical, therapeutic goals. Educating the potential music therapist requires both a wide range of skill and the ability to work with people in a therapeutic manner. Music therapy students have many opportunities to develop their clinical skills. Students also study musical improvisation, songwriting, world music and popular music styles.

Language Requirement: N | Program Fee: N

Admission Requirements: Students are admitted as music audition majors and must successfully complete an audition before enrolling in major courses.

Students wishing to pursue a major in the School of Music must successfully complete an audition before enrolling in major course work. Audition information can be found on the School of Music Web site at:
The Website details the enrollment and audition process.

Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

1. the existence of parallel and equal courses in the college’s curriculum, and
2. departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor’s degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

Career Opportunities: Graduates are eligible to register as professional music therapists and can sit for the music therapy certification examination given by the Certification Board for Music Therapy. Jobs are available nationally in hospitals, schools, rehabilitation centers, nursing homes and other healthcare facilities. Career opportunities also include work in mental health, special education, physical rehabilitation and geriatric care. A music therapy career may also provide an opportunity for private practice with flexible hours.

Contact:
School of Music
http://music.asu.edu
ugradmusicadmissions@asu.edu
MUSIC E167
480/965-3371

Program Description: The B.Mus. in performance with a concentration in collaborative piano offers private instruction, supervised ensemble work and ample opportunity for extensive performance experience. The program focuses on core repertoire: the English, German and French song literature and selected works from the instrumental, operatic and oratorio repertoire. Collaboration within the School of Music involves working with all performance areas, including duo recitals with instrumental and voice colleagues, performances of great chamber music literature, work as rehearsal and pit pianists for the Lyric Opera Theater and concerts with large ensembles and choirs. Few college music schools or departments offer a degree with a concentration in collaborative piano.

Language Requirement: N | Program Fee: N

Admission Requirements: Students are admitted as music audition majors and must successfully complete an audition before enrolling in major courses.
Students wishing to pursue a major in the School of Music must successfully complete an audition before enrolling in major course work. Audition information can be found on the School of Music Web site at: http://music.asu.edu/students/prospective/undergrad/apply.php. The Web site details the enrollment and audition process.

Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

1. the existence of parallel and equal courses in the college’s curriculum, and
2. departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor’s degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

Career Opportunities: A degree in the arts offers students a pathway to a rich and varied choice of careers. Career opportunities include professional performer, collaborative pianist or private studio of piano and/or collaborative piano. College-level teaching does require a graduate degree.

Contact:
School of Music
http://music.asu.edu
ugradmusicadmissions@asu.edu
MUSIC E167
480/965-3371

Performance (Guitar) (BMUS) FAMUSPGBM
Herberger Institute for Design and the Arts

Program Description: The B.Mus. program in performance with a concentration in guitar stresses the study of guitar literature and techniques. Goals include enabling students to express themselves musically while emphasizing the skills necessary to pursue a career as a professional musician. The course of study includes extensive performance experiences.

Language Requirement: N | Program Fee: N

Admission Requirements: Students are admitted as music audition majors and must successfully complete an audition before enrolling in major courses.

Students wishing to pursue a major in the School of Music must successfully complete an audition before enrolling in major course work. Audition information can be found on the School of Music Web site at:

Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

1. the existence of parallel and equal courses in the college’s curriculum, and
2. departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor’s degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

Career Opportunities: Career opportunities for graduates with a B.Mus. in performance with a concentration in guitar include, performing as a concert soloist or in chamber music ensembles, artist-in-residence interaction as part of school programs or state or community arts councils, for social functions, providing music for restaurants, clubs, resorts, churches and art galleries, recording and studio work and teaching privately or as part of a college or university program.

Contact:
School of Music
http://music.asu.edu
ugradmuscadmissions@asu.edu
MUSIC E167
480/965-3371

Performance (Jazz) (BMUS) FAMUSPJBM
Katherine K. Herberger College of the Arts

Program Description: The jazz concentration, under the B.Mus. in performance, places an emphasis on the improvisational aspects of jazz. The curriculum combines jazz performance, composition and pedagogy in a program that allows the student to express themselves musically while emphasizing the skills necessary to pursue a career as a professional musician. The study of jazz performance can be a suitable background for work in performance, recording studios, film scoring, writing and arranging, contemporary composition, jazz pedagogy and other related fields in the music industry.

Language Requirement: N | Program Fee: N

Admission Requirements: Students are admitted as music audition majors and must successfully complete an audition before enrolling in major courses.

Students wishing to pursue a major in the School of Music must successfully complete an audition before enrolling in major course work. Audition information
can be found on the School of Music Web site at: http://music.asu.edu/students/prospective/undergrad/apply.php. The Web site details the enrollment and audition process.

Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

1. the existence of parallel and equal courses in the college’s curriculum, and
2. departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor’s degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

Career Opportunities: Graduates are prepared to work in various professional capacities, including studio musician, jazz composer/arranger, freelance musician, accompanist, film scorer, professional recording artist and teacher.

Contact:
School of Music
http://music.asu.edu
ugradmusicadmissions@asu.edu
MUSIC E167
480/965-3371

Performance (Keyboard) (BMUS) FAMUSPKBM
Herberger Institute for Design and the Arts

Program Description: The B.Mus. in performance with a concentration in keyboard stresses the study of literature and techniques of the piano, organ or harpsichord. Students also study music theory and take other courses required of all music majors. The course of study includes extensive performance experience.

Language Requirement: N | Program Fee: N

Admission Requirements: Students are admitted as music audition majors and must successfully complete an audition before enrolling in major courses.

Students wishing to pursue a major in the School of Music must successfully complete an audition before enrolling in major course work. Audition information can be found on the School of Music Web site at: http://music.asu.edu/students/prospective/undergrad/apply.php. The Web site details the enrollment and audition process.

Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:
1. the existence of parallel and equal courses in the college’s curriculum, and
2. departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor’s degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

Career Opportunities: A degree in the arts offers students a pathway to a rich and varied choice of careers. This particular degree program is intended for individuals planning a career as a professional performer and/or private studio or college teacher of piano, harpsichord and/or organ.

Contact:
School of Music
http://music.asu.edu
ugradmusicadmissions@asu.edu
MUSIC E167
480/965-3371

Performance (Music Theatre) (BMUS) FAMUSPMBM
Herberger Institute for Design and the Arts

Program Description: The B.Mus in performance with a concentration in music theatre features workshops in music theatre performance techniques, and performances in various kinds of musical theatre. Students perform in up to five full productions every year, including every kind of music theatre. The program includes classes in techniques and skills specifically appropriate for music theatre, so students are not dependent upon classes in music and theatre as separate entities. The general education requirements include courses in dance and acting.

Language Requirement: Y | Program Fee: N

Admission Requirements: Students are admitted as music audition majors and must successfully complete an audition before enrolling in major courses.

Students wishing to pursue a major in the School of Music must successfully complete an audition before enrolling in major course work. Audition information can be found on the School of Music Web site at: http://music.asu.edu/students/prospective/undergrad/apply.php. The Web site details the enrollment and audition process.

Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

1. the existence of parallel and equal courses in the college’s curriculum, and
2. departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor’s degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

Career Opportunities: This degree is designed for individuals who plan a career as a performing singer-actor/actress in opera, operetta, musicals and other forms of musical theatre. Graduates find work as conductors, teachers, singers and as actors/actresses. Graduates perform on Broadway, in national touring companies, in major opera houses, or at universities, colleges and schools.

Contact:
School of Music
http://music.asu.edu
ugradmusicadmissions@asu.edu
MUSIC E167
480/965-3371

Performance (Orchestral Instrument) (BMUS) FAMUSPOBM
Herberger Institute for Design and the Arts

Program Description: The B.Mus. in performance (orchestral instrument) stresses the study of specific orchestral instrument literature and techniques. Goals include enabling students to express themselves musically while emphasizing the skills necessary to pursue a career as a professional musician. Students complete course work that is required of all music majors.

Language Requirement: N | Program Fee: N

Admission Requirements: Students are admitted as music audition majors and must successfully complete an audition before enrolling in major courses.

Students wishing to pursue a major in the School of Music must successfully complete an audition before enrolling in major course work. Audition information can be found on the School of Music Web site at: https://music.asu.edu/students/prospective/undergrad/apply.php. The Web site details the enrollment and audition process.

Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

1. the existence of parallel and equal courses in the college’s curriculum, and
2. departmental or school evaluation of studio courses with respect to performance standards.
Every candidate for the bachelor’s degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

Career Opportunities: A degree in the arts offers students a pathway to a rich and varied choice of careers. Specific opportunities available to graduates of this degree program include performance in professional ensembles, as a concert soloist and teaching privately.

Contact:
School of Music
http://music.asu.edu
ugradmusicadmissions@asu.edu
MUSIC E167
480/965-3371

Performance (Voice) (BMUS) FAMUSPVBM
Herberger Institute for Design and the Arts

Program Description: The B.Mus. in performance with a concentration in voice stresses the study of specific orchestral instrument literature and techniques. Goals include enabling students to express themselves musically while emphasizing the skills necessary to pursue a career as a professional musician. The course of study includes extensive performance experience.

Language Requirement: Y | Program Fee: N

Admission Requirements: Students are admitted as music audition majors and must successfully complete an audition before enrolling in major courses.

Students wishing to pursue a major in the School of Music must successfully complete an audition before enrolling in major course work. Audition information can be found on the School of Music Web site at: http://music.asu.edu/students/prospective/undergrad/apply.php. The Web site details the enrollment and audition process.

Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

1. the existence of parallel and equal courses in the college’s curriculum, and
2. departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor’s degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.
Career Opportunities: A degree in the arts offers students a pathway to a rich and varied choice of careers. Career opportunities for B.Mus. in performance graduates include professional performance in opera, oratorio, art song recitals, various chamber ensembles, including early music groups and/or teaching studio voice and related courses.

Contact:
School of Music
http://music.asu.edu
ugradmusicadmissions@asu.edu
MUSIC E167
480/965-3371

Theatre (BA) FATHEBA
Herberger Institute for Design and the Arts

Program Description: The B.A. in theatre involves comprehensive academic and hands-on theatre study. Student artists and scholars gain a general appreciation of the principal fields of human knowledge while acquiring training in such areas as theatre and performance studies, performance and directing, design and production, new work development, theatre for youth and film. Concentrations in acting or design and production are available for students who qualify for admission into these programs. ASU offers well-equipped theatre facilities including the Galvin Playhouse, the Lyceum Theatre, the Prism Theatre for student-produced works, extensive shops and uniquely equipped rehearsal and instructional spaces. The School of Theatre and Film production program emphasizes new work and innovative interpretations.

Language Requirement: N | Program Fee: N

Admission Requirements: Students, both freshmen and transfers, are admitted to ASU as theatre exploratory majors. They successfully complete an interview and audition or portfolio review before enrolling as a BA Theatre major. Students may interview before enrolling at ASU or participate in the interview during their first semester of study. Students who enter before interviewing take course work in the first semester to better prepare them for the interview.

Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

1. the existence of parallel and equal courses in the college’s curriculum, and
2. departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor’s degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.
Career Opportunities: The B.A. in theatre program provides an excellent broad-based foundation for work in the arts or entertainment professions or readies students for further training at graduate schools or conservatories. The program's liberal arts emphasis prepares graduates for a variety of occupations in both theatre and non-theatre fields. Opportunities may include work with production companies in theatre, television or film, in schools, themed entertainment or arts entrepreneurship.

Contact:
School of Theatre and Film
http://theatrefilm.asu.edu/
theatre@asu.edu
GHALL 232
480/965-5337

Theatre (Acting) (BA) FATHEABA
Herberger Institute for Design and the Arts

Program Description: The B.A. in theatre with a concentration in acting involves comprehensive academic and hands-on theatre study with an emphasis on performance. Student artists and scholars gain a general appreciation of the principal fields of human knowledge while acquiring training in such areas as theatre and performance studies, performance and directing, design and production, new work development, theatre for youth and film. ASU offers well-equipped theatre facilities including the Galvin Playhouse, the Lyceum Theatre, the Prism Theatre for student-produced work, extensive shops and uniquely equipped rehearsal and instructional spaces.

Language Requirement: N | Program Fee: N

Admission Requirements: Students are admitted to ASU as theatre exploratory majors. They successfully complete an interview and audition or portfolio review before enrolling as a B.A. Theatre major. Students may interview before enrolling at ASU or participate in the interview during their first semester of study. Students who enter before interviewing take course work in the first semester to better prepare for the interview. After students are admitted to the B.A. Theatre major, they may interview for admission into the acting concentration; these interviews are conducted in the spring semester. Sophomore standing is required for admission to the acting concentration.

Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

1. the existence of parallel and equal courses in the college's curriculum, and
2. departmental or school evaluation of studio courses with respect to performance standards.
Every candidate for the bachelor’s degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

*Career Opportunities:* The B.A. in theatre program provides an excellent broad-based foundation for work in the profession or readies students for further training at graduate schools or conservatories. The program’s liberal arts emphasis prepares graduates for a variety of occupations. The concentration in acting offers students advanced study that can lead to careers in theatre, film or media, ranging from regional/seasonal theatrical production opportunities to work in television and film, as well as careers in education and other related arts disciplines.

*Contact:*
School of Theatre and Film
http://theatrefilm.asu.edu/
theatre@asu.edu
GHALL 232
480/965-5337

**Theatre (Design & Production) (BA) FADSNPRBA**
Herberger Institute for Design and the Arts

*Program Description:* The B.A. in theatre with a concentration in design and production involves comprehensive academic and hands-on theatre study with an emphasis on design and production. Student artists and scholars gain a general appreciation of the principal fields of human knowledge while acquiring training in such areas as theatre and performance studies, performance and directing, design and production, new work development, theatre for youth and film. ASU offers well-equipped theatrical facilities including the Galvin Playhouse, the Lyceum Theatre, the Prism Theatre for student-produced work, extensive and professionally staffed production shops and uniquely equipped rehearsal and instructional spaces.

*Language Requirement:* N | *Program Fee:* N

*Admission Requirements:* Students are admitted to ASU as theatre exploratory majors. They successfully complete an interview and audition or portfolio review before enrolling as a BA Theatre major. Students may interview before enrolling at ASU or participate in the interview during their first semester of study. Students who enter before interviewing take course work in the first semester to better prepare for the interview. Interviews for admission into the BA Theatre design and production concentration are conducted each semester and require a portfolio.

Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:

1. the existence of parallel and equal courses in the college’s curriculum, and
2. departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor’s degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

*Career Opportunities:* The B.A. in theatre program provides an excellent broad-based foundation for work in the profession or readies students for further training at graduate schools or conservatories. The program’s liberal arts emphasis prepares graduates for a variety of occupations. The design and production concentration offers students advanced study that can lead to careers in the performing arts and the entertainment industry as designers or technologists.

*Contact:*
School of Theatre and Film
http://theatrefilm.asu.edu/
theatre@asu.edu
GHALL 232
480/965-5337

*Theory & Composition (Composition) (BMUS) FAMUSTCBM*
Herberger Institute for Design and the Arts

*Program Description:* The B.Mus. in theory and composition (with a concentration in composition) program focuses on the study of music from a compositional viewpoint. This program may be used as the first step toward a master’s or doctoral degree in music theory and composition. The School of Music offers students the opportunity to study with theorists and composers who have established national and international reputations.

*Language Requirement:* N | *Program Fee:* N

*Admission Requirements:* Students are admitted to the school as music audition majors. Admission into the Music Theory and Composition degree program is subject to a successful audition in the major performing medium. An interview with composition faculty member(s) and an evaluation of original compositions is also required.

Students wishing to pursue a major in the School of Music must successfully complete an audition before enrolling in major course work. Audition information can be found on the School of Music Web site at: http://music.asu.edu/students/prospective/undergrad/apply.php. The Web site details the enrollment and audition process.

Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:
1. the existence of parallel and equal courses in the college’s curriculum, and
2. departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor’s degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

Career Opportunities: A degree in the arts offers students a pathway to a rich and varied choice of careers. This particular degree program is designed for a student who plans a career as a professional composer, arranger or college-level teacher of theory and composition. College-level teaching does require a graduate degree, however.

Contact:
School of Music
http://music.asu.edu
ugradmusicadmissions@asu.edu
MUSIC E167
480/965-3371

Theory & Composition (Theory) (BMUS) FAMUSTTBM
Herberger Institute for Design and the Arts

Program Description: The B.Mus. in theory and composition (with a concentration in theory) program focuses on the theoretical study of music. This program may be used as the first step toward a master’s or doctoral degree in music theory and composition. The School of Music offers students the opportunity to study with theorists and composers who have established national and international reputations.

Language Requirement: N | Program Fee: N

Admission Requirements: Students meeting the university requirements for admission may matriculate in the Herberger Institute for Design and the Arts. Separate admission procedures and approvals are required for some programs within the college. Students must contact specific departments or schools for details.

Students wishing to pursue a major in the School of Music must successfully complete an audition before enrolling in major course work. Audition information can be found on the School of Music Web site at: http://music.asu.edu/students/prospective/undergrad/apply.php. The Web site details the enrollment and audition process.

Direct transfer of courses from other accredited institutions to the Herberger Institute for Design and the Arts are subject to:
1. the existence of parallel and equal courses in the college’s curriculum, and
2. departmental or school evaluation of studio courses with respect to performance standards.

Every candidate for the bachelor’s degree must earn a minimum of 30 semester hours in resident credit at ASU. Transfer students enrolled in the college must complete a minimum of 15 semester hours of resident credit in the major as approved by the faculty.

Career Opportunities: A degree in the arts offers students a pathway to a rich and varied choice of careers. This particular degree program is designed for a student who plans a career as a professional composer, arranger or college-level teacher of theory and composition. College-level teaching does require a graduate degree.

Contact:
School of Music
http://music.asu.edu
ugradmusicadmissions@asu.edu
MUSIC E167
480/965-3371

Engineering, Ira A. Fulton School of

Aerospace Engineering (Aeronautics) (BSE) ESAEROBSE
Ira A. Fulton School of Engineering

Program Description: The aerospace engineering curriculum provides students with an education in technological areas critical to the design and development of aerospace vehicles and systems. The aeronautics concentration, under the B.S.E. in aerospace engineering, emphasizes aeronautical engineering. Topics in required courses cover aerodynamics, aerospace materials, aircraft structures, propulsion, flight mechanics, and stability and control. Required astronautics topics include orbital mechanics, attitude control and rocket propulsion.

The aerospace engineering programs at ASU are accredited by the Engineering Accreditation Commission of ABET.

Language Requirement: N | Program Fee: Y

Admission Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside engineering when applying for admission. Students who are not eligible for admission to engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown
below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (http://students.asu.edu/international-admission) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.

**Freshman Admission:**

1. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class, and
2. No high school math or science competency deficiencies.

**Transfer students with fewer than 24 transferable college credit hours:**

1. Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
2. No high school math or science competency deficiencies, and
3. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class.

**Transfer students with more than 24 transferable college credit hours:**

1. Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
2. No high school math or science competency deficiencies (if Undergraduate Admissions requires submission of a high school transcript).

**Career Opportunities:** A majority of students entering the field of aerospace engineering desire to work on the design and analysis of aerospace vehicles. Most graduates are employed in the aerospace industry or in government positions related to aerospace. Specific careers in aerospace engineering include vehicle design and performance, vehicle and component analysis using computer-aided tools, wind-tunnel and flight testing, space mission design and analysis, propulsion engineering, aeronautical and space systems integration, material and structural design and configuration development.

The objectives of the aerospace engineering program are for graduates to be employed in aerospace engineering or a related field or accepted to graduate school and:

1. Graduates will have the technical skills for career success, including the ability to think in a critical and evaluative manner and to consider a broad perspective in order to solve technical and non-technical problems.
2. Graduates will have the professional skills for career success, including an awareness of ethical responsibility, the ability to communicate well and to work successfully within diverse groups.
Aerospace Engineering (Astronautics) (BSE) ESAEASBSE
Ira A. Fulton School of Engineering

Program Description: The aerospace engineering curriculum provides students with an education in technological areas critical to the design and development of aerospace vehicles and systems. The astronautics concentration, under the B.S.E. in aerospace engineering, is offered in partnership with the School of Earth and Space Exploration.

The curriculum covers orbital mechanics, space environment, attitude determination and control, telecommunications, space structures, rocket propulsion, and gas dynamics, as well as elective topics in aeronautics. Students in the astronautics concentration study alongside students majoring in exploration science, and design projects are carried out within transdisciplinary student teams.

The aerospace engineering programs at ASU are accredited by the Engineering Accreditation Commission of ABET.

Language Requirement: N | Program Fee: Y

Admission Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside engineering when applying for admission. Students who are not eligible for admission to engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (http://students.asu.edu/international-admission) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.

Freshman Admission:

1. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class, and
2. No high school math or science competency deficiencies.
Transfer students with fewer than 24 transferable college credit hours:

1. Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
2. No high school math or science competency deficiencies, and
3. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class.

Transfer students with more than 24 transferable college credit hours:

1. Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
2. No high school math or science competency deficiencies (if Undergraduate Admissions requires submission of a high school transcript).

Career Opportunities: A majority of students entering the field of aerospace engineering desire to work on the design and analysis of aerospace vehicles. Most graduates are employed in the aerospace industry or in government positions related to aerospace. Specific careers in aerospace engineering include vehicle design and performance, vehicle and component analysis using computer-aided tools, wind-tunnel and flight testing, space mission design and analysis, propulsion engineering, aeronautical and space systems integration, material and structural design, and configuration development.

The objectives of the aerospace engineering program are for graduates to be employed in aerospace engineering or a related field or accepted to graduate school and:

1. Graduates will have the technical skills for career success, including the ability to think in a critical and evaluative manner and to consider a broad perspective in order to solve technical and non-technical problems.
2. Graduates will have the professional skills for career success, including an awareness of ethical responsibility, the ability to communicate well and to work successfully within diverse groups.

Contact:
Mechanical and Aerospace Engineering Program
http://mae.fulton.asu.edu
mae@asu.edu
ECG 346
480/965-3291

Bioengineering (BSE) ESBMEBSE
Ira A. Fulton School of Engineering

Program Description: Bioengineering uses principles and methods from engineering and the physical sciences to solve problems in biology and medicine. A B.S.E. in bioengineering provides students with a broad-based education in engineering and the life and natural sciences, preparing them to apply their skills in an ethical,
sustainable and environmentally responsible manner to make contributions that address societal and individual needs.

The objective of the bioengineering program is to prepare students:

- For productive employment, graduate study, or professional programs, especially in human and animal medicine, biotechnology and related biology-based engineering fields.
- Who will ethically and responsibly contribute to society, drawing from an integrated, multidisciplinary bioengineering education, focusing on sustainability and environmentalism.
- Who continue to develop technical knowledge, awareness and leadership abilities to address domestic or global issues in human health.

*Language Requirement: N | Program Fee: Y*

*Admission Requirements:* The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside engineering when applying for admission. Students who are not eligible for admission to engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (http://students.asu.edu/international-admission) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.

**Freshman Admission:**

1. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class, and
2. No high school math or science competency deficiencies.

**Transfer students with fewer than 24 transferable college credit hours:**

1. Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
2. No high school math or science competency deficiencies, and
3. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class.

**Transfer students with more than 24 transferable college credit hours:**
1. Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
2. No high school math or science competency deficiencies (if Undergraduate Admissions requires submission of a high school transcript).

**Career Opportunities:** Biomedical engineers are employed in industry, hospitals and research facilities affiliated with educational and medical institutions, education and governmental regulatory agencies. They often serve a coordinating or interfacing function, using their background in both the engineering and medical fields. In industry, they may create designs where an in-depth understanding of living systems and technology is essential. They may be involved in performance testing of new or proposed products. Government positions often involve product testing and safety, as well as establishing safety standards for devices. In the hospital, the biomedical engineer may provide advice on the selection and use of medical equipment and supervise performance testing and maintenance of the selected equipment. Biomedical engineers may also build customized devices for special health care or research needs.

**Contact:**
Harrington Bioengineering Program
http://hdbe.fulton.asu.edu
hdbe@asu.edu
ECG 334
480/965-3028

**Biomedical Informatics (BS) ESBMIBS**
Not accepting applications.

**Program Description:** Biomedical informatics is the field in which computer science, information technology, probabilistic reasoning, cognitive science and other quantitative and technical methods and skills are applied to biomedicine and healthcare delivery. The program will educate undergraduate students in the informatics knowledge and skills that will enable them to be effective contributors to the informatics aspects of biomedical sciences, technology development and healthcare delivery. Students will also be prepared to enter graduate programs in biomedical informatics to equip them to assume leadership positions in these fields.

**Language Requirement:** N | Program Fee: Y

**Admission Requirements:** The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside engineering when applying for admission. Students who are not eligible for admission to engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown
below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (http://students.asu.edu/international-admission) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-Based) or a minimum IELTS score of 6.5.

**Freshman Admission:**

1. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class. **and**
2. No high school math or science competency deficiencies.

**Transfer students with fewer than 24 transferable college credit hours:**

1. Minimum transfer GPA of 3.00 for less than 24 transfer hours. **and**
2. No high school math or science competency deficiencies. **and**
3. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class.

**Transfer students with more than 24 transferable college credit hours:**

1. Minimum transfer GPA of 3.00 for 24 or more transfer hours, **and**
2. No high school math or science competency deficiencies (if Undergraduate Admissions requires submission of a high school transcript).

**Career Opportunities:** Graduates will be uniquely positioned to meet the industry demand for professionals conversant with both the technological and medical knowledge required to successfully implement and maintain information technology in large healthcare systems, hospitals and clinical settings.

With the continued growth of the bioinformatics industry, as genetic sequencing becomes increasingly affordable, new industries based on biomarkers, targeted therapies and risk prediction arise. As such, further opportunities will be available to our graduates as research analysts and entrepreneurs in these fields. Graduates will possess the requisite skills in software engineering, in addition to a strong biological background.

Finally, graduates will be prepared to continue on to graduate studies in biomedical informatics and pursue careers either as researchers in academia or industry, or as mid-level and upper-level management within the healthcare sector.

**Contact:**
Department of Biomedical Informatics Program
http://bmi.asu.edu/index.php
sci.advising@asu.edu
Chemical Engineering (BSE) ESCHEBSE
Ira A. Fulton School of Engineering

Program Description: Chemical engineering deals with the application of chemistry, physics and mathematics to the process of converting raw materials or chemicals into more useful or valuable forms. Chemical engineering also involves the design of valuable new materials and chemical products.

The B.S.E. offered in the chemical engineering program builds on a broad base of knowledge within the basic and mathematical sciences, and engineering, and offers excellent career opportunities. Chemical engineers are engaged in the development and production of a diverse range of products including high performance materials needed for aerospace, automotive, biomedical, electronic, environmental and military applications. The modern discipline of chemical engineering is intertwined with biology and biomedical engineering.

Language Requirement: N | Program Fee: Y

Admission Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside engineering when applying for admission. Students who are not eligible for admission to engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (http://students.asu.edu/international-admission) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.

Freshman Admission:

1. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class, and
2. No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

1. Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
2. No high school math or science competency deficiencies, and
3. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class.

Transfer students with more than 24 transferable college credit hours:

1. Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
2. No high school math or science competency deficiencies (if undergraduate admissions requires submission of a high school transcript).

Career Opportunities: Chemical engineers have traditionally played a key role in industries as varied as petroleum, food, artificial fibers, petrochemicals, plastics, ceramics, primary metals, glass and specialty chemicals. Newer areas, such as semiconductors, biotechnology, biomedical engineering, modern materials (composites, superconductors) and the solution of environmental problems, have also generated more opportunities for chemical engineers. These factors, along with the recent recovery and reported record earnings of the chemical and petroleum industries, have created a great demand for chemical engineering graduates.

Contact:
Chemical Engineering Program
http://che.fulton.asu.edu
che@asu.edu
ECG 202
480/965-3313

Civil Engineering (BSE) ESCEEBSE
Ira A. Fulton School of Engineering

Program Description: Civil engineering involves the analysis, planning, design, construction and maintenance of many types of facilities for government, commerce, industry and the public domain. These include office towers, factories, schools, roadway systems, bridges, airports, tunnels and subway systems, dams, canals and water purification facilities.

The faculty in the Ira A. Fulton School of Engineering offer a B.S.E. in civil engineering. Civil engineers are concerned with the impact their projects have on the public and the environment; they coordinate the needs of society with technical and economic feasibility.

The curriculum exposes students to various areas of civil engineering, including construction engineering, environmental engineering, geotechnical engineering, structures, transportation and water resources.

Language Requirement: N | Program Fee: Y

Admission Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements.
Students should select a second major choice outside engineering when applying for admission. Students who are not eligible for admission to engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (http://students.asu.edu/international-admission) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.

**Freshman Admission:**

1. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or
2. 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class, and
3. No high school math or science competency deficiencies.

**Transfer students with fewer than 24 transferable college credit hours:**

1. Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
2. No high school math or science competency deficiencies,
3. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or
4. 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class.

**Transfer students with more than 24 transferable college credit hours:**

1. Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
2. No high school math or science competency deficiencies (if undergraduate admissions requires submission of a high school transcript).

**Career Opportunities:** ASU graduates with a B.S.E. in civil engineering readily find employment. Civil engineers work in many different types of companies, from large corporations to small, private consulting firms, or in governmental agencies. A civil engineering background is an excellent foundation for jobs in management and public service. Civil engineering is one of the best engineering professions from the viewpoint of international travel opportunities or for eventually establishing one’s own consulting business. The B.S.E. in civil engineering prepares graduates for the Fundamentals of Engineering (FE) examination, the Principles and Practice of Engineering (PE) examination and graduate degrees.

**Contact:**
Civil, Environmental and Sustainable Eng Program
http://cee.fulton.asu.edu/
cee@asu.edu
Civil Engineering (Construction Engineering) (BSE) ESCEECBSE
Ira A. Fulton School of Engineering

Program Description: Civil engineering is primarily concerned with the public domain. Faculty in the Ira A. Fulton School of Engineering offer a B.S.E. in civil engineering, with a concentration in construction engineering. The emphasis in construction involves design, construction techniques, maintenance and operation of many types of facilities for government, commerce and industry. These include office towers, factories, schools, roadway systems, bridges, airports, tunnels and subway systems, dams, canals and environmental protection facilities, such as solid waste and water treatment systems. In addition to construction engineering, the curriculum exposes students to other areas of civil engineering, including structures, geotechnical engineering, transportation, environmental engineering and water resources.

Language Requirement: N | Program Fee: Y

Admission Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside engineering when applying for admission. Students who are not eligible for admission to engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (http://students.asu.edu/international-admission) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.

Freshman Admission:

1. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class, and
2. No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

1. Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
2. No high school math or science competency deficiencies, and
3. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class.

**Transfer students with more than 24 transferable college credit hours:**

1. Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
2. No high school math or science competency deficiencies (if undergraduate admissions requires submission of a high school transcript).

**Career Opportunities:** ASU graduates with a B.S.E. in civil engineering with a concentration in construction engineering find employment in consulting firms, design and build firms, municipalities, regulatory agencies and state agencies. A civil engineering background is an excellent foundation for jobs in management and public service.

International opportunities are abundant and are likely to expand. The B.S.E. in civil engineering prepares graduates for the Fundamentals of Engineering (FE) examination, the Principles and Practice of Engineering (PE) examination and graduate degrees.

**Contact:**
Civil, Environmental and Sustainable Eng Program
http://cee.fulton.asu.edu
cee@asu.edu
ECG 252
480/965-3589

**Civil Engineering (Environmental Engineering) (BSE) ESCEEBSE**
Ira A. Fulton School of Engineering

**Program Description:** Environmental engineering is a multidisciplinary field based on traditional civil engineering principles, chemistry, biology and geology. Environmental engineers are involved with the design and operation of water and wastewater treatment systems, remediation of contaminated soils and waters, construction of hazardous waste containment systems, analysis of the fate and transport of pollutants in natural environments, water conservation and reuse, air pollution technology and surface water quality management. In addition to environmental engineering, the curriculum exposes students to other areas of civil engineering, including water resources, structures, geotechnical engineering and transportation.

**Language Requirement:** N | **Program Fee:** Y

**Admission Requirements:** The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside engineering when applying for admission. Students who are not eligible for admission to engineering and who do
not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (http://students.asu.edu/international-admission) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.

**Freshman Admission:**

1. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class, and
2. No high school math or science competency deficiencies.

**Transfer students with fewer than 24 transferable college credit hours:**

1. Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
2. No high school math or science competency deficiencies, and
3. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class.

**Transfer students with more than 24 transferable college credit hours:**

1. Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
2. No high school math or science competency deficiencies (if undergraduate admissions requires submission of a high school transcript).

**Career Opportunities:** ASU graduates with a B.S.E. in civil engineering with a concentration in environmental engineering find employment in consulting firms, municipalities, regulatory agencies and industry. The growth of environmental engineering positions has been balanced by the growing number of students entering the field, resulting in a stable job market. A civil engineering background is an excellent foundation for jobs in management and public service. International opportunities are abundant and are likely to expand. The B.S.E. in civil engineering prepares graduates for the Fundamentals of Engineering (FE) examination, the Principles and Practice of Engineering (PE) examination and graduate degrees.

**Contact:**
Civil, Environmental and Sustainable Eng Program
http://cee.fulton.asu.edu
cee@asu.edu
Computer Science (BS) ESCSEBS
Ira A. Fulton School of Engineering

Program Description: The discipline of computer science is concerned with the design of computers, computational processes and information transfer and transformation. Examples of projects a computer scientist might work on include: design of next-generation computer systems, computer networking, biomedical information systems, gaming systems, search engines, Web browsers and computerized package distribution systems.

Computer scientists might also focus on improving software reliability, network security or information retrieval systems, or may even work as a consultant to a financial services company. Students pursuing this degree may choose to concentrate their studies in software engineering or information assurance.

Language Requirement: N | Program Fee: Y

Admission Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside engineering when applying for admission. Students who are not eligible for admission to engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (http://students.asu.edu/international-admission) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.

Freshman Admission:
1. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or
2. 3.00 minimum ABOR GPA
3. Class ranking in top 25 percent of high school class, and
4. No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:
1. Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
2. No high school math or science competency deficiencies, and
3. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class.

**Transfer students with more than 24 transferable college credit hours:**

1. Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
2. No high school math or science competency deficiencies (if undergraduate admissions requires submission of a high school transcript).

**Career Opportunities:** Graduates with a degree in computer science find employment working in a variety of capacities ranging from computer and software design to development of information technologies. Their jobs are often distinguished by the high level of theoretical expertise they apply to solving complex problems and the creation and application of new technologies. Some computer science-related jobs may include creating video games, designing artificial intelligence systems, developing network security applications and inventing and implementing more efficient systems for managing data including information on the Internet.

**Contact:**
Computer Science and Engineering Program  
http://sci.asu.edu/  
si.advising@asu.edu  
BYENG 553  
480/965-3190

**Computer Systems Engineering (BSE) ESCSE**
Ira A. Fulton School of Engineering

**Program Description:** The computer systems engineering program is concerned with the analysis, design and evaluation of computer systems, both hardware and software. The program emphasizes computer organization and architecture, digital hardware design, operating systems and systems programming.

Computer engineers often find themselves focusing on problems or challenges that result in new state-of-the-art products that integrate computer capabilities. They work on the manufacturing of computer hardware, from chips to device controllers, including computer networks for the transmission of data and multimedia, design, development, planning, supervision of manufacturing of computer hardware and testing. Computer engineers also focus on the interface between different pieces of hardware and strive to provide new capabilities to existing and new systems or products.

The work of a computer engineer is grounded in hardware, from circuits to architecture, and also focuses on operating systems and software. Computer engineers must understand computer architecture, computer interfacing, logic design, microprocessor system design, system requirements and design.
Admission Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside engineering when applying for admission. Students who are not eligible for admission to engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (http://students.asu.edu/international-admission) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.

Freshman Admission:

1. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class, and
2. No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

1. Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
2. No high school math or science competency deficiencies, and
3. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class.

Transfer students with more than 24 transferable college credit hours:

1. Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
2. No high school math or science competency deficiencies (if undergraduate admissions requires submission of a high school transcript).

Career Opportunities: Computer systems engineers are employed in industry, government, education and consulting and are concerned with the design, selection and installation of hardware and software components of a computer system.

Computer engineers often find themselves focusing on problems or challenges that result in new state-of-the-art products that integrate computer capabilities. They work on the manufacturing of computer hardware, from chips to device controllers, including computer networks for the transmission of data and multimedia, design, development, planning, supervision of manufacturing of computer hardware and testing.
Computer engineers frequently find jobs that involve designing new applications of computers and other devices, such as those used in airplanes, digital television and photography, intelligent highways and control systems for cars, new apparatuses for the sight-impaired or others with physical disabilities, new cell phone technologies, security systems and space vehicles.

Contact:
Computer Science and Engineering Program
http://sci.asu.edu
sci.advising@asu.edu
BYENG 553
480/965-3190

Construction (Concrete Industry Management) (BS) ESCONIMBS
Ira A. Fulton School of Engineering

Program Description: The Del E. Webb School of Construction offers the B.S. in construction with a concentration in concrete industry management. Concrete industry management graduates are broadly educated, articulate managers grounded in basic construction management, who are knowledgeable about concrete technology and techniques and are able to manage people and systems and to promote products or services in the concrete industry.

Language Requirement: N | Program Fee: Y

Admission Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside engineering when applying for admission. Students who are not eligible for admission to engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (http://students.asu.edu/international-admission) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.

Freshman Admission:

1. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class, and
2. No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:
1. Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
2. No high school math or science competency deficiencies, and
3. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or
   3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class.

**Transfer students with more than 24 transferable college credit hours:**

1. Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
2. No high school math or science competency deficiencies (if undergraduate admissions requires submission of a high school transcript).

**Career Opportunities:** The concrete industry management concentration provides a foundation for students who wish to pursue careers as project managers, estimators, schedulers or a combination of all three at an executive level. Concrete industry management career opportunities include:

- Field sales.
- Operations.
- Project and production management.
- Technical service.
- Concrete production.
- Cement.
- Advanced mixing technology or equipment manufacturing.
- Concrete or general contracting.
- Development.

**Contact:**
Del E. Webb Construction  
http://construction.asu.edu/cim  
dewsc@asu.edu  
USE 138  
480/965-3615

**Construction (General Building Construction) (BS) ESCONGBS**  
Ira A. Fulton School of Engineering

**Program Description:** Through the B.S. in construction program, with a concentration in general building construction, students learn to organize, lead and manage the building process. Builders are one of the three most vital individuals on a job site, equal in status and importance to the architect and engineer. Students learn the basics of design, how to estimate and control the costs of a project, the many construction methods used, what it takes to manage the people involved and the various types of contracts. Students are prepared with the computer, management, technical and people skills needed to succeed. This is one of two construction programs in the state of Arizona and one of approximately 60 accredited programs in the nation.
Admission Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside engineering when applying for admission. Students who are not eligible for admission to engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.

Freshman Admission:

1. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPAP class ranking in top 25 percent of high school class, and
2. No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

1. Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
2. No high school math or science competency deficiencies, and
3. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPAP class ranking in top 25 percent of high school class.

Transfer students with more than 24 transferable college credit hours:

1. Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
2. No high school math or science competency deficiencies (if undergraduate admissions requires submission of a high school transcript).

Career Opportunities: The general building construction concentration provides a foundation for students who wish to pursue careers as estimators, project managers, project engineers and eventually become owners of firms engaged in the construction of industrial, commercial and institutional structures.

Contact:
Del E. Webb Construction
http://construction.asu.edu
dewsc@asu.edu
**Construction (Heavy Construction) (BS) ESCONHBS**

Ira A. Fulton School of Engineering

*Program Description:* Through the B.S. in construction program (with a concentration in heavy construction), students learn to organize, lead and manage the building process. Builders are one of the three most vital people on a job site, equal in status and importance to the architect and engineer. Students learn the basics of design, how to estimate and control the costs of a project, the many construction methods used, what it takes to manage the people involved and the various types of contracts. Students are prepared with the computer, management, technical and people skills needed to succeed. This is one of two construction programs in the state of Arizona and one of approximately 60 accredited programs in the nation.

*Language Requirement: N | Program Fee: Y*

*Admission Requirements:* The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside engineering when applying for admission. Students who are not eligible for admission to engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (http://students.asu.edu/international-admission) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.

**Freshman Admission:**

1. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class, and
2. No high school math or science competency deficiencies.

**Transfer students with fewer than 24 transferable college credit hours:**

1. Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
2. No high school math or science competency deficiencies, and
3. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class.
Transfer students with more than 24 transferable college credit hours:

1. Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
2. No high school math or science competency deficiencies (if undergraduate admissions requires submission of a high school transcript).

Career Opportunities: The heavy construction concentration prepares students for careers related to the public works discipline. Graduates become project managers, estimators, schedulers, or a combination of all three at an executive level. Typical heavy construction-oriented projects include highways, airports, bridges, power plants, rapid transit systems, harbor and water facilities, pipelines, dams, tunnels, canals, sewerage systems, and water works. Heavy construction managers, through education and experience, are capable of implementing significant facets of construction on a timely and economical basis with proficiency and integrity.

Contact:
Del E. Webb Construction
http://construction.asu.edu
dewsc@asu.edu
USE 138
480/965-3615

Construction (Residential Construction) (BS) ESCONRBS
Ira A. Fulton School of Engineering

Program Description: Through the B.S. in construction program (with a concentration in residential construction), students learn to organize, lead and manage the building process. Builders are one of the three most vital people on a job site, equal in status and importance to the architect and engineer. This program teaches the basics of design, how to estimate and control the costs on a project, the many construction methods used, what it takes to manage the people involved and the various types of contracts. Students are prepared with the computer, management, technical, and people skills needed to succeed. This is one of two construction programs in the state of Arizona and one of approximately 60 accredited programs in the nation.

Language Requirement: N | Program Fee: Y

Admission Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside engineering when applying for admission. Students who are not eligible for admission to engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the
university requires a TOEFL score from the applicant, (http://students.asu.edu/international-admission) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.

**Freshman Admission:**

1. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; **or** 3.00 minimum ABOR GPA** or** class ranking in top 25 percent of high school class, **and**
2. No high school math or science competency deficiencies.

**Transfer students with fewer than 24 transferable college credit hours:**

1. Minimum transfer GPA of 3.00 for less than 24 transfer hours, **and**
2. No high school math or science competency deficiencies, **and**
3. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, **or** 3.00 minimum ABOR GPA** or** class ranking in top 25 percent of high school class.

**Transfer students with more than 24 transferable college credit hours:**

1. Minimum transfer GPA of 3.00 for 24 or more transfer hours, **and**
2. No high school math or science competency deficiencies (if undergraduate admissions requires submission of a high school transcript).

**Career Opportunities:** The residential construction concentration prepares students for careers in the housing sector of the industry. Graduates become project managers, estimators, schedulers or a combination of all three at the executive level.

**Contact:**
Del E. Webb Construction
http://construction.asu.edu
dewsc@asu.edu
USE 138
480/965-3615

**Construction (Specialty Construction) (BS) ESCONSBS**
Ira A. Fulton School of Engineering

**Program Description:** Through the B.S. in construction program (with a concentration in specialty construction), students learn to organize, lead and manage the building process. Builders are one of the three most vital individuals on a job site, equal in status and importance to the architect and engineer. This concentration program emphasizes the construction process at the subcontractor level. Students learn the basics of design, how to estimate and control the costs of a project, the many construction methods used, what it takes to manage the people involved and the various types of contracts. Students are prepared with the
computer, management, technical and people skills needed to succeed. This is one of two construction programs in the state of Arizona and one of approximately 60 accredited programs in the nation.

Language Requirement: N | Program Fee: Y

Admission Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside engineering when applying for admission. Students who are not eligible for admission to engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (http://students.asu.edu/international-admission) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.

Freshman Admission:

1. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class, and
2. No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

1. Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
2. No high school math or science competency deficiencies, and
3. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class.

Transfer students with more than 24 transferable college credit hours:

1. Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
2. No high school math or science competency deficiencies (if undergraduate admissions requires submission of a high school transcript).

Career Opportunities: The specialty construction concentration prepares students for careers with contractors, such as mechanical and electrical construction firms.

Contact:
Del E. Webb Construction
http://construction.asu.edu
dewsc@asu.edu
Electrical Engineering (BSE) ESEE

Ira A. Fulton School of Engineering

Program Description: The goal of the electrical engineering undergraduate program is to prepare graduates for positions as electrical engineers. Faculty in the Ira A. Fulton School of Engineering offer a B.S.E. in electrical engineering. Following initial course work in mathematics and sciences, the engineering core classes build a solid base of engineering knowledge. Beyond the engineering core, the electrical engineering curriculum includes a number of required electrical engineering and technical elective courses; areas include systems, circuits, power, solid-state devices, electromagnetics and computer engineering. Approved technical elective courses provide students with an opportunity either to broaden their background in electrical engineering or to study, in greater depth, technical subjects in which they have special interest.

The electrical engineering programs at ASU are accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology.

Language Requirement: N | Program Fee: Y

Admission Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside engineering when applying for admission. Students who are not eligible for admission to engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (http://students.asu.edu/international-admission) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.

Freshman Admission:

1. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class, and
2. No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:
1. Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
2. No high school math or science competency deficiencies, and
3. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class.

Transfer students with more than 24 transferable college credit hours:

1. Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
2. No high school math or science competency deficiencies (if undergraduate admissions requires submission of a high school transcript).

Career Opportunities: Graduates with the B.S.E. in electrical engineering find many exciting opportunities in industry. These include semiconductor chip designers and manufacturers, electric power utilities, consulting companies, communication equipment and network providers, computers and peripheral devices manufacturers and defense organizations. The degree also prepares graduates for continued learning experiences, either in a formal graduate program or in continuing education applications.

Contact:
Department of Electrical Engineering
http://ee.fulton.asu.edu
askee@asu.edu
GWC 205
480/965-3424

Electrical Engineering (Electric Power and Energy Systems) (BSE) ESEEPBSE
Ira A. Fulton School of Engineering

Program Description: The goal of the electric power and energy systems concentration is to prepare graduates for positions in industries dealing with conventional power generation (fossil fuel and nuclear) and alternative energy systems, including solar, wind and fuel cells.

Employment opportunities range from utility companies to power equipment manufacturers, consulting firms, research and design organizations. This concentration will also prepare students to pursue graduate degrees in the areas of power systems, power generation and renewable and sustainable energy sources.

The electrical engineering programs at ASU are accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology.

Language Requirement: N | Program Fee: Y

Admission Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements.
Students should select a second major choice outside engineering when applying for admission. Students who are not eligible for admission to engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (http://students.asu.edu/international-admission) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.

**Freshman Admission:**

1. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class, and
2. No high school math or science competency deficiencies.

**Transfer students with fewer than 24 transferable college credit hours:**

1. Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
2. No high school math or science competency deficiencies, and
3. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class.

**Transfer students with more than 24 transferable college credit hours:**

1. Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
2. No high school math or science competency deficiencies (if undergraduate admissions requires submission of a high school transcript).

**Career Opportunities:** Career opportunities for graduates with a concentration in electric power and energy systems include employment in utility companies, consulting engineer firms, power equipment manufacturers, state and municipal agencies, research and design organizations as well as entrepreneurial opportunities.

**Contact:**
Department of Electrical Engineering
http://ee.fulton.asu.edu
askee@asu.edu
GWC 205
480/965-3424
Engineering Special Studies (Premedical Engineering) (BSE) ESESPPBSE
Ira A. Fulton School of Engineering

Program Description: In the past decade, the interrelation between engineering and medicine has become vigorous and exciting. Rapidly expanding technology dictates that engineering will continue to become increasingly involved in all branches of medicine. As this involvement develops, so will the need for physicians trained in the engineering sciences: medical professionals with a knowledge of computer technology, transport phenomena, biomechanics, bioelectric phenomena, operations research and cybernetics.

The B.S.E. in engineering special studies with a concentration in pre-medical engineering is designed to meet the needs of this growing profession.

Language Requirement: N | Program Fee: Y

Admission Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside engineering when applying for admission. Students who are not eligible for admission to engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (http://students.asu.edu/international-admission) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.

Freshman Admission:

1. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class, and
2. No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

1. Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
2. No high school math or science competency deficiencies, and
3. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class.

Transfer students with more than 24 transferable college credit hours:
1. Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
2. No high school math or science competency deficiencies (if undergraduate admissions requires submission of a high school transcript).

Career Opportunities: This program’s focus is of special interest to students who desire entry into a medical college and whose medical interests lie in research, aerospace and undersea medicine, artificial organs, prostheses, biomedical engineering or biophysics.

Contact:
Engineering Special Studies Program
http://hdbe.fulton.asu.edu
hdbe@asu.edu
ECG 334
480/965-3028

Industrial Engineering (BSE) ESIEEBSE
Ira A. Fulton School of Engineering

Program Description: Industrial engineers design and manage complex systems in the manufacturing and service industries through the integration of people, material, information, capital, energy and equipment. The faculty in the Ira A. Fulton School of Engineering offer a B.S.E. in industrial engineering.

Industrial engineering applies systems modeling and analysis skills to ensure that high-quality products and services are achieved with the optimal use of resources. Industrial engineering focuses on the total picture of developing, producing, delivering and servicing products and services to satisfy customers. The industrial engineer blends knowledge of mathematics, engineering principles, computing technologies, systems modeling and simulation tools and human factors with strong management and communication skills to achieve this goal. This gives an industrial engineer broad knowledge of an organization and provides increased opportunities for advancement into management and leadership.

Language Requirement: N | Program Fee: Y

Admission Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside engineering when applying for admission. Students who are not eligible for admission to engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (http://students.asu.edu/international-admission) then admission to engineering
requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.

**Freshman Admission:**

1. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class, and
2. No high school math or science competency deficiencies.

**Transfer students with fewer than 24 transferable college credit hours:**

1. Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
2. No high school math or science competency deficiencies, and
3. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class.

**Transfer students with more than 24 transferable college credit hours:**

1. Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
2. No high school math or science competency deficiencies (if undergraduate admissions requires submission of a high school transcript).

**Career Opportunities:** Graduates in industrial engineering are prepared to design and manage systems for a wide range of organizations. They find exciting career opportunities in all types of manufacturing and service industries, including semiconductor manufacturing, automotive, aerospace, defense, banking, finance, transportation, health care, telecommunications, management consulting and government.

**Contact:**
Industrial, Systems & Operations Engineering Prgm
http://ie.fulton.asu.edu
ie@asu.edu
GWC 502
480/965-3185

**Materials Science & Engineering (BSE) ESMSEBSE**
Ira A. Fulton School of Engineering

**Program Description:** Materials engineers are responsible for designing and developing new and improved materials for a wide variety of engineering applications. The faculty in the Ira A. Fulton School of Engineering offer a B.S.E. in materials science and engineering. Courses in materials teach students about the structure of materials, how to process them to improve their structure and how the structure affects their properties and performance.

**Language Requirement:** N | **Program Fee:** Y
Admission Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside engineering when applying for admission. Students who are not eligible for admission to engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (http://students.asu.edu/international-admission) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.

Freshman Admission:

1. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class, and
2. No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

1. Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
2. No high school math or science competency deficiencies, and
3. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class.

Transfer students with more than 24 transferable college credit hours:

1. Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
2. No high school math or science competency deficiencies (if undergraduate admissions requires submission of a high school transcript).

Career Opportunities: Materials engineers are in demand in a wide range of industries, including the automotive, aerospace, electronics, semiconductor, computer and healthcare professions. The career paths in these industries offer opportunities to impact technological advances through working in a team environment with engineers from the chemical, electrical, mechanical, aerospace and other engineering disciplines.

Contact:
Materials Program
http://som.asu.edu/
som@asu.edu
Program Description: Mechanical engineering is a creative, diverse discipline. Mechanical engineers design, build and control the devices, machines, processes, and systems that are the mainstay of modern industrialized society.

Students are prepared for a career in mechanical engineering through a curriculum that includes study of the principles governing energy transfer, mechanical design, sensors and control devices and the application of these principles to the creative solution of practical modern problems.

The mechanical engineering programs at ASU are accredited by the Engineering Accreditation Commission of ABET.

Language Requirement: N | Program Fee: Y

Admission Requirements: The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside engineering when applying for admission. Students who are not eligible for admission to engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (http://students.asu.edu/international-admission) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.

Freshman Admission:

1. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class, and
2. No high school math or science competency deficiencies.

Transfer students with fewer than 24 transferable college credit hours:

1. Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
2. No high school math or science competency deficiencies, and
3. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class.

**Transfer students with more than 24 transferable college credit hours:**

1. Minimum transfer GPA of 3.00 for 24 or more transfer hours, and

2. No high school math or science competency deficiencies (if undergraduate admissions requires submission of a high school transcript).

**Career Opportunities:** A major strength of a mechanical engineering education is the flexibility it provides in future employment opportunities for its graduates. Mechanical engineers are employed in virtually every kind of industry. They are involved in seeking new knowledge through research; in generating creative design and development; and in the production, control, management and sales of the devices and systems needed by society.

The objectives of the mechanical engineering program are for graduates to be employed in mechanical engineering or a related field or accepted to graduate school and:

Graduates will have the technical skills for career success, including the ability to think in a critical and evaluative manner and to consider a broad perspective, in order to solve technical and non-technical problems.

Graduates will have the professional skills for career success, including an awareness of ethical responsibility, the ability to communicate well and to work successfully within diverse groups.

**Contact:**

Mechanical and Aerospace Engineering Program
http://mae.fulton.asu.edu
mae@asu.edu
ECG 346
480/965-3291

**Mechanical Engineering (Computational and Mathematical Mechanics) (BSE)**

ESMAECBSE
Ira A. Fulton School of Engineering

**Program Description:** As mathematical and numerical modeling takes on a much larger role in product development, graduates who are highly skilled in computational and mathematical engineering will be in high demand. The concentration in computational and mathematical mechanics, under the B.S.E. in mechanical engineering, is designed to teach students the modern computational tools available for solving large-scale and complex technical problems. The curriculum focuses on high-performance computing and the accurate modeling of large- and small-scale systems.
The mechanical engineering programs at ASU are accredited by the Engineering Accreditation Commission of ABET.

*Language Requirement: N | Program Fee: Y*

*Admission Requirements:* The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside engineering when applying for admission. Students who are not eligible for admission to engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.

International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant, (http://students.asu.edu/international-admission) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.

**Freshman Admission:**

1. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or
2. 3.00 minimum ABOR GPA
3. Class ranking in top 25 percent of high school class, and

2. No high school math or science competency deficiencies.

**Transfer students with fewer than 24 transferable college credit hours:**

1. Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
2. No high school math or science competency deficiencies, and
3. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or

**Transfer students with more than 24 transferable college credit hours:**

1. Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
2. No high school math or science competency deficiencies (if undergraduate admissions requires submission of a high school transcript).

**Career Opportunities:** Mechanical engineers are employed in virtually every kind of industry. They are involved in seeking new knowledge through research; in generating creative design and development; and in the production, control, management and sales of the devices and systems needed by society. Therefore, a major strength of a mechanical engineering education is the flexibility it provides in future employment opportunities for its graduates.
The objectives of the mechanical engineering program are for graduates to be employed in mechanical engineering or a related field or accepted to graduate school and:

Graduates will have the technical skills for career success, including the ability to think in a critical and evaluative manner and to consider a broad perspective, in order to solve technical and non-technical problems.

Graduates will have the professional skills for career success, including an awareness of ethical responsibility, the ability to communicate well and to work successfully within diverse groups.

Contact:
Mechanical and Aerospace Engineering Program
http://mae.fulton.asu.edu
mae@asu.edu
EC G346
480/965-3291

**Mechanical Engineering (Energy & Environment) (BSE) ESMAEBSE**
Ira A. Fulton School of Engineering

Not accepting applications.

**Program Description:** The concentration in energy and environment, within the B.S.E. in mechanical engineering, seeks to prepare students to analyze technical problems in energy efficiency, renewable energy, environmental sustainability, air pollution, climate change and other timely issues facing the global community. Although the primary focus of this program is technical, the general education courses in the areas of the humanities and social and behavioral sciences introduce students to the global, political and societal issues relating to energy and environment. By focusing on issues such as air pollution, water scarcity and the lack of alternative transportation, this program becomes even more attractive for employers in the greater Phoenix area.

The mechanical engineering programs at ASU are accredited by the Engineering Accreditation Commission of ABET.

**Language Requirement:** N | **Program Fee:** Y

**Admission Requirements:** The admission requirements for majors in the Ira A. Fulton School of Engineering are higher than minimum university admission requirements. Students should select a second major choice outside engineering when applying for admission. Students who are not eligible for admission to engineering and who do not indicate a second major choice will be placed in exploratory mathematics, physical sciences, engineering and technology within University College.
International students may have an additional English-language proficiency criterion. Foreign nationals must meet the same admission requirements shown below with the possible additional requirement of a minimum TOEFL score. If the university requires a TOEFL score from the applicant (http://students.asu.edu/international-admission) then admission to engineering requires a minimum TOEFL score of 550 (paper-based), 213 (computer-based), 79 on iBT (Internet-based) or a minimum IELTS score of 6.5.

**Freshman Admission:**

1. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score; or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class, and
2. No high school math or science competency deficiencies.

**Transfer students with fewer than 24 transferable college credit hours:**

1. Minimum transfer GPA of 3.00 for less than 24 transfer hours, and
2. No high school math or science competency deficiencies, and
3. Minimum 1140 SAT combined math and verbal or minimum 24 ACT combined score, or 3.00 minimum ABOR GPA or class ranking in top 25 percent of high school class.

**Transfer students with more than 24 transferable college credit hours:**

1. Minimum transfer GPA of 3.00 for 24 or more transfer hours, and
2. No high school math or science competency deficiencies (if undergraduate admissions requires submission of a high school transcript).

**Career Opportunities:** Mechanical engineers are employed in virtually every kind of industry. They are involved in seeking new knowledge through research; in generating creative design and development; and in the production, control, management and sales of the devices and systems needed by society. Therefore, a major strength of a mechanical engineering education is the flexibility it provides in future employment opportunities for its graduates. Students completing this concentration have opportunities as power plant designers, environmental consultants and heating, ventilation and air-conditioning (HVAC) engineers.

The objectives of the mechanical engineering program are for graduates to be employed in mechanical engineering or a related field or accepted to graduate school and:

Graduates will have the technical skills for career success, including the ability to think in a critical and evaluative manner and to consider a broad perspective, in order to solve technical and non-technical problems. Graduates will have the professional skills for career success, including an awareness of ethical responsibility, the ability to communicate well and to work successfully within diverse groups.
Honors – Barrett, The Honors College

Honors College 9HOHONALL

Program Description: Barrett, The Honors College at Arizona State University is a selective, residential college that recruits academically outstanding undergraduates across the nation. Named “Best Honors College” in the nation, this residential community has more National Merit Scholars than Princeton, Yale or Stanford, and Barrett students benefit from a $10 million endowment used exclusively to support honors students and their projects.

Barrett students have the unique advantage of both experiencing a small, intellectually and socially vibrant environment, while having access to the vast resources of a major research university in ASU. All Barrett students are also enrolled in a disciplinary college and pursue one or more of the 250 available majors and concentrations. Their education is the result of the collaborative efforts of the Barrett’s directly appointed faculty and of faculty appointed in the college of their major.

Barrett accepts high performing, academically engaged students and works with them in collaboration with all of the units at ASU to contribute to student success. Most students enter as freshmen, but about 90 each year enter after one or more semesters at a university or college (primarily from ASU).

Special Opportunities

- **Lorraine W. Frank Office of National Scholarship Advisement**: this office assists students in identifying nationally competitive scholarship programs appropriate to each individual’s intellectual and career goals. http://honors.asu.edu/w-National_Scholarships-53.aspx
- **Undergraduate Research Opportunities**: Barrett encourages students to participate in undergraduate research throughout the university. The college maintains a list of current opportunities university-wide. http://honors.asu.edu/w-Research_Opportunities-51.aspx
- **Travel**: Barrett study abroad programs, directed and taught by Barrett faculty, occur during the summer and allow students to earn honors credit. Students can also take advantage of the Great American Cities program and
visit cities throughout the U.S. http://honors.asu.edu/w-Travel_Abroad-52.aspx


- **Events/Programming**: students enrolled in Barrett benefit from preeminent guest speakers, special lectures and visits from some of the nation’s greatest contributors to contemporary thought in society. The college hosts two of the university’s premier scholar-in-residence programs, the Centennial Lecture and the John J. Rhodes Chair.

**Barrett Honors Requirements Overview**

Students complete 36 hours of honors credits within the 120 hours required to earn a bachelor's degree by completing HON courses, honors-only courses in other ASU units, special class projects with faculty in other ASU units, internships, undergraduate research and summer study abroad.

To graduate from Barrett, students must complete the required honors courses with a minimum grade of “C” (2.00), defend a thesis/creative project and have a cumulative GPA of 3.25.

All students entering Barrett with less than 60 credits completed at a university/college after high school graduation:

- Must complete HON 171 and HON 272/273 The Human Event by the time they reach 45 credits at ASU.
- Must complete 36 honors credits, of which at least 18 must be upper-division.
- May have up to 30 of the 36 honors credits as upper-division courses.

All students entering Barrett with greater than 60 credits completed at a university/college after high school graduation:

- Must complete 21 upper-division honors credits.
- One HON 300-level seminar.

*Language Requirement: N | Program Fee: Y*

*Admission Requirements*: Students who have demonstrated high levels of academic achievement in high school or college may apply for admission to Barrett. All candidates for admission must file an application to Barrett separate from their ASU application and must be admitted to ASU before Barrett can consider their application.
Applicants are evaluated on the basis of:

1. High school GPA (Arizona Board of Regents GPA based on 16 competency courses).
2. High school class rank.
3. Performance on the SAT or ACT.
4. Talents that contribute to leadership and community service. Continuing ASU or transfer students are evaluated on their college GPA. Please contact the Honors College for more information.

Contact:
The Barrett Honors College
http://honors.asu.edu
IRISH A121
4809654033

Journalism and Mass Communication, Walter Cronkite School of

Journalism & Mass Communication (BA) CSJMCBA
Walter Cronkite School of Journalism and Mass Communication

Program Description: The Walter Cronkite School of Journalism and Mass Communication, named in honor of legendary CBS news anchor Walter Cronkite, is one of the largest and most successful professional journalism schools in the country. Students study print and online journalism, broadcast journalism, or strategic media/public relations, leading to a B.A. in journalism and mass communication. The Cronkite school is located at the ASU at the Downtown Phoenix campus, in the heart of the 13th largest media market in the U.S. The school features state-of-the-art computer labs, editing suites, production studios and classrooms dedicated to journalism education.

Language Requirement: Y | Program Fee: Y

Admission Requirements: The Bachelor of Arts in Journalism and Mass Communication degree program has higher admission requirements. Students should select a second major on the application. Students who are not admitted to the Cronkite School and who did not select a second major, or are not admissible to the second major, are admitted to Exploratory Social and Behavioral Sciences within University College.

Freshman applicants must meet the following standards:

1. Have a 3.00 (4.00 = A) ABOR GPA;
2. Have no English competency deficiencies; and
3. Meet one of the following two requirements, top 25 percent of high school class, or 1040 SAT Reasoning or 22 ACT score.
Transfer students **applying for fall 2010 or later** (with 12 or more transfer hours after high school graduation) are required to have a cumulative transfer GPA of 3.00 or higher and no English competency deficiencies.

Transfer students **applying for fall 2009/spring 2010** (with 12 or more transfer hours after high school graduation) are required to have a cumulative transfer GPA of 3.25 or higher and no English competency deficiencies.

Transfers should contact the school for additional steps after admission to ASU. Students should select a second major on the application. For more information regarding transfer admission, see [http://cronkite.asu.edu/undergrad/xfer_major_change.php](http://cronkite.asu.edu/undergrad/xfer_major_change.php).

**Career Opportunities:** Walter Cronkite School of Journalism and Mass Communication graduates work for newspapers, radio and television stations, online services, magazines, public relations firms and corporate communication divisions. Positions include reporters, editors, photojournalists, writers and media managers.

**Contact:**
Walter Cronkite School of Journalism & Mass Comm
http://cronkite.asu.edu
cronkiteadvising@asu.edu
CRONK 302
602/496-5555

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**Law, Sandra Day O’Connor College of**

**Legal Studies (BS) LWLAWBS**
Sandra Day O’Connor College of Law

**Program Description:** The Bachelor of Science in Legal Studies offers students the practical theory and skills-based knowledge to succeed in today’s legal marketplace. This rigorous **online-only** degree program is the first such program developed and delivered by a law school. The Sandra Day O’Connor College of Law has specifically designed the curriculum to teach students how to research legal issues, draft legal documents, utilize legal resources and technology, and understand the legal process from the perspective of law firms, courts, administrative agencies, and businesses. This degree program is not intended as preparation for law school. Currently the degree program is available to first-time freshman only. LAW courses for second year and beyond are still under development. ***We expect to be ready to welcome transfer students with a limited number of credits into our program in Fall 2010.*** Please check with our web site or contact a transfer advisor at that time.

**Language Requirement:** N | **Program Fee:** N
Career Opportunities: An undergraduate degree in Legal Studies prepares graduates for careers in the ever-expanding legal marketplace, both in the public and private sectors and in domestic and international workplaces. Whether as a legal assistant, paralegal, court representative, law firm administrator, compliance officer, legislative assistant, social worker, or other law-related professional, the BSLS will give students the skills to excel and succeed in the wide range of fields touched by law. This degree program is not intended as preparation for law school.

Contact:
Sandra Day O'Connor College of Law
www.law.asu.edu/BSLS
BSLSProgram@asu.edu
Armstrong Hall
480/965-6181

Letters and Sciences, School of
Applied Science (Technical Communication) (BAS) LSTECBAS
School of Letters and Sciences

Program Description: The B.A.S. is a flexible degree plan designed specifically for students who have earned an A.A.S. from a regionally accredited institution. This major combines the technical experience gained in the student’s associate degree program with a broader education of management, leadership, critical thinking and communication skills.

Technical communication is applied workplace communication that makes technical information understandable and available to many audiences. In the technical communication concentration, students learn how to produce, design and manage information using both traditional and developing technologies.

Language Requirement: N | Program Fee: N

Admission Requirements: Students applying to this program must have completed an Associate of Applied Science (A.A.S.) degree from a regionally accredited institution. Not available for freshmen.

Career Opportunities: The Bureau of Labor Statistics estimates the need for writers and editors will increase by 25 percent over the next five years. Software and electronics companies, media corporations, financial institutions, government agencies, nonprofits and other areas will see an increased demand for writers. Students in the program will prepare for careers as:

- Desktop publishers.
- Information designers.
- Multimedia designers.
• Publications managers.
• Technical editors.
• Technical writers.
• Web page and intranet page designers.

Contact:
School of Letters and Sciences
http://techcomm.asu.edu/
SAAS@asu.edu
SUTON 301
480/727-5100

General Studies (BGS) LSGNSBGS
School of Letters and Sciences

Program Description: The Bachelor of General Studies with a major in General Studies offers students a flexible, innovative path to degree completion. Graduates of the program will be informed and effective members of society, who are well-prepared for a changing global marketplace with its diverse cultures. The theme of this degree, offered by the School of Letters and Sciences on the Downtown Phoenix campus, is society and the individual. Students will explore the tensions between individualism and collectivism, the public and private self and the interplay of culture and identity.

Language Requirement: N | Program Fee: N

Career Opportunities: General studies majors have the option of working in almost any field that requires effective interaction with others, from sales to social services, organizational management or government administration. Graduates will be equipped with transferable skills highly desired by many employers; therefore, a wide array of job choices is available. The B.G.S. creates great flexibility in career choice because of the versatility within the program.

Graduates may choose to enter one of the areas for which their concentration prepares them, including corporate communications, media, advertising, marketing, sales, tourism, hospitality, higher education, nonprofit administration, the helping professions or government sectors.

Contact:
School of Letters and Sciences
http://sls.asu.edu/
UCENT 300
602/496-4000

History & Culture (BA) ECHSTCULBA
School of Letters and Sciences
Program Description: The B.A. in history and culture focuses on public policy, archival work, Southwest history and related fields. Six degree tracks are available:

- Archival preservation and digital media.
- Environmental history and culture.
- History and culture of the American southwest.
- History and philosophy of science and technology.
- History and public policy.
- History for secondary teachers.

Language Requirement: N | Program Fee: N

Career Opportunities: The B.A. in history and culture prepares scholars and teachers for graduate or professional study and careers in education, writing and other related fields. Career prospects for secondary history and social studies teachers in Arizona are particularly strong. Students in the program develop skills in analyzing ideas and problems, finding and evaluating information, communicating effectively and presenting clear and logical arguments. With these skills, graduates of the program can find jobs in public policy, government, lobbying, social work, program management, museum management, archiving, curating and with nonprofit organizations. The degree also prepares students to continue in graduate and professional programs.

Contact:
School of Letters and Sciences
http://www.poly.asu.edu/saas/humanitiesarts/
hua@asu.edu
SANCA 233
480/727-1526

Interdisciplinary Studies (BIS) LSBISBIS
School of Letters and Sciences

Program Description: Interdisciplinary studies is an approach to answering questions, solving problems and addressing contemporary social issues from multiple perspectives. Interdisciplinary students develop the intellectual tools needed to build bridges across academic disciplines and apply their skills, innovations and knowledge in various academic and practical settings. In core classes, students develop a portfolio that showcases each individual's skills, interests and talents. This portfolio and the applied learning experience provide each student with valuable resources for flexible, individualized career planning and development.

The B.I.S. program may be completed in-person or online. Working with an advisor, students choose from and combine two of more than 100 concentrations that represent academic interests they wish to integrate. Of these, the following concentrations are available to students attending in-person or online: family and
Human development, film and media studies, history (U.S. or European track), justice studies, political science, religious studies, small business, sociology, technical writing, and women and gender studies.

A B.I.S. in organizational studies is also available online. For more information visit http://asuonline.asu.edu/programs or e-mail orgstudies@asu.edu.

Language Requirement: N | Program Fee: N

Admission Requirements: The B.I.S. program is available to all students in good academic standing who have achieved sophomore, junior or senior standing. Students must complete the online B.I.S. cyber workshop (found online at http://sls.asu.edu/bis/) prior to meeting with an advisor to declare their major as interdisciplinary studies.

Career Opportunities: Because of the flexibility of the B.I.S. degree, B.I.S. graduates leave ASU ready for their next steps in life, whether employment in an entry-level position, promotional opportunities, or for graduate studies in a variety of disciplines. Recent examples include a graduate with biology and chemistry concentrations who is pursuing a master of pharmacy degree, another graduate who combined business and communication and now owns a small business, and another who integrated sociology and family studies to further a career in law enforcement.

Contact:
School of Letters and Sciences
http://sls.asu.edu/
bis@asu.edu
USAB 203
480/965-1970

Interdisciplinary Studies (BIS) LSBISBIS
School of Letters and Sciences

Program Description: Interdisciplinary studies is an approach to answering questions, solving problems and addressing contemporary social issues from multiple perspectives. Interdisciplinary students develop the intellectual tools needed to build bridges across academic disciplines and apply their skills, innovations and knowledge in various academic and practical settings. In core classes, students develop a portfolio that showcases each individual’s skills, interests and talents. This portfolio and the applied learning experience provide each student with valuable resources for flexible, individualized career planning and development.

The B.I.S. program may be completed in-person or online. Working with an advisor, students choose from and combine two of more than 100 concentrations that represent academic interests they wish to integrate. Of these, the following concentrations are available to students attending in-person or online: family and
human development, film and media studies, history (U.S. or European track), justice studies, political science, religious studies, small business, sociology, technical writing, and women and gender studies.

A B.I.S. in organizational studies is also available online. For more information visit http://asuonline.asu.edu/programs/ or e-mail orgstudies@asu.edu.

Language Requirement: N | Program Fee: N

Admission Requirements: The B.I.S. program is available to all students in good academic standing who have achieved sophomore, junior or senior standing. Students must complete the online B.I.S. cyber workshop (found online at http://sls.asu.edu/bis/) prior to meeting with an advisor to declare their major as interdisciplinary studies.

Career Opportunities: Because of the flexibility of the B.I.S. degree, B.I.S. graduates leave ASU ready for their next steps in life, whether employment in an entry-level position, promotional opportunities, or for graduate studies in a variety of disciplines. Recent examples include a graduate with biology and chemistry concentrations who is pursuing a master of pharmacy degree, another graduate who combined business and communication and now owns a small business, and another who integrated sociology and family studies to further a career in law enforcement.

Contact:
School of Letters and Sciences
http://sls.asu.edu/
bis@asu.edu
USAB 203
480/965-1970

Interdisciplinary Studies (Management Communication) (BIS) LSMGTCBIS
School of Letters and Sciences

Program Description: Management communication is a concentration in the interdisciplinary studies degree program. Interdisciplinary students develop the intellectual tools needed to build bridges between academic disciplines and apply their skills, innovations and knowledge in various academic and practical settings.

Via the management communication curriculum, students learn to apply principles of management and communication to increase organizational effectiveness, gaining valuable knowledge of management styles, communication strategies, collaboration and team skills, diversity, ethics, conflict resolution, leadership and organizational behavior. This is an employer-based program: all course work for the management communication concentration is offered at corporate-based, off-campus sites with public access. Students are charged an additional fee to defray costs of facilities and off-campus student services. All courses in the concentration are offered as evening classes, scheduled in a condensed seven-week format.
Admission Requirements: Students who have completed at least 30 hours of transferable college coursework and meet minimum university transfer admission requirements (http://transfer.asu.edu/transferadmission) are eligible for admission; first-time freshman are not eligible.

Career Opportunities: By engaging a breadth of knowledge and experience, and by acquiring the skills to integrate various domains of knowledge, management communication students prepare themselves for careers in:

- Business.
- Government.
- Healthcare administration.
- Nonprofit agencies.
- Service industry.

Many management communication students already have a chosen career field, yet desire a degree that is versatile, flexible and meaningful and affords the opportunity for continued career development and advancement.

Contact:
School of Letters and Sciences
http://mgtcom.asu.edu
mgtcom@asu.edu
ASU Online and Extended Campus/Skysong 315BC
4808841528

Interdisciplinary Studies (Organizational Studies) (BIS) LSORGBIS
School of Letters and Sciences

Program Description: Interdisciplinary Studies online degree program is an approach to answering questions, solving problems, and addressing contemporary social issues from multiple perspectives. Interdisciplinary students develop the intellectual tools needed to build bridges between academic disciplines and apply their skills, innovations and knowledge in various academic and practical settings. The B.I.S. in organizational studies is intended for students seeking an interdisciplinary degree and a desire to learn about the dynamics of contemporary organizations. Via the organizational studies curriculum, students gain valuable knowledge of management styles, communication strategies, technologies, diversity, ethics and politics. All course work for organizational studies is offered online, giving students freedom and flexibility in completing their requirements. By engaging a breadth of knowledge and experience, and by acquiring the skills to integrate various domains of knowledge, organizational studies students prepare themselves for careers in:

- Business.
- Government.
• Health-care administration.
• Nonprofit agencies.
• Service industry.

Many organizational studies students already have a chosen career field, yet desire a degree that is versatile, flexible and meaningful, and affords the opportunity for continued career development and advancement.

Language Requirement: N | Program Fee: N

Career Opportunities: Because of the flexibility of the B.I.S. program, graduates leave ASU ready for their next steps in life, whether employment in an entry-level position, promotional opportunities or for graduate studies in a variety of disciplines. Recent graduates have found opportunities in education, business, health-care administration, nonprofit administration, tourism and many other exciting fields.

Contact:
School of Letters and Sciences
http://sls.asu.edu/
distance@asu.edu
UASB 203
4809651970

Liberal Studies (BLS) LABLSBLS
School of Letters and Sciences

Program Description: The B.L.S. is an online program that students can complete via the internet from anywhere in the world. The B.L.S. is an excellent choice for working adults and can sometimes be completed in as little as one year as a degree completion program. Students in the B.L.S. program are able to design their own transdisciplinary major based on their personal interests.

For more information on eligibility requirements, visit http://asuonline.asu.edu.

Language Requirement: N | Program Fee: N

Career Opportunities: Although a liberal studies major is not professionally or vocationally oriented, the program shares with all other liberal arts and science degrees the goal of developing analytical and communicative abilities. The program offers breadth of learning in an online setting. The liberal studies degree is transdisciplinary, providing the student with a “thematic” approach to his/her education. Liberal studies graduates are prepared to enter the work force or pursue graduate or professional studies at the completion of their undergraduate program.

Contact:
School of Letters and Sciences
http://clas.asu.edu/liberalstudies/
**Literature, Writing & Film (BA) ECLWFBA**
School of Letters and Sciences

*Program Description:* The B.A. in literature, writing and film focuses on effective writing, critical thinking and sophisticated reading of literary and nonliterary texts. Three degree tracks are available:

- English for secondary teachers.
- Writing.
- Literature and film.

*Language Requirement:* N | *Program Fee:* N

*Career Opportunities:* The B.A. in literature, writing and film program prepares scholars and teachers for graduate or professional study and for careers in education, writing and other related fields. Career prospects for secondary language arts teachers in Arizona are particularly strong. More importantly, students in the program will develop skills that employers value, such as analyzing ideas and problems, finding and evaluating information, communicating effectively and presenting clear and logical arguments. With these skills, graduates of the program can find jobs in creative and technical writing, marketing, lobbying, program management, editing, reporting, public relations, health care, social work, government, nonprofit organizations and financial services.

*Contact:*
School of Letters and Sciences
http://www.poly.asu.edu/saas/humanitiesarts/
hua@asu.edu
SANCA 233
480/727-1526

**Science, Technology and Society (BS) ECSTSBS**
School of Letters and Sciences

*Program Description:* Questions surrounding the interaction of science, technology and human systems are highly interdisciplinary and cultural, requiring analytical techniques that transcend space and time. Thus, the Science, Technology and Society Program stresses the need to step outside both disciplinary and cultural boxes in pursuit of knowledge. Accordingly, the program is heavy on cultural and information literacy and critical thinking. The primary goal is to produce generalists who understand the intricate interrelationship of science, technology and society and are armed with the technical skills to change their environment. The following tracks are available:
• Science, technology and governance.
• Global technology and development and general science.
• Technology and society.

Language Requirement: N | Program Fee: N

Career Opportunities: The bachelor's degree in science, technology and society prepares professionals and scholars for careers in the twenty-first century world focusing primarily, but not exclusively, on the interaction of science and technology with human systems. Graduates are prepared for professional careers in government, nonprofit organizations, business, education and law and for graduate or professional study. The focus of the program is on developing the technical skills required to audit the social, political and policy impact of technological advancement and the competence required to navigate questions surrounding the future trajectory of science and technology.

Contact:
School of Letters and Sciences
http://sls.asu.edu/ss/sts/index.html
sbscpoly@asu.edu
SANCA 252
480/727-1716

Technical Communication (BS) LSTECBS
School of Letters and Sciences

Program Description: The B.S. in technical communication is the only undergraduate technical communication degree program available in the state of Arizona. Technical communication is applied workplace communication that makes technical information understandable and available to many audiences. In the technical communication program, students learn how to produce, design and manage information using both traditional and developing technologies.

Language Requirement: N | Program Fee: N

Career Opportunities: The Bureau of Labor Statistics estimates the need for writers and editors will increase by 25 percent over the next five years. Software and electronics companies, media corporations, financial institutions, government agencies, nonprofits and other areas will see an increased demand for writers. Students in the program will prepare for careers as:

• Desktop publishers.
• Information designers.
• Multimedia designers.
• Publications managers.
• Technical editors.
• Technical writers.
• Web page and intranet page designers.

Contact:
Dean, School of Letters & Sciences
http://techcomm.asu.edu/
sls@asu.edu
SANCA 251
480/727-1526

Liberal Arts and Sciences, College of

African & African American Studies (BA) LAAFRBA
College of Liberal Arts and Sciences

Program Description: African and African American Studies (AAAS) is an interdisciplinary B.A. program that focuses on people of African descent throughout the world and the diversity of past and present experiences of those who live in the United States, Africa, the Caribbean, South America and Central America. As an institutional program, AAAS is structured to:

1. Prepare students of all ethnicities to better understand, value and more effectively participate in our increasingly diverse society.
2. Combine knowledge of the African diaspora with intellectual and practical training in specific areas to create more effective communities and global partnerships.
3. Provide students with a foundation for advanced studies in such fields/professions as history, English, sociology, political science, communications, arts, public administration, law, psychology, social work, education and business.

Language Requirement: Y | Program Fee: N

Career Opportunities: Because of its emphasis on various social aspects and groups, AAAS provides students with practical applications useful for various workplaces. The minor requirement of AAAS helps students develop cultural sensitivity and prepares them for careers in administration, advertising, counseling, travel, business, international relations, justice, journalism, human resources, management and education. Our program prepares students for work in civil rights organizations, colleges, universities, corporations, government agencies, hotel chains, the insurance industry, law firms, libraries, museums, nonprofit organizations, the Peace Corps, political action groups, public relation firms, research organizations, sales departments, social service agencies, travel agencies and many more.

Contact:
School of Social Transformation
http://aaas.clas.asu.edu/
American Indian Studies (BS) LAAISBS
College of Liberal Arts and Sciences

Program Description: The B.S. in American Indian studies provides students with unique opportunities to evaluate issues of American Indian nations within a domestic and international context. The B.S. in American Indian studies encompasses two areas of emphasis: legal, policy and community and economic development, and arts, languages and culture. The American Indian Studies Program is committed to broadening the knowledge of students interested in the histories, languages, cultures, arts and contemporary situations of American Indian nations and people. The program is designed to protect the integrity and identity of the indigenous populations of North America and to create a learning environment conducive to critical and creative thought.

Language Requirement: N | Program Fee: N

Career Opportunities: American Indian Studies graduates will be qualified to fill positions at the tribal government, state, federal and private levels. Graduates can advance to graduate school or can pursue professional careers in such fields as government service or public service. For example, federal and tribally operated schools located in remote areas within Indian Country have high turnover rates for both teachers and staff. American Indian Studies graduates should be available to help fill these positions. Furthermore, the federal government, a major employer on many reservations across the country, is in need of qualified people who are knowledgeable of Indian cultures, laws and policies. Additionally, many American Indian nations economies and infrastructures are developing at a rapid pace, and they are in continuous need to fill mid-management and management-level positions.

Contact:
American Indian Studies Program
http://www.asu.edu/clas/americanindian
AIS@asu.edu
DHALL 356
4807277056

Anthropology (BA) LAASBBA
College of Liberal Arts and Sciences

Program Description: The B.A. in anthropology gives students an opportunity to learn how and why humans evolved, and how our evolutionary biological, social and cultural trajectories help us understand what it means to be human in past, present and future environments. A special feature of the ASU anthropology program is its relevance to other disciplines, including:
• Applied mathematics
• Architecture
• Area or cultural group studies
• Biology
• Community planning
• Economics
• Fine arts
• Global studies
• Law
• Medicine
• Public health
• Psychology
• Religious studies
• Sociology

Anthropology provides many exciting hands-on learning opportunities through laboratories and field-based courses that focus on:

• Finding ancient human fossils.
• Unearthing buried cities, villages and hunter-gatherer camps.
• Understanding health, disease and human biology.
• Appreciating the languages and cultures of such diverse areas as Southeast Asia, the South Pacific, Latin America and the Mediterranean Basin.
• Many other topics that explore humans of the past and present.

Language Requirement: Y | Program Fee: N

Career Opportunities: The B.A. in anthropology is beneficial and useful for careers in areas such as:

• Postgraduate academic research and teaching.
• Consulting for large and small private and public organizations.
• Directing programs in the private or public sector.
• Providing healthcare as nurses, doctors or public or global health professionals.
• Analyzing and proposing policies.
• Acting as legal advocates in international cases.
• Curating cultural resources.
• Planning communities.
• Directing nonprofit organizations.

Contact:
School of Human Evolution & Social Change
http://shesc.asu.edu/undergraduate_studies
shesc.undergrad@asu.edu
SHESC 233
480/965-6215
**Applied Mathematics for Life and Social Sciences (BS) LAAMLBS**

**College of Liberal Arts and Sciences**

*Program Description:* Applied mathematics for life and social sciences (AMLSS) is a new and rapidly developing crossdisciplinary field that investigates and integrates complex areas of the physical, life and social sciences. A cardinal objective of this program is to offer students the opportunities to develop purposeful competencies in mathematics as well as an appreciation for the contributions of mathematics to the fields of sciences, engineering, business, government, economics, and the power of critical thinking.

The students are taught how to use theories and techniques such as mathematical modeling and computational methods to resolve real world practical problems. They will also engage in course work directed toward an understanding of mathematical theory and its relation to other fields of study which includes an emphasis on precision of definition, reasoning to accurate conclusions and analyzing and developing solutions to problems using mathematical principles.

The B.S. in AMLSS is a challenging, but fun, curriculum that will prepare a new generation of students to pursue advanced degrees in mathematical, life or social sciences. The focus of this degree is acquiring a lifelong learning philosophy that will prepare students to become first-rate scientists and important agents of change in the shrinking global village. The AMLSS B.S. will provide students entering the environmental, life, health, mathematical and social science fields the quantitative, scientific and analytical skills that are critical but still lacking for professionals working in these areas.

*Language Requirement: N | Program Fee: N*

*Career Opportunities:* Career opportunities in AMLSS are varied and diverse. Graduates from the program may work in the public or private sectors. For example, graduates with an interest in education may go into academia and become teachers or professors and/or researchers. Graduates who are more oriented toward the private and government sectors may become consultants in federal and state organizations or agencies, actuaries for banks or insurance companies, engineers, computer analysts and operations researchers. Many careers require a certain authority of quantitative methods and graduates qualified in mathematics are more marketable.

According to a survey in 1999, by the National Association of Colleges and Employers, starting salaries for mathematics graduates with a bachelor’s degree averaged about $37,300 per year and $42,000 for those with a master’s degree. Doctoral degree holders averaged $58,900. The typical yearly salary for mathematicians employed by the federal government in supervisory, nonsupervisory and decision-making positions was $69,000; for mathematical statisticians, $69,000; and for cryptanalysts, $61,100, in early 1999. An example of
other professions that require broad mathematical skills include actuary, statistician, computer programmer, systems analyst, systems engineer and operations research analyst.

Contact:
School of Human Evolution & Social Change
http://shesc.asu.edu/undergraduate_studies
shesc.undergrad@asu.edu
SHESC 233
480/965-6215

Asia Studies (East Asia) (BA) LAHSTEABA
College of Liberal Arts and Sciences

Program Description: The interdisciplinary BA in Asia Studies offers students the opportunity to study South, Southeast Asia, or East Asia in depth through a coherent concentration of academic study across a number of disciplines. The interdisciplinary approach will prepare students to deploy a variety of intellectual tools to address contemporary political, social and cultural issues in Asia and to apply their knowledge in various academic and practical settings. Students will identify which concentration (South, Southeast, or East Asia) they will pursue.

The concentration in East Asia focuses on China, Japan, Korea, and Taiwan.

Language Requirement: Y | Program Fee: N

Career Opportunities: People knowledgeable about Asia will be required in virtually every arena in which America interacts with the rest of the world, including diplomacy, law, trade, journalism, higher education, tourism, technology transfer, food security, philanthropy, humanitarian service, transportation, communication, international organizations, law enforcement, intelligence, and the military.

Contact:
School of Historical and Critical Inquiry
Coor Hall, room 4587
480/965-8364

Asia Studies (South Asia) (BA) LAHSTSABA
College of Liberal Arts and Sciences

Program Description: The interdisciplinary B.A. in Asia Studies offers students the opportunity to study South, Southeast Asia, or East Asia in depth through a coherent concentration of academic study across a number of disciplines. The interdisciplinary approach will prepare students to deploy a variety of intellectual tools to address contemporary political, social and cultural issues in Asia and to
apply their knowledge in various academic and practical settings. Students will
identify which concentration (South, Southeast, or East Asia) they will pursue.

The concentration in South Asia focuses on India, Pakistan, Bangladesh and other
South Asian states and societies.

*Language Requirement:* Y | *Program Fee:* N

*Career Opportunities:* People knowledgeable about Asia will be required in virtually
every arena in which America interacts with the rest of the world, including
diplomacy, law, trade, journalism, higher education, tourism, technology transfer,
food security, philanthropy, humanitarian service, transportation, communication,
international organizations, law enforcement, intelligence, and the military.

*Contact:*
School of Historical and Critical Inquiry
Coor Hall, room 4587
4809658364,

**Asia Studies (Southeast Asia) (BA) LAHSTSEABA**
College of Liberal Arts and Sciences

*Program Description:* The interdisciplinary BA in Asia Studies offers students the
opportunity to study South, Southeast Asia, or East Asia in depth through a coherent
concentration of academic study across a number of disciplines. The
interdisciplinary approach will prepare students to deploy a variety of intellectual
tools to address contemporary political, social and cultural issues in Asia and to
apply their knowledge in various academic and practical settings. Students will
identify which concentration (South, Southeast, or East Asia) they will pursue.

The concentration in South Asia focuses on Burma/Myanmar, Thailand, Laos,
Cambodia, Vietnam, Malaysia, Singapore, Indonesia, Brunei, East Timor, and the
Philippines.

*Language Requirement:* Y | *Program Fee:* N

*Admission Requirements:

*Career Opportunities:* People knowledgeable about Asia will be required in virtually
every arena in which America interacts with the rest of the world, including
diplomacy, law, trade, journalism, higher education, tourism, technology transfer,
food security, philanthropy, humanitarian service, transportation, communication,
international organizations, law enforcement, intelligence, and the military.

*Contact:*
School of Historical and Critical Inquiry
Coor Hall, room 4587
4809658364
Asian Languages - Chinese (BA) LACHIBA
College of Liberal Arts and Sciences

Program Description: Students in the B.A. in Asian languages with a concentration in Chinese program study the language, literature and culture of China. They gain a respectable measure of competence in reading, writing and oral/aural skills in the Chinese language. Throughout the program, students take courses in either Japanese or Korean and related courses in Chinese and East Asian culture on topics such as Chinese history, art, religion, government, literary and cultural theory and linguistics. In addition, ASU has a summer overseas program to study Chinese.

Language Requirement: Y | Program Fee: N

Career Opportunities: Graduates have a variety of career opportunities. Many work for firms that deal with international trade for U.S. companies that have branches in China or for Chinese companies located either in the United States or China. Other graduates work for government agencies or teach (usually English) in China. Some pursue graduate work in Chinese studies, eventually teaching the language and/or culture in universities or colleges.

Contact:
School of International Letters and Cultures
http://silc.asu.edu/undergraduate/majors-minors-certs
silcadvising@asu.edu
LL 440
480/965-6281

Asian Languages - Japanese (BA) LAJPNBA
College of Liberal Arts and Sciences

Program Description: Students in the B.A. in Asian languages with a concentration in Japanese program study the language, literature and culture of Japan. They gain a respectable measure of competence in reading, writing and oral/aural skills in the Japanese language. Students also gain linguistic and cultural competence through the required study of classical Japanese. Throughout the program, students take courses in either Chinese or Korean and related courses in Japanese and East Asian culture on topics such as Japanese history, art, religion, government, literary and cultural theory and linguistics. In addition, ASU offers summer or yearlong overseas programs to study Japanese.

Language Requirement: Y | Program Fee: N

Career Opportunities: Graduates have a variety of career opportunities. Many work for firms that deal with international trade for U.S. companies that have branches in Japan or for Japanese companies located either in the United States or Japan. Other graduates work for government agencies or teach (usually English) in Japan. Some pursue graduate work in Japanese studies, eventually teaching the language and/or culture in universities or colleges.
culture in universities or colleges. High school and elementary teaching are also possible with certification.

Contact:
School of International Letters and Cultures
http://silc.asu.edu/undergraduate/majors-minors-certs
silcadvising@asu.edu
LL 440
480/965-6281

Biochemistry (BA) LABCHBA
College of Liberal Arts and Sciences

Program Description: The B.A. in biochemistry provides students with a course of study in the fundamental knowledge of the chemical substances and vital processes of living organisms. Discoveries of new drugs, the recognition and control of new pathogens, development of new catalysts for energy transformations and the production of new materials, and solutions to problems such as food production and environmental remediation depend upon a thorough grounding in this area of science.

Language Requirement: Y | Program Fee: N

Career Opportunities: A solid undergraduate education in biochemistry provides the necessary background for career paths in research, teaching, health care, chemical industries, government and other areas. Students planning careers in medicine, dentistry, pharmacy or veterinary medicine often study biochemistry with supporting work in biology and chemistry as the route for preprofessional training.

Contact:
Department of Chemistry and Biochemistry
http://chemistry.asu.edu
chmugadv@asu.edu
PS D 102
480/965-3461

Biochemistry (BS) LABCHBS
College of Liberal Arts and Sciences

Program Description: The B.S. in biochemistry provides students with a course of study in the fundamental knowledge of the chemical substances and vital processes of living organisms. Discoveries of new drugs, the recognition and control of new pathogens, development of new catalysts for energy transformations and the production of new materials, and solutions to problems such as food production and environmental remediation depend upon a thorough grounding in this area of science.

Language Requirement: N | Program Fee: N
Career Opportunities: A solid undergraduate education in biochemistry provides the necessary background for career paths in research, teaching, health care, chemical industries, government and other areas. Students planning careers in medicine, dentistry, pharmacy or veterinary medicine often study biochemistry with supporting work in biology and chemistry as the route for preprofessional training.

Contact:
Department of Chemistry and Biochemistry
http://chemistry.asu.edu
chmugadv@asu.edu
PS D 102
4809653461

Biochemistry (Medicinal Chemistry) (BS) LABCHMBS
College of Liberal Arts and Sciences

Program Description: The science of biochemistry is about the discovery and dissemination of fundamental knowledge of the chemical substances and vital processes of living organisms. Discoveries of new drugs, the recognition and control of new pathogens, development of new catalysts for energy transformations and the production of new materials, and solutions to problems such as food production and environmental remediation depend upon a thorough grounding in this area of science. The B.S. in biochemistry with a concentration in medicinal chemistry emphasizes aspects of biochemistry that will be useful to those planning careers in medically related areas.

Language Requirement: N | Program Fee: N

Career Opportunities: A solid undergraduate education in biochemistry provides the necessary background for career paths in research, teaching, health care, chemical industries, government and other areas. Students planning careers in medicine, dentistry, pharmacy or veterinary medicine often pursue the medicinal chemistry concentration, with supporting work in biology and chemistry as the route for preprofessional training.

Contact:
Department of Chemistry and Biochemistry
http://chemistry.asu.edu
chmugadv@asu.edu
PS D 102
4809653461

Biological Sciences (BS) LABSCBS
College of Liberal Arts and Sciences

Program Description: The B.S. in biological sciences is designed for students who desire a broad background in many areas of biology or who want to postpone selection of a concentration until graduate school. Biological sciences encompasses
the study of all living things (microbes, plants and animals), and includes the study of basic organization and function (molecules, cells, tissues, organs), how organisms evolve, their roles in the natural environment, how hereditary information is transferred and the development of biotechnology.

*Language Requirement: N | Program Fee: N*

*Career Opportunities:* Students graduating with this degree are broadly trained and well prepared for admission into graduate programs and professional schools (medical, dental and veterinary). They may also directly enter positions in government, education, industry or certain technical fields.

Students exploring becoming a middle or high school teacher can find more information about the concurrent degree program at http://www.asu.edu/programs/concurrentdegrees/BAE_BA_BioSciences.html.

*Contact:
School of Life Sciences
http://sols.asu.edu/
sols.advising@asu.edu
LSC 206
480/727-6277*

**Biological Sciences (Animal Physiology & Behavior) (BS) LABSCABS**

*College of Liberal Arts and Sciences*

*Program Description:* The animal physiology and behavior concentration in the B.S. in biological sciences is intended for students interested in a broad, integrated education in the principles and mechanisms governing animal function and behavior. This concentration will prepare students for graduate-level study in physiology, neuroscience and animal behavior; professional school in health professions; or careers in basic and biomedically oriented research.

*Language Requirement: N | Program Fee: N*

*Career Opportunities:* Students graduating with this degree are broadly trained and well prepared for admission into graduate programs and professional schools (medical, dental and veterinary). They may also directly enter positions in government, education, industry or certain technical fields.

*Contact:
School of Life Sciences
http://sols.asu.edu/
sols.advising@asu.edu
LSC 206
480/727-6277*
Biological Sciences (Biology & Society) (BS) LABCSBS
College of Liberal Arts and Sciences

Program Description: The biology and society concentration in the B.S. in biological sciences is designed to provide students with a working knowledge of life sciences and related sciences. Students gain the historical, philosophical, political and bioethical perspectives needed to explore interactions between the life sciences and related complex human issues. Subsequently, the program contributes to better-informed and more effective policymakers, teachers, writers and researchers in areas related to biology, medicine and society. To achieve this, the curriculum is highly individualized.

Language Requirement: N | Program Fee: N

Career Opportunities: Our students have pursued diverse career paths. They have gone on to medical school, public health, law, environmental studies and graduate programs in such diverse areas as history and philosophy of science, genetics or counseling psychology. Other graduates work in genetic counseling, health policy and international disease studies and prevention.

Contact:
School of Life Sciences
http://sols.asu.edu/
sols.advising@asu.edu
LSC 206
480/727-6277

Biological Sciences (Conservation Biology & Ecological Sustainability) (BS) LABSCCBS
College of Liberal Arts and Sciences

Program Description: The conservation biology and ecological sustainability concentration in the B.S. in biological sciences is designed to provide students with a broad background in conservation biology and ecological sustainability, while allowing them to specialize in a particular area of interest. The concentration provides for training in:

- Behavioral ecology.
- Climate change.
- Conservation of endangered species.
- Population biology.
- Urban ecology.
- Social and historical aspects of conservation.

Language Requirement: N | Program Fee: N

Career Opportunities: Students graduating with this degree are broadly trained and well prepared for admission into graduate programs and veterinary school. They may also directly enter positions in:
Biological Sciences (Ecology & Evolution) (BS) LABSCEBS
College of Liberal Arts and Sciences

Program Description: The ecology and evolution concentration in the B.S. in biological sciences is designed to provide training in:

1. The ecology, evolution and behavior of organisms.
2. The diversity and systematic relationships among species and change in these relationships through time.
3. The responses of organisms and ecological systems to human activity and environmental change.

Evolution forms the foundation for understanding everything in the biological sciences, while ecology examines the interaction of organisms with their environment.

Language Requirement: N | Program Fee: N

Career Opportunities: Students graduating with this degree are broadly trained and well prepared for admission into graduate programs and professional schools. They may also directly enter positions in:

- Education.
- Government.
- Industry.
- Technical fields.

Contact:
School of Life Sciences
http://sols.asu.edu/
sols.advising@asu.edu
LSC 206
480/727-6277
Biological Sciences (Genetics, Cell & Developmental Biology) (BS) LABSCGBS
College of Liberal Arts and Sciences

Program Description: The genetics, cell and developmental biology concentration in the B.S. in biological sciences is intended for students interested in a flexible curriculum focused on the related fields of genetics, cell biology and developmental biology. This concentration will prepare students for careers in basic and biomedically oriented research or postbaccalaureate education in the health professions.

Language Requirement: N | Program Fee: N

Career Opportunities: Students graduating with this degree are well prepared for admission into graduate programs and professional schools (medical, dental and veterinary). They may also directly enter positions in:

- Education.
- Government.
- Industry.
- Technical fields.

Contact:
School of Life Sciences
http://sols.asu.edu/
sols.advising@asu.edu
LSC 206
480/727-6277

Biological Sciences (Genomics & Bioinformatics) (BS) LABSCBBS
College of Liberal Arts and Sciences

Program Description: The genomics and bioinformatics concentration in the B.S. in biological sciences is intended for students interested in a flexible curriculum focused on modern genome science. This concentration will prepare students for careers in basic and biomedically oriented research or professional training in the health professions.

Language Requirement: N | Program Fee: N

Career Opportunities: Students graduating with this degree are broadly trained and well prepared for admission into graduate programs and professional schools (medical, dental and veterinary). They may also directly enter positions in:

- Education.
- Government.
- Industry.
- Technical fields.
**Biological Sciences (Plant Biology) (BS) LABSCPBS**

College of Liberal Arts and Sciences

**Program Description:** The plant biology concentration in the B.S. in biological sciences program is designed to provide breadth for students interested in all aspects of plant biology, including:

- Anatomy.
- Cellular.
- Developmental.
- Ecology.
- Evolution.
- Evolution.
- Molecular.
- Morphology.
- Physiology.
- Systematics.

The concentration provides elective courses that permit students to further focus their education in these areas of specialization. One area is primarily for students interested in plant diversity, ecology and evolution, or other aspects of organismal biology; the other is appropriate for students interested in genetics and genomics, and cellular, molecular and developmental plant biology.

**Language Requirement:** N  |  **Program Fee:** N

**Career Opportunities:** Students graduating with this degree are broadly trained and well prepared for admission into graduate programs, specimen-based collections research, and conservation and resource management agencies. They may also directly enter positions in:

- Education.
- Government.
- Industry.
- Technical fields.

**Contact:**
School of Life Sciences
http://sols.asu.edu/
sols.advising@asu.edu
Chemistry (BA) LACHMBA
College of Liberal Arts and Sciences

Program Description: Chemistry is a central science that connects the “hard sciences,” including physics, with the “soft sciences,” such as biology and medicine, and provides fundamental knowledge needed to deal with many needs of society. Discoveries of new materials, processes and solutions to problems such as pollution control depend upon a thorough grounding in this area of science. Students in the B.A. in chemistry program have opportunities to explore interests in analytical, inorganic, organic and physical chemistry as well as biochemistry, geochemistry, solid-state and materials chemistry. A secondary education B.A. with a specialization in chemistry is also available.

Language Requirement: Y | Program Fee: N

Career Opportunities: A solid undergraduate education in chemistry provides the necessary background for many career paths in chemical industries, government and other areas. Chemistry can be combined with law for patent work, economics for sales and marketing careers, and computer science for careers in information storage and retrieval. Students planning careers in medicine, dentistry or veterinary medicine often pursue a course of study in chemistry with supporting work in biology as the route for preprofessional training.

Contact:
Department of Chemistry and Biochemistry
http://chemistry.asu.edu
chmugadv@asu.edu
PS D 102
4809653461

Chemistry (BS) LACHMBS
College of Liberal Arts and Sciences

Program Description: Chemistry is a central science that connects the “hard sciences,” including physics, with the “soft sciences,” such as biology and medicine, and provides fundamental knowledge needed to deal with many needs of society. Discoveries of new materials, processes and solutions to problems such as pollution control depend upon a thorough grounding in this area of science. Students in the B.S. in chemistry program have opportunities to explore interests in analytical, inorganic, organic and physical chemistry as well as biochemistry, geochemistry, solid-state and materials chemistry. A secondary education B.A. with a specialization in chemistry is also available.

Language Requirement: N | Program Fee: N
Career Opportunities: A solid undergraduate program of education in chemistry provides the necessary background for many career paths in chemical industries, government and other areas. Chemistry can be combined with law for patent work, economics for sales and marketing careers, and computer science for careers in information storage and retrieval. Students planning careers in medicine, dentistry or veterinary medicine often pursue a course of study in chemistry with supporting work in biology as the route for preprofessional training.

Students exploring becoming a middle or high school teacher can find more information about the concurrent degree program at http://www.asu.edu/programs/concurrentdegrees/BAE_BS_Chemistry.html.

Contact:
Department of Chemistry and Biochemistry
http://chemistry.asu.edu
chmugadv@asu.edu
PS D 102
4809653461

Chemistry (Environmental Chemistry) (BS) LACHMEBS
College of Liberal Arts and Sciences

Program Description: Chemistry is a central science that connects the “hard sciences,” including physics, with the “soft sciences,” such as biology and medicine, and provides fundamental knowledge needed to deal with many needs of society. Discoveries of new materials, processes and solutions to problems such as pollution control depend upon a thorough grounding in this area of science. Students in the B.S. in chemistry program have opportunities to explore interests in analytical, inorganic, organic and physical chemistry as well as biochemistry, geochemistry, solid-state and materials chemistry. The environmental chemistry concentration is especially appropriate for those with strong interests in solving environmental problems.

Language Requirement: N | Program Fee: N

Career Opportunities: A solid undergraduate program of education in chemistry provides the necessary background for many career paths in chemical industries, government and other areas. Chemistry can be combined with law for patent work, economics for sales and marketing careers, and computer science for careers in information storage and retrieval. Students planning careers in medicine, dentistry or veterinary medicine often pursue a course of study in chemistry with supporting work in biology as the route for preprofessional training. Students planning to work in environmentally-related areas will find the environmental chemistry concentration especially appropriate.

Contact:
Department of Chemistry and Biochemistry
Clinical Laboratory Sciences (BS) LACLSBS
Program information not available at time of publication.

No longer accepting applications.

Contact:
School of Life Sciences
http://sols.asu.edu
LS E218
sols@asu.edu
480/965-6899

Communication (BA) LACOMBA
College of Liberal Arts and Sciences

Program Description: The B.A. in communication focuses on teaching students how communication processes create, maintain and transform identities, relationships, workplaces and communities. Our mission statement is: “Through the study and critique of human communication, we generate knowledge, creativity and understanding to facilitate healthy relationships and workplaces, civil and secure communities and constructive intercultural interaction.”

Language Requirement: Y | Program Fee: N

Career Opportunities: Graduates of our program often attend leading graduate schools in communication, law schools and business schools, and/or find gainful employment in careers in the areas of:

- Campaign management.
- Counseling.
- Entrepreneurism.
- Event planning.
- Health care management.
- Human resource management.
- Intercultural relations.
- Marketing.
- Nonprofit management.
- Public relations.
- Sales.

Contact:
Hugh Downs School of Human Communication
Communication (BS) LACOMBS
College of Liberal Arts and Sciences

Program Description: The B.S. in communication program focuses on teaching students how communication processes create, maintain and transform identities, relationships, workplaces and communities. Our mission statement is: “Through the study and critique of human communication, we generate knowledge, creativity and understanding to facilitate healthy relationships and workplaces, civil and secure communities and constructive intercultural interaction.”

Language Requirement: N | Program Fee: N

Career Opportunities: Graduates of our program often attend leading graduate schools in communication, law schools and business schools, and/or find gainful employment in careers in the areas of:

- Campaign management.
- Counseling.
- Entrepreneurism.
- Event planning.
- Health care management.
- Human resource management.
- Intercultural relations.
- Marketing.
- Nonprofit management.
- Public relations.
- Sales.

Contact:
Hugh Downs School of Human Communication
http://humancommunication.clas.asu.edu/
communication@asu.edu
STA 412
480/965-5095

Computational Mathematical Sciences (BS) LACMSBS
College of Liberal Arts and Sciences

Program Description: Mathematics is a crucial component in many disciplines such as physics, engineering applications, business and economics, and in the life sciences and social sciences. The B.S. in computational mathematical sciences is an interdisciplinary degree, with components in mathematics, science and computing,
and a focus on computational and numerical aspects of techniques used to solve a wide range of applied problems arising in practically any field of study.

A large component is geared towards understanding why and how computer algorithms work, as well as their limitations in terms of applicability and efficiency. This program is designed for students interested in computing and simulation of applied problems. It promotes creative skills and develops problem-solving tools needed in today's technological world.

Language Requirement: N | Program Fee: N

Career Opportunities: Employment opportunities for math majors can be found in virtually all sectors of industry:

- Academia (high-school or college teacher, university professor).
- Applied math (scientific computing).
- Biotech.
- Business (actuary for bank or insurance company, operations research).
- Computer.
- Engineering.
- Government (consultant, federal and state organizations).
- Graduate school (mathematics or other fields).
- Medicine.

A B.S. in computational mathematical sciences is perhaps the most versatile of all math degrees in that it can lead to a wider choice of career paths. Many careers require a command of quantitative methods; persons qualified in mathematics hold a favorable edge in competition for job opportunities. Profiles and descriptions of jobs and career paths of actual mathematicians in a wide array of fields are published by the American Mathematical Society.

Contact:
School of Mathematical and Statistical Sciences
http://math.asu.edu/
math@asu.edu
PSA 211
4809657195

Earth & Space Exploration (BS) LASESBS
College of Liberal Arts and Sciences

Program Description: The B.S. in earth and space exploration offers students an integrated education across earth sciences, planetary sciences, astrophysics and engineering. The degree incorporates strong quantitative preparation, a learning community that includes both science and engineering students, and a yearlong collaborative capstone senior exploration project. This strong foundation in geosciences, astrophysics and exploration engineering will prepare students for key
roles in space research and industry, environmental and geologic engineering, earth resources and exploration, and water and environmental use policy.

Language Requirement: N | Program Fee: N

Career Opportunities: The earth and space exploration major addresses critical future shortfalls in the national and regional training of the next generation of geoscientists and aerospace engineers. Arizona has an expanding space industry with major new investments and is prepared to engage new technologies to monitor and understand environmental issues in Arizona, the southwest and throughout the world. Students who major in earth and space exploration will have the tools, knowledge and understanding to address key problems of a global nature, whether they are working in the private or the public sector.

Contact:
School of Earth and Space Exploration
http://sese.asu.edu
sesefine@asu.edu
PS F 686
480/965-5081

Economics (BS) LAECNBS
College of Liberal Arts and Sciences

Program Description: Economics provides a powerful platform for analyzing and answering questions such as:

- What are the best ways to design compensation schemes to attract and retain top workers while maintaining productivity?
- How does offshoring affect the economy, workers, and firms?
- Why do business cycles exist?
- What are the economic consequences of regulation?
- How should environmental safeguards be designed to simultaneously reduce pollution and maintain production efficiency?
- How should healthcare be provided to increase access and still maintain quality and encourage innovation?

Our faculty well known for both teaching excellence and high-quality research, ensuring that students receive the most current knowledge from acclaimed instructors.

Language Requirement: N | Program Fee: N

Career Opportunities: Students who have sought careers following their undergraduate education have been very successful in business, consulting or government. Our graduates have taken positions as corporate economists who collect data and make forecasts concerning the nature of the firm's business; as consultants who serve as advisers to both state and federal governments as well as
private corporations and as economic analysts for banks and financial firms. Others have gone on to the best law schools in the country, or to the top Ph.D. and M.B.A. programs here and abroad. Finally, many of our graduates have won prestigious national awards, such as the Marshall Award, the NSF Fellowship, Fulbright fellowships and most recently, the Truman Award.

Contact:
Economics Program in CLAS
http://wpcarey.asu.edu/ecn
wpcareyecn@asu.edu
BAC 659
480/965-3531

**English (Creative Writing) (BA) LAENGcba**
College of Liberal Arts and Sciences

*Program Description:* The B.A. in English offers concentrations in creative writing, linguistics or literature. Students in the creative writing concentration study and practice the art of writing poetry and fiction. The faculty in the Department of English offer courses in:

- Comparative literature.
- Creative writing.
- English as a second language
- English education.
- English linguistics, literature and language.
- Rhetoric and composition.

Students engage in community outreach and in such diverse cross-disciplinary offerings as discourses of cultural encounters, borderlands, intercultural studies and technologies. A secondary education B.A. with a specialization in English is also available.

*Language Requirement: Y | Program Fee: N*

**Admission Requirements:**

**Career Opportunities:** With a degree in English, students’ career options are virtually endless. Employers in all fields are always looking for workers with strong writing and communication skills and the ability to think critically. Some of the most common professions for English majors are:

- Banking.
- Business.
- Editing.
- Journalism.
- Law.
- Medicine.
• Professional writing.
• Public relations.
• Publishing.
• Teaching.
• Web content development.

Contact:
Department of English
http://english.clas.asu.edu/
englishadvising@asu.edu
LL 542
4809653168

English (Minor) LAARTHMIN
Program information not available at time of publication.

Not accepting new students.

Contact Information:
College of Liberal Arts and Sciences
http://clas.asu.edu/

English (Linguistics) (BA) LAENGBA
College of Liberal Arts and Sciences

Program Description: The B.A. in English offers concentrations in creative writing, linguistics, or literature. Students in the linguistics concentration focus on study of the history and structure of language. The faculty in the Department of English offer courses in:

• Comparative literature.
• Creative writing.
• English as a second language.English education.
• English linguistics, literature and language.
• Rhetoric and composition.

Students engage in community outreach and in such diverse cross-disciplinary offerings as discourses of cultural encounters, borderlands, intercultural studies and technologies. A secondary education B.A. with a specialization in English is also available.

Language Requirement: Y | Program Fee: N

Career Opportunities: With a degree in English, students' career options are virtually endless. Employers in all fields are always looking for workers with strong writing and communication skills and the ability to think critically. Some of the most common professions for English majors are:
Program Description: The B.A. in English offers concentrations in creative writing, linguistics or literature. Students in the literature concentration study British, American and global literatures in English from the earliest writings to the present. The faculty in the Department of English offer courses in:

- Comparative literature.
- Creative writing.
- English as a second language.
- English education.
- English linguistics, literature and language.
- Rhetoric and composition.

Students engage in community outreach and in such diverse cross-disciplinary offerings as discourses of cultural encounters, borderlands, intercultural studies and technologies. A secondary education B.A. with a specialization in English is also available.

Language Requirement: Y | Program Fee: N

Career Opportunities: With a degree in English, students’ career options are virtually endless. Employers in all fields are always looking for workers with strong writing and communication skills and the ability to think critically. Some of the most common professions for English majors are:

- Banking.
- Business.
• Journalism.
• Law.
• Medicine.
• Professional writing and editing.
• Public relations.
• Publishing.
• Teaching.
• Web content development.

Contact:
Department of English
http://english.clas.asu.edu/
englishadvising@asu.edu
LL 542
4809653168

Family & Human Development (BS) LAFASBS
College of Liberal Arts and Sciences

Program Description: The B.S. in family and human development offers course work on the development of individuals and families as they relate to their social worlds. The required concentration in family studies and child development provides a focus on the development of children, adults and families. Students take a wide variety of courses on contemporary issues related to human development from infancy through the end of the life span, and the development, formation and dissolution of families and develop proficiency in written communication, computer skills, statistics and research methods.

Language Requirement: N | Program Fee: N

Career Opportunities: As a liberal arts degree, the B.S. in family and human development not only provides excellent preparation for future graduate work in family and developmental sciences, social work, law, medicine and counseling, it also prepares undergraduates for direct entry into positions in business, social service and government.

Contact:
School of Social/Family Dynamics T
http://ssfd.clas.asu.edu/
ssfd@asu.edu
SS 144
4809656978

Film (Film & Media Studies) (BA) LAFMSBA
College of Liberal Arts and Sciences
Program Description: The B.A. in film with a concentration in film and media studies provides students with an opportunity for interdisciplinary study of film and media. The core faculty are nationally and internationally recognized scholars, with terminal degrees from the nation's top film and media programs. Their innovative curriculum focuses on teaching students to understand how film, television, video and computer games, new media and entertainment culture represent and influence our society.

Students interested in the B.A. in film in the College of Liberal Arts and Sciences complete a concentration in film and media studies, and students accepted into the B.A. in film in the Katherine K. Herberger College of the Arts complete a concentration in film and media production. The concentrations include core courses and electives in the areas of critical studies and film production.

Language Requirement: Y | Program Fee: N

Career Opportunities: The film and media studies concentration provides undergraduates with skills that can be applied in a number of professional fields, preparing students for a variety of career opportunities as leaders within media entertainment industries, including:

- Creative management.
- Critics.
- Development.
- Marketing and regulation.
- Teachers.

Former students of film and media studies have gone on to pursue graduate studies at USC, UCLA, the University of Texas and Stanford. Others have selected career paths in the film, media and entertainment industries.

Contact:
Dean, College of Liberal Arts and Sciences
http://film.asu.edu/major
filminfo@asu.edu
LL 641
480/965-6747

French (BA) LAFREBA
College of Liberal Arts and Sciences

Program Description: Students in the B.A. in French program study the language, literature and culture of France and Francophone countries. They gain a respectable measure of competence in reading, writing, and oral/aural skills in the French language. They are required to take a number of related courses on topics such as:

- Art.
- Cultural theory.
- French history.
• Government.
• International business.
• Linguistics.
• Literary theory.
• Religion.

To help students gain proficiency in the language, the French section has an active French Club, conversation hours and film screenings. In addition ASU also offers study abroad and exchange programs in France and Quebec during the summer and academic year.

Language Requirement: Y | Program Fee: N

Career Opportunities: Graduates have a variety of career opportunities in firms that deal with international trade, U.S. companies that have branches in France, airlines, and in education or government service. Many pursue graduate work in French, eventually teaching the language and culture in universities or colleges. With state certification, high school teaching is also a possibility.

Contact:
School of International Letters and Cultures
http://silc.asu.edu/undergraduate/majors-minors-certs
silcadvising@asu.edu
LL 440
480/965-6281

Geography (BA) LAGCUBA
College of Liberal Arts and Sciences

Program Description: Geographers have a unique spatial perspective in understanding the modern world, global to local, through the twin lenses of space and place. The B.A. in geography emphasizes humanistic and cultural traditions, and students pursuing undergraduate studies in geography typically concentrate knowledge-building in understanding various cultural phenomena, or in studying regions such as Latin America, Europe, Asia or Africa.

Language Requirement: Y | Program Fee: N

Career Opportunities: B.A. geographers go on to careers as:

• Community developers.
• Foreign service. Geodemographic analysts.
• Governmental organizations. Intelligence analysts.
• International trade consultants.
• Nongovernmental organizations.
• Public sector transportation planners.
• Teachers.
• Urban and regional planners.
Geography (BS) LAGCUBS
College of Liberal Arts and Sciences

Program Description: Geographers have a unique spatial perspective in understanding the modern world, global to local, through the twin lenses of space and place. A B.S. in geography emphasizes spatial patterns in natural science features such as weather, water, landforms, plants, or in social science/environmental science dynamics involving human populations, economic patterns or transportation.

Language Requirement: N | Program Fee: N

Career Opportunities: With a focus on geospatial techniques, B.S. geographers go on to careers as:

- Cartographers.
- Computer cartographers.
- Environment impact analysts.
- Geographic information system (GIS) specialists and analysts.
- Geospatial software developers.
- Hydrology and water resource specialists.
- Location analysts for businesses.
- Remote sensing analysts.

Graduates are presented with a host of other geospatial career options in the burgeoning fields of geographic information science (GiSci), mapping and navigation systems.

Contact:
School of Geographical Sciences and Urban Planning
http://geography.asu.edu
geographyadvising@asu.edu
COOR 5650
480/965-7533

Geography (Meteorology-Climatology) (BS) LAGCUMBS
College of Liberal Arts and Sciences

Program Description: The meteorology-climatology concentration under the B.S. in geography is designed to meet the requirements of certification as a meteorologist by the National Weather Service. As such, it requires a heavy concentration on:
Dynamic meteorology (atmospheric physics).
Mathematics (requiring three semesters of calculus).
Physics (two semesters of university or calculus-based physics).
Synoptic meteorology (operational weather forecasting).

Language Requirement: N | Program Fee: N

Career Opportunities: Students successfully completing the program have found employment with:

- Energy power companies (e.g., Salt River Project and Arizona Public Service).
- Government agencies (e.g., Arizona Department of Environmental Quality, U.S. Environmental Protection Agency, U.S. Army Corps of Engineers).
- Graduate work in either meteorology or climatology.
- The National Weather Service.
- U.S. Air Force (in either meteorology or pilot training).

Contact:
School of Geographical Sciences and Urban Planning
http://geography.asu.edu
geographyadvising@asu.edu
COOR 5650
4809657533

Geography (Urban Studies) (BS) LAGCUUBS
College of Liberal Arts and Sciences

Program Description: The urban studies concentration under the B.S. in geography is designed to facilitate the growing interest in urban areas, with special emphasis on studying the Phoenix metropolitan area and other rapidly urbanizing regions in arid climates. Tied with geographic information systems (GIS), the urban studies major brings both knowledge and skill sets together in a powerful way. This program, with its focus on GIS, is a viable alternative to the urban planning degree, which has restrictive enrollment.

Language Requirement: N | Program Fee: N

Career Opportunities: Students successfully completing the program often find employment with city planning agencies, as well as government agencies at various levels, including county, state and federal levels. The urban studies major, especially when combined with a focus on GIS, gives graduates an advantage in careers in urban planning and other jobs dealing with urban issues, including transportation, economic development planning and housing issues.

Contact:
School of Geographical Sciences and Urban Planning
http://geography.asu.edu/
geographyadvising@asu.edu
Geological Sciences (BS) LAGLGBS
College of Liberal Arts and Sciences

Program Description: Geological science is the study of the Earth and other planets and the processes that have shaped them since the origin of the solar system. Topics covered in geological sciences include:

- Earthquakes.
- Exploration of the sea floor.
- Fossils.
- Groundwater.
- Mountain building.
- Petroleum and ore deposits.
- Plate tectonics.
- The history of the Earth and planets.
- Volcanoes.

A B.S. in geological sciences from ASU provides students with a solid background, drawing upon the fields of chemistry, mathematics and physics. Students gain a strong understanding of field methods as well as modern computing, remote sensing and instrumentation. The modern geological scientist uses computers, satellites, high-tech instrumentation, field mapping and exploration to understand the natural environment and Earth’s resources.

Language Requirement: N | Program Fee: N

Career Opportunities: Geological scientists are employed in jobs that range from the preservation of the environment to the discovery of natural resources on Earth and the exploration of the solar system and beyond. They work to understand the effects of natural and human processes on Earth. Careers in geological science usually involve a combination of field work, lab and computer analysis and writing. Many geologists work in private industry in the environmental, mining and energy fields. Others hold jobs in public agencies or universities, working on natural hazards, resources, research and informing the public. Work environments can vary widely, relating to such diverse settings as the deep ocean floor and the moon and planets. Geologists have the skills and knowledge to address major issues of global importance.

Contact:
Department of Geological Sciences
http://sese.asu.edu
seseinfo@asu.edu
PSF 686
4809655081
**German (BA) LAGERBA**
College of Liberal Arts and Sciences

*Program Description:* Students in the B.A. in German program study the language, literature and culture of Germany. They gain a respectable measure of competence in reading, writing and oral/aural skills in the German language. They are required to take a number of related courses on topics such as:

- Art.
- German history.
- Government.
- International business.
- Religion.

Students are encouraged to study abroad in Germany as participants in ASU’s summer program in Regensburg, or on one of the academic-year exchange programs available at several German universities.

*Language Requirement: Y | Program Fee: N*

*Career Opportunities:* Graduates have a variety of career opportunities in firms that deal with international trade, U.S. companies that have branches in Germany, with airlines, and in other fields. Some decide to pursue graduate work, eventually teaching the language and culture in universities or colleges. With state certification, high school teaching is also a possibility.

*Contact:*
School of International Letters and Cultures
http://silc.asu.edu/undergraduate/majors-minors-certs
silcadvising@asu.edu
LL 440
480/965-6281

**Global Health (BA) LASSHBA**
College of Liberal Arts and Sciences

*Program Description:* The B.A. in global health is an interdisciplinary degree designed for students who seek a broad and flexible set of skills for understanding contemporary health challenges and thinking about how they might best be solved. “Global” is understood in the anthropological sense, meaning ways of understanding and addressing disease, health and well-being that can incorporate all cultures, places and time, and that can integrate knowledge of health’s social, historical, biological and ecological dimensions.

The curriculum emphasizes the development of core skills in critical thinking and problem solving and the importance of direct experience (research, study abroad, service learning and advocacy). The degree cultivates capacities to deal with any
complex problem with social components: how to identify the critical issues, ask the right questions and create solutions that are meaningful and effective.

**Language Requirement: Y | Program Fee: N**

**Career Opportunities:** Nationally and internationally, the health field provides enormous and varied career opportunities, and demands for graduates with skills is high and only growing. The major would support the goals of those who plan to pursue careers in academic research and teaching, and in health services, whether in universities, government agencies, departments of health, international agencies (WHO, CDC, Global Health Council, World Bank, Interamerican Development Bank), NGOs, or in private business or industry. The degree also provides those who plan advanced specialist health training, such as in nursing, medicine, dentistry or pharmacy, with a broad intellectual base that enhances later specialist training.

In reports prepared by such organizations as the Pew Health Professional Consortium and the National Commission on Allied Health, experts conclude that the best health professionals have interdisciplinary perspectives, social and cultural acuity (such as in cross-cultural settings) and team-oriented skills. In Arizona and elsewhere, there is a pressing need for professionals with appropriate skills to work in cross-cultural settings or with underserved populations (such as migrants, minorities and those living in poverty), and many of these jobs are directly or indirectly related to health. Graduates interested in pursuing research or scientific careers continue to graduate school to seek a master’s or doctorate degree in fields such as:

- Anthropology.
- Applied mathematics.
- Biology.
- Demography.
- Environmental studies.
- Evolutionary biology.
- Genetics.
- Geography.
- Infectious diseases.
- Public health.
- Sociology.
- Sustainability.

**Contact:**
School of Human Evolution & Social Change
http://shesc.asu.edu/undergraduate_studies
shesc.undergrad@asu.edu
SHESC 233
480/965-6215
Global Studies (BA) LASGSBA
College of Liberal Arts and Sciences

Program Description: The School of Government, Politics and Global Studies serves global, national and academic communities by spearheading new intellectual perspectives in which people strive to attain a higher quality of life. The school is transdisciplinary in strategy and transformational in purpose. Students pursuing the B.A. in global studies examine global issues from the perspective of an overarching theme of quality of life. Students organize their program of study by selecting a track. Students may choose a track in one of the following:

- Development.
- Environment.
- Global governance.
- Urban systems.
- Violence, conflict and human rights.

The program is organized around key current research and teaching themes. Global studies faculty as well as affiliated faculty from throughout the university offer courses.

Language Requirement: Y | Program Fee: N

Career Opportunities: The program prepares students for professional and graduate training (including law, business and public policy) and provides professional training to future decision-makers in government, business and policy entities.

Contact:
School of Government, Politics and Global Studies
http://globalstudies.clas.asu.edu/
globalstudies@asu.edu
WHALL 130
4807278286

History (BA) LAHISBA
College of Liberal Arts and Sciences

Program Description: Students in the B.A. in history program study the growth and development of human society from all aspects—political, social, economic and cultural. Students are required to complete course work in one geographic emphasis. The department covers the history of Europe, the United States, Asia, Latin America and Africa, and courses are designed to give students both breadth and depth in understanding today's complex world.

Language Requirement: Y | Program Fee: N

Career Opportunities: History majors seek jobs in:
• Business and industry.
• Education.
• Government.

They pursue graduate study in:

• Business.
• History.
• Justice studies.
• Law.
• Medicine.
• Public administration.
• Public history.
• Theology.

History is an excellent preprofessional major for:

• Business.
• Justice studies.
• Law.
• Medicine.
• Public administration.
• Public history.
• Theology.

A high-quality record as a history major indicates to employers and admissions officers that the student has acquired a respectable degree of literacy. It also demonstrates that the student has the ability to conduct research, assimilate material, read critically and evaluate conflicting interpretations of events.

Contact:
School of Historical and Critical Inquiry
http://history.clas.asu.edu
historyadvisor@asu.edu
COOR 4587
4809658364

Integrated Studies (BA) LAISTBA
College of Liberal Arts and Sciences

Program Description: The integrated studies program is not a General Studies major, but a unique and highly focused plan of study for gifted students whose academic interests are not served by the more traditional disciplinary studies. Superior students whose interests lie beyond the traditional departmental emphases have the opportunity to work with various faculty members in creating an individualized B.A. plan.
Students who elect an integrated studies major pursue a coherent course of study involving more than one department or college. Students majoring in integrated studies transcend the traditional disciplinary structure of the college to concentrate on individually designed areas of study not covered by the traditional major and minor.

*Language Requirement: Y | Program Fee: N*

*Admission Requirements:* Not available to freshmen. There is an additional application for this degree. Admissions consist of completion of 32 credit hours at ASU with a GPA of at least 3.25 and three letters of recommendation from ASU faculty members. For more information contact the assistant dean for academic affairs, Office of Student and Academic Programs, Fulton Center, Suite 110.

*Career Opportunities:* An integrated studies major may or may not be professionally or vocationally oriented, depending on the area of concentration. All integrated studies majors, however, share with all other liberal arts and sciences students the goal of developing analytical and communicative abilities. The program combines breadth of learning with an appropriate depth in some focused area of inquiry. Integrated studies graduates are prepared to enter the work force or pursue graduate or professional studies at the completion of their undergraduate program.

*Contact:*  
Dean, College of Liberal Arts and Sciences  
http://clas.asu.edu/undergraduate_studies  
CLASUndergrad@asu.edu  
Fulton 110  
480/965-6506

**Integrated Studies (BS) LAISTBS**  
College of Liberal Arts and Sciences

*Program Description:* The integrated studies program is not a General Studies major, but a unique and highly focused plan of study for gifted students whose academic interests are not served by the more traditional disciplinary studies. Superior students whose interests lie beyond the traditional departmental emphases have the opportunity to work with various faculty members in creating an individualized B.S. plan.

Students who elect an integrated studies major pursue a coherent course of study involving more than one department or college. Students majoring in integrated studies transcend the traditional disciplinary structure of the college to concentrate on individually designed areas of study not covered by the traditional major and minor.

*Language Requirement: N | Program Fee: N*
Admission Requirements: Not available to freshmen. There is an additional application for this degree. Admissions consist of completion of 32 credit hours at ASU with a GPA of at least 3.25 and three letters of recommendation from ASU faculty members. For more information contact the assistant dean for academic affairs, Office of Student and Academic Programs, Fulton Center, Suite 110.

Career Opportunities: The integrated studies program may or may not be professionally or vocationally oriented, depending on the area of concentration. However, the program shares with all other liberal arts and science degrees the goal of developing analytical and communicative abilities. The program combines breadth of learning with an appropriate depth in some focused area of inquiry. Integrated studies graduates are prepared to enter the work force or pursue graduate or professional studies at the completion of their undergraduate program.

Contact:
Dean, College of Liberal Arts and Sciences
http://clas.asu.edu/undergraduate_studies
CLASUndergrad@asu.edu
Fulton 110
480/965-6506

International Letters and Cultures (BA) LASLCBA
College of Liberal Arts and Sciences

Program Description: The B.A. in international letters and cultures is a degree grounded in the study of at least one foreign language. It is a more transcultural and transdisciplinary degree than a traditional languages and literature degree and is designed to encourage students to explore and even challenge the traditional boundaries of cultures, texts and disciplines. Students choose a program of study that requires study and research in a minimum of two cultures or disciplines (or both). Students must meet with an advisor in the School of International Letters and Cultures to discuss this degree option.

Language Requirement: Y | Program Fee: N

Career Opportunities: This degree program will provide essential skills that employers in government, education and various business sectors are looking for, including proficiency in another language or languages, knowledge of other cultures, strong written and oral communication skills and valuable critical thinking and analytical skills.

Contact:
School of International Letters and Cultures
http://silc.asu.edu/undergraduate/majors-minors-certs
silcadvising@asu.edu
LL 440
480/965-6281
International Letters & Cultures (Classics) (BA) LASLCCBA

College of Liberal Arts and Sciences

Program Description: The B.A. in International Letters and Cultures with a concentration in classics will allow students to pursue a traditional degree in classics in a non-traditional way. Students will be expected to acquire the traditional skills in the core ancient languages and history (with an emphasis in either ancient Greek or Latin language), but they will also be asked to seek out courses in several departments across the university and tailor their degree to whatever aspect of classical scholarship appeals to them. This classics degree will therefore encourage academic enterprise and intellectual and cultural diversity among individual students.

Language Requirement: Y | Program Fee: N

Career Opportunities: The reasoning, research, language, and analysis skills developed in study of the Classics are well suited for many careers, particularly in Law, Business, or Education.

Contact:
School of International Letters and Cultures
silcadvising@asu.edu
LL 440
4809656281

Italian (BA) LAITABA

College of Liberal Arts and Sciences

Program Description: Students in the B.A. in Italian program study the language, literature and culture of Italy. They gain a respectable measure of competence in reading, writing and oral/aural skills in the Italian language. They are required to take a number of related courses on topics such as:

- Art.
- Government.
- Italian history.
- Religion.

A summer program in Florence, Italy, is available for students who wish to study the language and culture while living in the country. There are also study abroad programs in various cities in Italy during the academic year.

Language Requirement: Y | Program Fee: N

Career Opportunities: There are numerous career opportunities for Italian graduates in art museums, firms that deal with international trade, including U.S. companies that have branches in Italy, airlines and other fields. Some graduates pursue doctoral studies, eventually teaching the language in universities or colleges.
Justice Studies (BS) LAJUSBS
College of Liberal Arts and Sciences

Program Description: The School of Social Transformation contains an innovative social science program that places social justice at the center of its scholarship and teaching. The B.S. in justice studies is designed for students interested in studying the multiple meanings and manifestations of justice and social change, both locally and globally. Students receive interdisciplinary training in research methods and theory, and take courses that provide them with a comprehensive understanding of substantive issues within five primary research areas. These five core substantive areas are:

3. Law, Policy and Social Change.
5. Social Identities and Communities.

The goal is to enable students, faculty, and graduates to use their skills to find solutions to complex social problems.

Language Requirement: N | Program Fee: N

Career Opportunities: Many graduates go on to law school, graduate school or other professional degree programs. Students emerge from this program with the knowledge and skills designed to bring social justice concerns to their professional careers. Our graduates work in a variety of fields including law, nongovernmental organizations, human welfare agencies and other public service organizations.

Contact:
School of Social Transformation
http://sjsi.clas.asu.edu
justiceinfo@asu.edu
WILSN 228
480/965-7682

Kinesiology (BS) LAKINBS
College of Liberal Arts and Sciences

Program Description: Kinesiology is a discipline emphasizing the study of movement as it relates to physical activity, health and disease prevention, exercise, and sport.
Using both human and animal models and reflecting research ranging from basic to applied, it draws from an interdisciplinary body of knowledge grounded in the biological, psychological, physical and social sciences.

Undergraduate students in the program gain disciplinary knowledge of the aspects of human movement and physical activity, including:

- Anatomical.
- Biomechanical.
- Developmental.
- Physiological.
- Psychological.
- Sociological.

The department’s graduate programs, at both the master’s and doctoral levels, are highly regarded nationally and internationally and have a strong interdisciplinary emphasis.

Language Requirement: N | Program Fee: N

Career Opportunities: Kinesiology graduates have a wide range of career options in health and exercise performance. Some typical job paths include:

- Cardiac rehabilitation.
- Dentistry.
- Exercise equipment manufacturing.
- Medicine.
- Pharmaceutical sales.
- Pharmacy.
- Physical/occupational therapy.

Contact:
Department of Kinesiology
http://kinesiology.clas.asu.edu/
kinesundgrad@asu.edu
PEBW 218
480/965-3875

Mathematics (BA) LAMATBA
College of Liberal Arts and Sciences

Program Description: Mathematics is a crucial component in many disciplines such as physics, engineering applications, business and economics, and the life sciences and social sciences where the need for quantification in the analysis of phenomena is strong. The B.A. in mathematics provides a general background in mathematics, at a level sufficient to improve critical thinking, rigor and problem solving skills required in certain "social" fields. The B.S. requires six more credit hours (SBS 304
Social Statistics and a political science elective) within the major than the B.A. The B.A. program has a foreign language requirement. A secondary education B.A. with a specialization in mathematics is also available.

Language Requirement: Y | Program Fee: N

Career Opportunities: Employment opportunities for math majors can be found in virtually all sectors of industry:

- Academia (high-school or college teacher, university professor).
- Applied math (scientific computing).
- Business (actuary for bank or insurance company, operations research).
- Engineering, biotech, computer, government (consultant, federal and state organizations).
- Graduate school (mathematics or other fields).
- Medicine.

Graduates with a B.A. in mathematics may pursue a master's degree in a more applied field (social sciences) or an M.B.A. and typically move on to “social” careers (social scientist, politics, education). Graduates also have the option of becoming certified and teaching mathematics in public middle schools and high schools. Many careers require a command of quantitative methods and persons qualified in mathematics hold a favorable edge in competition for job opportunities.

Contact:
School of Mathematical and Statistical Sciences
http://math.asu.edu/
math@asu.edu
PSA 211
4809657195

Mathematics (BS) LAMATBS
College of Liberal Arts and Sciences

Program Description: Mathematics is a crucial component in many disciplines such as physics, engineering applications, business and economics, and the life sciences and social sciences where the need for quantification in the analysis of phenomena is strong. The B.S. includes more analytical courses, as well as additional advanced courses compared to the B.A. It is the most popular math degree at ASU. Many B.S. majors are dual majors in a more applied field, such as physics and engineering.

Language Requirement: N | Program Fee: N

Career Opportunities: Employment opportunities for math majors can be found in virtually all sectors of industry:

- Academia (high-school or college teacher, university professor).
- Applied math (scientific computing).
Many careers require a command of quantitative methods and persons qualified in mathematics hold a favorable edge in competition for job opportunities. Profiles and descriptions of jobs and career paths of actual mathematicians in a wide array of fields are published by the American Mathematical Society.

Students exploring becoming a middle or high school teacher can find more information about the concurrent degree program at http://www.asu.edu/programs/concurrentdegrees/BAE_BS_Math.html.

Contact:
School of Mathematical and Statistical Sciences
http://math.asu.edu/
math@asu.edu
PSA 211
4809657195

Mathematics (Statistics) (BS) LAMATTBS
College of Liberal Arts and Sciences

Program Description: Mathematics is a crucial component in many disciplines such as physics, engineering applications, business and economics, and in the life sciences and social sciences where the need for quantification in the analysis of phenomena is strong. The B.S. in mathematics with a concentration in statistics focuses on course work related to the statistical analysis of data and the evaluation of probabilistic models based on these data. Such models are heavily used in the banking and insurance industries, but also increasingly in more engineering fields where the effects of noise sometimes play a critical role in the behavior of the model. Many B.S. students in the statistics concentration are dual business or economics majors.

Language Requirement: N | Program Fee: N

Career Opportunities: Employment opportunities for math majors can be found in virtually all sectors of industry:

- Academia (high-school or college teacher, university professor).
- Applied math (scientific computing).
- Business (actuary for bank or insurance company, operations research).
- Engineering, biotech, computer, government (consultant, federal and state organizations).
- Graduate school (mathematics or other fields).
• Medicine.

A course of study in statistics is especially useful in technical positions in finance, insurance, business, as well as in fields where data analysis plays an important role, such as genomics. Graduates also have the option of becoming certified and teaching mathematics in public middle schools and high schools. Many careers require a command of quantitative methods and persons qualified in mathematics hold a favorable edge in competition for job opportunities.

Contact:
School of Mathematical and Statistical Sciences
http://math.asu.edu/
math@asu.edu
PSA 211
4809657195

Microbiology (BS) LAMICBS
College of Liberal Arts and Sciences

Program Description: Students in the B.S. in microbiology program engage in the study of microorganisms (bacteria, viruses, fungi) and their activities, including their impact on humans, animals and the environment. Several basic and applied subdisciplines are included:

• Biodegradation.
• Food and pharmaceutical microbiology, including quality control.
• Immunology, which involves the study of immune defense mechanisms.
• Industrial microbiology and biotechnology.
• Medical and clinical microbiology, which concerns microbes that cause infectious diseases.
• Microbial fermentation, which involves growing microorganisms to make chemicals, antibiotics and other economically important products.
• Microbial genetics.
• Microbial physiology and biochemistry.
• Molecular biology.
• Mycology, which is the study of fungi.
• Recombinant DNA technology.
• Soil and aquatic microbiology.
• Virology.

Language Requirement: N | Program Fee: N

Career Opportunities: Microbiology (including biotechnology and molecular biology) is a rapidly developing science with career opportunities in industrial, governmental, hospital-clinic and academic environments. Graduates work in:

• Clinical applications.
• Education.
• Production and testing of microbial products and quality control.
• Public health and environmental microbiology.
• Research and development.

Contact:
School of Life Sciences
http://sols.asu.edu/
sols.advising@asu.edu
LSC 206
4807276277

Molecular Biosciences/Biotechnology (BS) LAMBBBS
College of Liberal Arts and Sciences

Program Description: Students in the B.S. in molecular biosciences and biotechnology program focus on learning the fundamentals of:

• Biochemistry.
• Cell biology.
• Molecular genetics.
• Organismal structure and function.
• Physiology.

Students then apply these principles in research settings to discover more about the causes of disease and how organisms develop and respond to environmental changes. Special emphasis is devoted to understanding how these principles are applied by the biotechnology industry to improve the quality of life through the production of better and healthier foods with lower environmental impact and the treatment of illness and disease.

Language Requirement: N | Program Fee: N

Career Opportunities: Graduates of the molecular biosciences and biotechnology program are prepared for admission into strong graduate and professional schools or may assume positions in education, government and technical fields, and are especially well prepared for careers in biotechnology. This program will provide a foundation for modern medical research and practice, plant research, pharmacology and gene discovery. Explosive growth in the biotechnology industry recently has resulted in a substantial increase in the number of employment opportunities for majors in molecular biosciences and biotechnology.

Contact:
School of Life Sciences
http://sols.asu.edu/
sols@asu.edu
Program Description: A B.A. in philosophy offers a unique course of study. As the American Philosophical Association says, “Philosophy is quite unlike any other field...it is a reasoned pursuit of fundamental truths, a quest for understanding, a study of principles of conduct. It seeks to establish standards of evidence, to provide rational methods of resolving conflicts and to create techniques for evaluating ideas and arguments. Philosophy develops the capacity to see the world from the perspective of other individuals and other cultures; it enhances one's ability to perceive the relationships among the various fields of study; and it deepens one's sense of the meaning and varieties of human experience.”

Language Requirement: Y | Program Fee: N

Career Opportunities: The analytical, rhetorical and writing skills developed through the study of philosophy provide ideal preparation for a wide range of careers, including:

- Business.
- Education.
- Journalism.
- Law.

Contact:
School of Historical and Critical Inquiry
http://www.asu.edu/clas/philosophy/
scott.scheall@asu.edu
COOR 3309
480/965-3394

Program Description: Physics is concerned with the nature, structure and interactions of matter and radiation. Students in the B.S. in physics program may pursue one of two options:

1. The traditional “professional” physics program, which is selected by a majority of our majors, particularly those who plan to pursue graduate work in physics.
2. The interdisciplinary physics program, which provides a strong physics core but also includes courses in a secondary area of concentration, such as materials science, applied mathematics, physical chemistry, geophysics or astronomy
Students also have the option of building a program that combines physics with business, journalism, law, premedical or other areas.

Language Requirement: N | Program Fee: N

Career Opportunities: The broad range of applicability of the principles of physics gives the physicist great flexibility in a choice of career or further education. About half of the graduates with a bachelor’s degree in physics go on to graduate school in physics, engineering, astronomy, medicine and other fields. The other half go directly into employment in areas such as engineering, materials science, education and business.

Students exploring becoming a middle or high school teacher can find more information about the concurrent degree program at http://www.asu.edu/programs/concurrentdegrees/BAE_BS_Physics.html.

Contact:
Department of Physics
http://physics.asu.edu
physics.info@asu.edu
PSF 470
480/965-3561

Political Science (BA) LAPOSBA
College of Liberal Arts and Sciences

Program Description: The B.A. in political science offers students the necessary skills and knowledge to participate effectively as citizens in a democratic political system and to flourish in the rapidly developing globalization of the world’s political institutions, cultures and economies. The major aims to provide students with the tools and skills necessary to make connections linking theory with real world problems and issues.

Language Requirement: Y | Program Fee: N

Career Opportunities: Many of our graduates have gone on to some of the country’s most prestigious graduate programs and schools. Graduating seniors have also found a range of employment opportunities in:

- Communication.
- Education.
- Journalism.
- Law.
- Politics.
- Public service.
In fact, some of our graduating seniors have been hired to work at the Federal Reserve, the Arizona governor's office, local and national newspapers, multinational corporations, state and local government and the judiciary.

**Contact:**  
School of Government, Politics and Global Studies  
http://www.asu.edu/clas/polisci  
COOR 6797  
4809656551

**Political Science (BS) LAPOSBS**  
College of Liberal Arts and Sciences

*Program Description:* The B.S. in political science offers students the necessary skills and knowledge to participate effectively as citizens in a democratic political system and to flourish in the rapidly developing globalization of the world's political institutions, cultures and economies. The major aims to provide students with the tools and skills necessary to make connections linking theory with real world problems and issues.

*Language Requirement:* N | *Program Fee:* N

*Career Opportunities:* Many of our graduates have gone on to some of the country's most prestigious graduate programs and schools. Graduating seniors have also found a range of employment opportunities in the fields of:

- Communication.
- Education.
- Journalism.
- Law.
- Politics.
- Public service.

In fact, some of our graduating seniors have been hired to work at the Federal Reserve, the Arizona governor's office, local and national newspapers, multinational corporations, state and local government and the judiciary.

**Contact:**  
School of Government, Politics and Global Studies  
http://www.asu.edu/clas/polisci  
COOR 6797  
4809656551

**Pre-Health/Pre-Med Professions (BNODEG) LAMEDPRE**  
College of Liberal Arts and Sciences

*Program Description:* Students who are interested in pursuing a medical, dental or other health career can major in any area they wish, as long as they fulfill the
particular professional school’s prerequisite requirements. Successful applicants have majored in such diverse fields as:

- Art
- Biology
- Chemistry
- Economics
- Engineering
- Music
- Psychology

The College of Liberal Arts and Sciences health career services office provides ongoing academic career advising for pre-health students who wish to pursue a career in:

- Chemistry
- Medicine
- Optometry
- Pharmacy
- Physical therapy
- Podiatry

Language Requirement: N | Program Fee: Y

Admission Requirements: Students must meet the admission requirements of the major to which they apply.

Career Opportunities: The health career services office is devoted to helping students make important decisions about their futures and assisting them with the technical aspects of the application process for professional health programs. The very competitive nature of admission to these programs makes it essential for students to work closely with the office from the beginning of their studies at ASU.

Contact:
Dean, College of Liberal Arts and Sciences
http://prehealth.asu.edu/
prehealth@asu.edu
FULTN 110
480/965-2365

Pre-Law (BNODEG) LALAWPRE
College of Liberal Arts and Sciences

Program Description: This program is designed for students interested in pursuing a legal career. Law school admission policies do not favor one major over another, provided the pre-law student's chosen major requires substantive course work. Instead of recommending a single program, the Association of American Law Schools suggests that an undergraduate education develop certain skills, qualities,
knowledge and insights essential to the law student and ultimately to the profession. At the point that the student is ready to take the LSAT and begin the application process, he or she is encouraged to meet with a pre-law professional either in the student's major or in the Office of Student and Academic Programs.

*Language Requirement: N | Program Fee: N*

*Career Opportunities:* Pre-law advisors can help students make important decisions about their futures and assist them with the technical aspects of the application process for law school programs.

*Contact:*
Dean, College of Liberal Arts and Sciences
http://prelaw.asu.edu/
clasundergrad@asu.edu
FULTN 110
4809656506

**Psychology (BA) LAPGSBA**
College of Liberal Arts and Sciences

*Program Description:* Psychologists study behavior, emotions and mental processes. The B.A. in psychology is designed to prepare students to work in a variety of settings that provide opportunities to apply concepts and principles of psychology. Students in the B.A. program acquire knowledge and skills related to such fascinating topics as:

- How do children develop?
- How do people remember information over long periods of time?
- How do the mind and body react to stress?
- How can people use social influence to increase compliance?
- Which types of treatments are most effective for individuals who are depressed?

In addition, B.A. majors learn about statistics and research methods and use elective courses to develop skill sets in diverse settings, including the department's child development facilities.

*Language Requirement: Y | Program Fee: N*

*Career Opportunities:* This degree provides students with a broad range of highly marketable skills, including analytical skills, writing and public speaking skills and teamwork and leadership skills, as well as valuable computer skills leading to many career opportunities. To practice psychology, advanced degrees are required in:

- Clinical.
- Developmental.
- Experimental.
This degree also leads to professional postgraduate programs in the fields of law and medicine.

Contact:
Department of Psychology
http://psychology.clas.asu.edu/
psych.advisor@asu.edu
PSY 255
4809657258

Psychology (BS) LAPGSBS
College of Liberal Arts and Sciences

Program Description: Psychology is the study of behavior, emotions and the mental processes of individuals and groups, approached through a scientific methodology. The B.S in psychology is designed to prepare students to pursue graduate work in psychology and related fields. Students in the B.S. program are exposed to theories and research addressing such fascinating topics as:

- How do children develop?
- How do people remember information over long periods of time?
- How do the mind and body react to stress?
- How can people use social influence to increase compliance?
- Which types of treatments are most effective for individuals who are depressed?

In addition, B.S. majors take advanced course work in statistics, and receive hands-on research experience by working with faculty members in the laboratory.

Language Requirement: N | Program Fee: N

Career Opportunities: This degree prepares students to pursue graduate degrees in psychology and cognate fields such as counseling, social work and family therapy. To practice psychology, advanced degrees are required in:

- Clinical.
- Developmental.
- Experimental.
- Cognitive systems.
- Behavior.
- Behavioral neuroscience.
- Social psychology.
Opportunities exist for professionals who complete advanced degrees in academic and clinical settings.

Contact:
Department of Psychology
http://psychology.clas.asu.edu/
psych.advisor@asu.edu
PSY 255
480/965-7258

Religious Studies (BA) LARELBA
College of Liberal Arts and Sciences

Program Description: Students in the B.A. in religious studies program engage in the comparative, cross-cultural study of religions and cultures. Employing various disciplinary approaches, including the historical, sociological, anthropological and theological, the academic study of religion seeks to interpret, analyze and evaluate the nature and role of religion in the lives of individuals and societies. The Department of Religious Studies enjoys an excellent national reputation and is distinctive at ASU because the relatively small number of majors allows undergraduates to receive individual faculty attention, which is often not possible in larger departments.

Language Requirement: Y | Program Fee: N

Career Opportunities: A degree in religious studies provides a strong liberal arts background and excellent training in critical thinking and writing. Such a liberal education, which includes the development of basic intellectual skills, has become increasingly attractive to employers seeking to hire recent college graduates. Students with a degree in religious studies are also well positioned to pursue graduate studies in the liberal arts and professional programs, including business, law, journalism and social work.

Contact:
School of Historical and Critical Inquiry
http://www.asu.edu/clas/religious_studies/
religious.studies@asu.edu
ECA 377
480/965-7145

Russian (BA) LARUSBA
College of Liberal Arts and Sciences

Program Description: Students in the B.A. in Russian program study the language, literature and culture of Russia. They gain a respectable measure of reading, writing and oral/aural skills in the Russian language, engaging in:

- Art.
The Russian language program also cooperates with other related units within the university (e.g., the Melikian Center for Russian, Eurasian and East European Studies) to offer a Russian and East European Studies Certificate (REESC).

Students may also take summer intensive courses in Macedonian, Albanian, Armenian, Serbo-Croatian, Tatar and Polish through the Critical Language Institute at ASU.

A study abroad program is offered in Macedonia, and advanced Russian language students may study in Moscow and St. Petersburg during the summer.

**Language Requirement:** Y | **Program Fee:** N

**Career Opportunities:** Graduates have a variety of career opportunities. At present these graduates have an enviable record of postgraduate placement in the job market. Many work for firms that deal with international trade or for U.S. companies that have branches in Russia, and many find positions within government service or in teaching. A few pursue graduate work in Russian studies, eventually teaching the language and/or culture in universities or colleges.

**Contact:**
School of International Letters and Cultures
http://silc.asu.edu/undergraduate/majors-minors-certs
silcadvising@asu.edu
LL 440
480/965-6281

**Sociology (BS) LASOCBS**
College of Liberal Arts and Sciences

**Program Description:** Sociology is the study of social life, social change and the social causes and consequences of human behavior. The B.S. in sociology trains students in written communication, computer skills, statistics and research methods, and offers a wide variety of substantive courses on contemporary social issues ranging from crime to population trends, and courses on social institutions, such as the family, education and religion.

**Language Requirement:** N | **Program Fee:** N
**Career Opportunities:** An undergraduate degree in sociology not only provides excellent preparation for future graduate work in sociological research, social work, law, medicine, and counseling, it also prepares undergraduates for direct entry into positions in business, social service and government.

**Contact:**  
School of Social/Family Dynamics  
T  
http://ssfd.cas.asu.edu/  
ssfd@asu.edu  
SS 144  
480/965-6978

**Spanish (BA) LASPABA**  
College of Liberal Arts and Sciences

**Program Description:** Students in the B.A. in Spanish program have the opportunity to gain oral, reading, speaking and written proficiency in the language. The program offers two study tracks from which to choose: literature and culture or Spanish linguistics. The literature and culture track provides an in-depth understanding of the themes of Spanish and Latin American culture and literature and the contemporary issues throughout the Spanish-speaking world.

The Spanish linguistics track provides an in-depth understanding of the Spanish language (syntax, morphology) and may include courses in translation (English/Spanish). Students are encouraged to contact a School advisor to discuss the two available tracks. ASU offers opportunities throughout the year to study in Spain, Mexico and other Spanish-speaking countries through study abroad and exchange programs. Students majoring in Spanish may also work toward a professional certificate in Spanish/English translation.

**Language Requirement:** Y  |  **Program Fee:** N

**Career Opportunities:** Graduates may choose from several career options:

- College or university teaching and research in linguistics or literature through advanced degrees.
- Become certified to teach high school.
- Translation or interpretation studies.

Graduates may combine Spanish with other fields with an international emphasis, such as:

- Business.
- Engineering.
- Journalism.
- Political science.
Speech & Hearing Science (BS) LASHSBS
College of Liberal Arts and Sciences

Program Description: Students in the B.S. in speech and hearing science program study the normal aspects of the communication process. Emphasis is placed on:

- Speech, language and hearing science.
- Anatomy and physiology of the hearing mechanism.
- The human communication system, including normal development of speech and language.

Graduates attain broad-based knowledge in the basic aspects of speech, language and hearing sciences, which prepares them for graduate studies in audiology or speech language pathology.

Language Requirement: N | Program Fee: N

Career Opportunities: Employment opportunities for those with a B.S. may include positions as research assistants/associates in behavioral disciplines, management trainees or speech-language pathology assistants. Primarily, a degree in this field prepares the student for entrance into a graduate program in speech-language pathology (SLP) or audiology. In both fields, a graduate degree is required for employment.

The undergraduate degree in speech and hearing science is also excellent preparation for those who wish to enter other professional graduate programs such as:

- Education.
- Law.
- Medicine.
- Rehabilitation.
- Special education.
- Teaching for the deaf.

Graduates in SLP and audiology can work in a variety of settings from schools to hospitals and clinics.

Contact:
Department of Speech and Hearing Science
http://shs.asu.edu/
Transborder Chicana/o & Latina/o Studies (Media, Literature and Arts) (BA)
LATCLMBA
College of Liberal Arts and Sciences

Program Description: The department enjoys great faculty strengths in this area. Its media focus includes cinematography, film production, video and electronic communication, performance art, cultural and literary studies and long-distance learning and development. This area will prepare students with critical, analytical and some technical skills, as well as the theoretical underpinnings of the use of media for human communication within the context of transnational and transborder processes.

Simultaneously, the literary and creative study of the major works and canons in Chicana/o, Latina/o, Mexican and Latin American corpora provide the academic templates for understanding the emotive and psychological basis of identity and cultural change of border and transnational populations. Literary and artistic works are templates of creativity from whence broader discussions of theory, history and multiple identities emerge enshrouded within broad criticisms situated in transcultural settings.

Language Requirement: Y | Program Fee: N

Career Opportunities: The bachelor’s program in transborder Chicana/o and Latina/o studies prepares ASU graduates for career opportunities in a variety of national and international fields, including:

- Business fields.
- Communication.
- Education.
- Health services.
- Justice studies.
- Public policy and administration.

Transborder Chicana/o and Latina/o majors will also be well prepared to enter graduate study in such high need career fields as:

- Business.
- Education.
- Law.
- Medicine.
- Public health.
- Social work.
Contact:
Dept of Transborder Chicana/o & Latina/o Studies
http://transborder.clas.asu.edu
tcls.info@asu.edu
COOR 6633
480/965-5091

Transborder Chicana/o & Latina/o Studies (Transborder Community Development and Health) (BA) LATCLTBA
College of Liberal Arts and Sciences

Program Description: The B.A. in transborder Chicana/o and Latina/o studies is an interdisciplinary degree program whose central mission is to provide a value added environment that increases the direct participation of Chicana/o and Latina/o populations in the formation of human and capital development. By developing a program of social science research and teaching with an emphasis on community development and health, students will concentrate on patterns of physical, mental and social health disparities closely associated with poverty, limited access to insurance, reliance on emergency measures and facilities and differential healthcare, as well as learn how to develop the appropriate mitigating applied programs. Other major orientations with an applied focus will include:

- Environmental home health.
- Vulnerable population’s well being through the life cycle.
- Work and labor accidents.
- Ecological and environmental degradation.
- Epidemiological trends and issues of Mexican origin and Latina/o populations.

The department enjoys the presence of one medical anthropologist and we will in the very near future search for one more person in a medically-oriented social science or policy area. Deeply embedded within local and transborder communities, methodological instruction and skills will be especially stressed.

Majors are expected to fulfill the college’s language requirement in Spanish. In addition, all majors must demonstrate proficiency in Spanish by passing an upper-division transborder Chicana/o and Latina/o course taught in Spanish.

Language Requirement: Y | Program Fee: N

Career Opportunities: The bachelor’s program in transborder Chicana/o and Latina/o studies prepares ASU graduates for career opportunities in a variety of national and international fields, including:

- Business fields.
- Communication.
- Education.
• Health services.
• Justice studies.
• Public policy and administration.

Transborder Chicana/o and Latina/o majors will also be well prepared to enter graduate study in such high need career fields as:

• Business.
• Education.
• Law.
• Medicine.
• Public health.
• Social work.

Contact:
Dept of Transborder Chicana/o & Latina/o Studies
http://transborder.clas.asu.edu
tcls.info@asu.edu
COOR 6633
480/965-5091

Transborder Chicana/o & Latina/o Studies (US and Mexican Regional Immigration Policy & Economy) (BA) LATCLUBA
College of Liberal Arts and Sciences

Program Description: The B.A. in transborder Chicana/o and Latina/o studies is an interdisciplinary degree program whose central mission is to provide a value added environment that increases the direct participation of Chicana/o and Latina/o populations in the formation of human and capital development. This concentration has a strong applied orientation and focuses on the regional and transnational policies and practices that have led to enormous demographic changes in:

1. The borderlands of the immediate U.S.-Mexico border region, where close to 12 million people live.
2. The entire country, with a total of 20.6 million people of Mexican origin, born in or migrated to the United States.

Our focus concerns the manner in which economic and political decisions between Mexico and the United States, as well as other transnational policies concerning other countries, strongly influence the present state of human migration, ecological conditions, economic policy towards trade, demographic transitions and the nexus of relations that are established across borders at local, regional and transborder levels.

We will focus primarily on the U.S.-Mexico region but transnational economics and political policies have, and will continue to, affect the manner in which Spanish-speaking Caribbean, and Central and South American regions respond. We will pay
special attention to those policies concerning trade, agriculture, manufactured and assembled goods, and such major policies as NAFTA and CAFTA.

Majors are expected to fulfill the college’s language requirement in Spanish. In addition, all majors must demonstrate proficiency in Spanish by passing an upper-division transborder Chicana/o and Latina/o studies course taught in Spanish.

Language Requirement: Y | Program Fee: N

Career Opportunities: The bachelor’s program in transborder Chicana/o and Latina/o studies prepares ASU graduates for career opportunities in a variety of national and international fields, including:

- Business fields.
- Communication.
- Education.
- Health services.
- Justice studies.
- Public policy and administration.

Transborder Chicana/o and Latina/o majors will also be well prepared to enter graduate study in such high need career fields as:

- Business.
- Education.
- Law.
- Medicine.
- Public health.
- Social work.

Contact:
Dept of Transborder Chicana/o & Latina/o Studies
http://transborder.clas.asu.edu
tcls.info@asu.edu
COOR 6633
480/965-5091

Urban Planning (BSP) ARPUPBSP
College of Liberal Arts and Sciences

Program Description: Urban planners guide communities in making wise decisions about their use of land and resources. The B.S.P. in urban planning program offers students expertise in both the analysis and the synthesis of the physical, social, political and economic issues that shape urban and regional development. Students take courses that include:

- Comprehensive planning, socioeconomic and environmental analysis.
• Computer and analytical methods.
• Planning law.
• Public-policy formulation and administration.
• Site planning.
• Urban design.

Planning includes:

• Computer and research methods.
• Environmental impact assessment.
• Geographic information systems.
• Housing.
• Landscape architecture and urban design.
• Planning and zoning law.
• Public policy formulation and administration.
• Transportation.
• Urban and development economics.
• Utilities.

Language Requirement: N | Program Fee: N

Admission Requirements: Students are admitted to the major, but must pass a degree milestone to continue in the major at the end of the first year.

Career Opportunities: Graduates in planning pursue career opportunities with private planning firms and governmental planning agencies. Some planners elect to pursue graduate degrees to develop specialty skills and to enhance their opportunities for career advancement.

Contact:
School of Geographical Sciences and Urban Planning
http://design.asu.edu/planning
design.advising@asu.edu
CDN 162
480/965-7167

Women & Gender Studies (BA) LAWSTBA
College of Liberal Arts and Sciences

Program Description: The B.A. in women and gender studies offers a comprehensive program of study that empowers students to make a difference in the world. Through the study of history, culture, literature, politics, film, science and economics, students learn to challenge conventional wisdom about gender and learn new ways of viewing the world. Internship and leadership opportunities in business, government and nonprofit organizations, for example, allow students to pursue career goals.
Career Opportunities: The interdisciplinary women and gender studies program prepares students for many different career opportunities upon graduation. Graduates have created businesses, worked in nonprofit organizations and agencies serving women and girls, become lawyers and teachers and worked in policy and government. They have become consultants and counselors and secured careers in public relations. Our graduates are also well prepared for graduate and law school and have been admitted to prestigious programs.

Contact:
School of Social Transformation
http://wgs.asu.edu
wgs.asutempe@asu.edu
WHALL 205
480/965-2358

New College of Interdisciplinary Studies

American Studies (BA) ASAMSBA
New College of Interdisciplinary Arts and Sciences

Program Description: The B.A. in American studies within the New College of Interdisciplinary Arts and Sciences enables students to look at the experiences of North Americans and their environment from a variety of historical and contemporary perspectives. Courses are grouped into four emphases:

- American systems, dealing with political, economic, religious and legal institutions.
- American cultures, concentrating on systems of belief and their symbolic expression in literature, art, philosophy and regional and popular cultures.
- American lives, exploring the ways in which categories of race, ethnicity, class and gender intersect with individual and community experience.
- Writing, stressing critical writing skills and training students to pursue careers in which writing is a major activity. Students learn to think and write critically, to conduct research, and to appreciate the changing and diverse nature of American life. Students determine appropriate programs of study in consultation with department academic advisors.

Language Requirement: N | Program Fee: N

Career Opportunities: Graduates are well equipped to embark on a wide variety of careers in government, education, business, museum and foundation work, journalism and other forms of professional writing, and in other areas where these capabilities are highly valued and sought. The program also serves as excellent preparation for law school and for graduate programs in fields such as American
studies, English, journalism, history and art history. Ideally suited to careers in which research, analysis and planning play a central role.

Contact:
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/programs/amer_studies/
harcs.dept@asu.edu
FAB N290
602/543-4444

Applied Computing (BS) ASACOBS
New College of Interdisciplinary Arts and Sciences

Program Description: The B.S. in applied computing within the New College of Interdisciplinary Arts and Sciences prepares students to collect and analyze data; allow for efficient, effective and ethical user interaction with computer systems; apply skills to lead the development of technology systems; engage in creative efforts; and develop and assure quality and value of information.

The program has both a technical component, concerned with the design and use of appropriate systems and technologies, and a social sciences component, concerned with understanding how people seek, obtain, evaluate, use and categorize information. Students receive a solid foundation in mathematics, technology and social sciences. Students can also choose one of three concentrations within the major: database systems, digital media and graphic design and networking and distributed processing.

Language Requirement: N | Program Fee: N

Career Opportunities: Students are prepared to integrate technology with human activities and to respond to global changes, solve problems and create and manage the technological production of information and creative products. Core information technology industries are among the fastest growing sectors in the U.S. economy. Graduates will find employment opportunities with corporations and businesses, nonprofit and government agencies, digital arts media industries and in the academic world.

Contact:
Department of Mathematical Sciences & Applied Computing
http://newcollege.asu.edu/programs/app_comp/
MNS.Dept@asu.edu
CLC C217
602/543-6050

Applied Mathematics (BS) ASMATBS
New College of Interdisciplinary Arts and Sciences
Program Description: The B.S. in applied mathematics offers an interdisciplinary degree providing students with a broad and rigorous foundation in applied mathematics. The program emphasizes an education in quantitative problem solving and critical thinking through a survey of courses exposing students to a wide variety of mathematical theories, techniques and applications that are currently used by analysts and researchers in government, industry and nonprofit organizations. Students will also do a capstone project involving real-world problems under the supervision of an adviser and in close consultation with an external project sponsor.

Language Requirement: N | Program Fee: N

Career Opportunities: Students graduating with a B.S. in applied mathematics have a wide range of career options in industry, finance, government, nonprofit organizations and education, as well as advanced degrees in the mathematical sciences (mathematics, statistics, and computer science). Based on students’ career interests they may enroll in degree tracks to help guide the students’ choice of courses, such as:

- Operations research.
- Financial mathematics.
- Mathematical biology.
- Applied mathematical networks.
- General applied mathematics.

Contact:
Department of Mathematical Sciences & Appld Comptg
http://newcollege.asu.edu/

Applied Science (BAS) ASBASBAS
New College of Interdisciplinary Arts and Sciences

Program Description: The B.A.S. program within the New College of Interdisciplinary Arts and Sciences combines the technical concentration knowledge earned in the student's Associate of Applied Science degree with a broader education gained at the bachelor's level of education. Included in the program of study is an area of concentration (using an approved West campus minor or creating a concentration that is completely individualized) unique to their own interests and career pursuits. For example, the area of concentration can include, but is not limited to:

- Business.
- Communication.
- Criminal justice and prelaw.
- Education and teaching.
- Environmental issues and physical sciences.
- Languages and cultures.
- Social sciences and policy issues.
The applied science program is capped with an internship experience.

Language Requirement: N | Program Fee: N

Admission Requirements: Students applying to this program must have completed an Associate of Applied Science (A.A.S.) degree. Not available for freshmen.

Career Opportunities: Emphasizing professional study combined with a specific area of concentration (e.g., business, communication studies, English, gerontology, history, psychology or pre-law), students tailor their programs to meet individualized career goals. The capstone internship program prepares students to make the transition smoothly to post baccalaureate employment in business, cultural, educational, community and human service settings, as well as to graduate school. Students planning graduate or professional degrees in law, business, social sciences, helping professions, or in traditional disciplines benefit from the flexibility of this program for a broad range of future academic and career pursuits.

Contact:
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/programs/app_science/
harcs.dept@asu.edu
FAB N290
602/543-4444

Communication Studies (BA) ASCOMBA
New College of Interdisciplinary Arts and Sciences

Program Description: Communication studies is an extensive field involving the exploration of messages and their various meanings. Such exploration occurs in countless ways, including the study of messages between individuals in relationships, between employees in organizations, between media and their respective publics, between social institutions and their constituents and between members of different cultures. The B.A. prepares students to work in communication environments such as training, human resources management and media relations.

Language Requirement: N | Program Fee: N

Career Opportunities: Communication studies is a broadly based discipline that trains individuals to speak and write competently, to manage relationships well, to effectively problem solve, and to understand the role and function of communication in public forums, organizational settings, relational exchanges and intercultural situations. Because these skills are crucial to many professions, communication studies graduates work in a variety of fields including:

- Customer service and customer relations.
- Education.
- Legal professions.
program description: Communication studies is an extensive field involving the exploration of messages and their various meanings. Such exploration occurs in countless ways, including the study of messages between individuals in relationships, between employees in organizations, between media and their respective publics, between social institutions and their constituents and between members of different cultures. The B.S. prepares students to work in communication-rich environments such as training, human resources management and media relations. It also readies graduates to perform various forms of data analysis, communication assessment and technical reporting.

Language Requirement: N | Program Fee: N

Career Opportunities: The program prepares students for advanced education; advancement toward careers in teaching, counseling, law and medicine; and various careers, including:

- Advertising.
- Customer relations.
- Fundraising.
- Health and human services.
- Human resources.
- International service.
- Lobbying.
- Mediation.
- Ministry.
- Public administration.
- Public advocacy.
- Public office.
- Public relations.
- Research.
• Speech writing.
• Training and development.

Contact:
Division of Social and Behavioral Sciences - W
http://newcollege.asu.edu/programs/comm_studies/
SBS.Dept@asu.edu
FAB N251
6025436058

English (BA) ASENGBA
New College of Interdisciplinary Arts and Sciences

Program Description: The primary mission of the program is undergraduate education. Graduates should be able to write clearly and effectively, to think critically and to construct well-supported rational arguments. They should gain an awareness of genre, should be able to take a critical approach to texts and should learn to shape their discourse to suit their intended audience.

The program, in its thematic cluster design, provides students with a balanced overview of major literature in the English language—major authors, regional and ethnic literatures and writing by women—and an awareness of the role of literary discourse in broader social and historical contexts.

The program stresses both the formal aesthetic qualities of texts and issues of class, gender, race and ethnicity relating to literary representation. It provides students a familiarity with standard literary critical terminology and an awareness of a variety of theoretical approaches to literary study. It relates works of literature to historical events, cultural patterns, philosophical and theological concepts and technological innovations.

Language Requirement: N | Program Fee: N

Career Opportunities: The program prepares students for graduate and professional training (including law, business, teaching and public policy). With breadth and emphasis on the communication of ideas, it serves as an excellent point of departure for careers in marketing, public relations, government, diplomacy and community work.

Contact:
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/programs/english/
harcs.dept@asu.edu
FAB N290
602/543-4444
Ethnicity, Race, First Nation Studies (BA) ASETHBA
New College of Interdisciplinary Arts and Sciences

Program Description: Ethnicity, race and First Nation studies is the first such B.A. program in Arizona. It provides an integrated, comparative and comprehensive approach to the study of diversity among ethnic and racial groups and First Nations. A highlight of the program is the internship, which fosters direct links between the university and community-based settings. Both theoretical and applied perspectives are embedded in a curriculum addressing how ethnicity, race and First Nations shape identities, literacies, public policies and communities in local and transnational U.S. contexts. Students identify a career area enabling them to integrate their knowledge with specific course work tied to their career and advanced educational goals.

Language Requirement: N | Program Fee: N

Career Opportunities: Rapid socioeconomic change, changing demographics, increased global competition and rapid cultural diversification have created an increasing need for workers and citizens knowledgeable about diverse ethnic and racial groups. Graduates of the undergraduate program in ethnicity, race and First Nation studies will be positioned to enter the workforce and function effectively and critically as informed citizens in a diverse and complex society.

Contact:
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/programs/erfns/
harscdept@asu.edu
FAB N290
602/543-4444

History (BA) ASHISBA
New College of Interdisciplinary Arts and Sciences

Program Description: The B.A. in history within the New College of Interdisciplinary Arts and Sciences trains students in the use of basic tools and methods of the historical discipline. Students are exposed to a broad span of modern history, a wide range of historiographical perspectives and approaches, and such fundamental categories of historical analysis as race, class, gender and ethnicity. Students develop habits of mind associated with history as a discipline. The program consists of several specific core courses and a range of electives and distributional requirements, providing students with a solid foundation in historical methods. Students tailor the major to their personal and professional interests in consultation with a faculty advisor.

Language Requirement: N | Program Fee: N

Career Opportunities: The history program serves as excellent preparation for study in graduate or professional degree programs and for careers in which critical
thinking, research and writing skills are highly valued. This program provides a strong foundation for understanding the forces of change that shape contemporary society, the marketplace, and the lives of individuals and groups, thereby equipping students to negotiate the complex cultural, community and business environments of the 21st century.

Contact:
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/programs/history/
harcs.dept@asu.edu
FAB N290
602/543-4444

**Integrative Studies (BA) ASIASBA**
New College of Interdisciplinary Arts and Sciences

*Program Description:* The B.A. in integrative studies within the New College of Interdisciplinary Arts and Sciences prepares students for broad employment alternatives or for pursuing graduate studies. As a variation on the classic liberal arts degree, students combine a solid foundation of lower-division courses, followed by upper-division liberal arts courses where students design an area of concentration (using an approved West campus minor or creating a concentration that is completely individualized) unique to their own interests and career pursuits. For example, the concentration can include, but is not limited to:

- Business.
- Communication.
- Criminal justice and prelaw.
- Education and teaching.
- Environmental issues and physical sciences.
- Languages and cultures.
- Social sciences and policy issues.
- Flexible and diverse, the program is capped with an internship experience.

*Language Requirement:* N | *Program Fee:* N

*Career Opportunities:* Emphasizing interdisciplinary study combined with a specific area of concentration (e.g., business, communication studies, English, gerontology, history, psychology or pre-law), students tailor their programs to meet individualized career goals. The capstone internship program prepares students to make the transition smoothly to post baccalaureate employment in business, cultural, educational, community, social sciences and human service settings, as well as to graduate school. Students planning graduate or professional degrees in law, business, helping professions, or in traditional disciplines benefit from the flexibility of this program for a broad range of future academic and career pursuits.
Contact:
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/programs/integrative_studies/index.shtml
harcs.dept@asu.edu
FAB N290
602/543-4444

Interdisciplinary Arts & Performance (BA) ASIAPBA
New College of Interdisciplinary Arts and Sciences

Program Description: The B.A. in interdisciplinary arts and performance (IAP) is an interdisciplinary study of the arts and digital media with an emphasis on 20th- and 21st-century arts, performance, technology and practice. The program encourages practical application of theory and content area knowledge with the integration of skills and performance. IAP courses highlight creativity, innovation, integration and presentation.

Language Requirement: N | Program Fee: N

Career Opportunities: This interdisciplinary arts training can be the basis for a variety of personal and professional pursuits. Students who major in the program receive practical, professional training and solid academic skills. They gain extensive preparation for careers as artists, performers and creative professionals. They also develop critical backgrounds useful for becoming future teachers and scholars. Graduates of the program are prepared for advanced study in the performing arts or arts-related professions in education, art and cultural journalism, government and community arts administration, media services and production.

Contact:
Division of Humanities, Arts, and Cultural Studies
harcs.dept@asu.edu
FAB N 290
602/543-4444

Life Sciences (BS) ASLSCBS
New College of Interdisciplinary Arts and Sciences

Program Description: The intricate connections between biology, chemistry and physics form the basis of the life sciences curriculum. The B.S. program emphasizes experiential learning: All required core courses have laboratories. By learning in an integrative environment that emphasizes the connectedness between disciplines, students gain a better understanding of larger scientific concepts and can view these concepts from multiple perspectives. Undergraduates have the opportunity to conduct independent research under the mentorship of faculty members or in internships outside of the department.
Career Opportunities: The B.S. in life sciences prepares students for a wide range of careers by offering course and laboratory work and quantitative research opportunities that develop fundamental problem-solving, critical thinking, writing and communication skills. Graduates may enter careers in laboratory or field research, business, scientific journalism, publishing, teaching and medicine. Other opportunities include working as a laboratory technician or research associate in university and government research laboratories and hospital and diagnostic laboratories or working in pharmaceutical, biotechnology, agricultural and food processing companies. Undergraduate laboratory experience both on and off campus enhances employability in these areas. Students engaged in field studies are prepared for entry-level positions in private companies and state and federal agencies (e.g., wildlife biologist, environmental consultant, conservation officer).

Contact:
Division of Mathematical and Natural Sciences
http://newcollege.asu.edu/programs/lifesci/
MNS.Dept@asu.edu
CLCC 217
602/543-6050

Political Science (BA) ASPOLBA
New College of Interdisciplinary Arts and Sciences

Program Description: Students gain understanding of theory, practice and policy underlying political processes locally, nationally and internationally in the B.A. in political science program. The degree trains students in research skills necessary for analysis of complex sociopolitical issues locally and globally. Course work is learner-centered in political theory, American political institutions, international relations and world affairs. This is a flexible program focusing on international, urban, and race/ethnic sociopolitical areas, internships, and service-learning/action research opportunities with emphasis on intellectual and concrete policy issues in the greater Phoenix metropolitan area, Arizona, the Arizona-Mexico borderlands, the Americas and the world.

Language Requirement: N | Program Fee: N

Career Opportunities: The political science curriculum provides a solid background for employment in a relevant profession and prepares students for graduate work in political science, social science disciplines, urban planning or in professional schools. The program serves as a good precursor to staff, manager or policy analyst positions in local, state and federal government. This degree is recognized as qualification for many careers in business (for-profit and nonprofit) and industry. Work may include binational, cross-border positions linking U.S. and Mexican businesses, Arizona-Sonora local government or local community groups on both sides of the border. Many students use the degree as a gateway to law school or
Political Science (BS) ASPOLBS
New College of Interdisciplinary Arts and Sciences

Program Description: Students gain understanding of theory, practice and policy underlying political processes locally, nationally and internationally in the B.S. in political science program. The degree trains students in research skills necessary for analysis of complex sociopolitical issues locally and globally. Course work is learner-centered in political theory, American political institutions, and international relations and world affairs. This is a flexible program focusing on international, urban and race/ethnic sociopolitical areas, internships and service-learning/action research opportunities with emphasis on intellectual and concrete policy issues in the greater Phoenix metropolitan area, Arizona, the Arizona-Mexico borderlands, the Americas and the world. The B.S. requires six more credit hours (SBS 304 Social Statistics and a political science elective) than the B.A.

Language Requirement: N | Program Fee: N

Career Opportunities: The political science curriculum provides a solid background for employment in a relevant profession and prepares students for graduate work in political science, social science disciplines, urban planning or in professional schools. The program serves as a good precursor to staff, manager or policy analyst positions in local, state and federal government. This degree is recognized as qualification for many careers in business (for-profit and nonprofit) and industry. Work may include binational, cross-border positions linking U.S. and Mexican businesses, Arizona-Sonora local government or local community groups on both sides of the border. Many students use the degree as a gateway to law school or basis for further study in such applied fields as urban affairs/urban and regional planning, public administration, public policy or community development.

Contact:
Division of Social and Behavioral Sciences - W
http://newcollege.asu.edu/programs/polisci/
SBS.Dept@asu.edu
FAB N251
602/543-6058

Psychology (BA) ASPGSBA
New College of Interdisciplinary Arts and Sciences
Program Description: The diverse B.A. curriculum in psychology within the New College of Interdisciplinary Arts and Sciences consists of basic and applied courses covering multiple perspectives within the field, including clinical, cognitive systems/behavioral neuroscience, cross-cultural, developmental, organizational and social psychology. Courses are presented in the context of cultural, socio-historical and transnational issues, enabling the student to understand the relationship between psychology and other social and behavioral sciences. This program adds practical experiences to enrich study through service learning, internships and research with faculty members. Strong emphasis is placed on developing skills in critical thinking and reasoning, quantitative and qualitative research methods and writing to round out preparation for a career or for graduate studies.

Language Requirement: N | Program Fee: N

Career Opportunities: A degree in psychology will prepare students for a career in mental health professions (e.g., youth counselor, substance abuse counselor), social services (e.g., high school psychology teacher, occupational analyst) and government (e.g., sales and marketing, human resources management). The degree also provides an excellent foundation for graduate study in fields such as public administration, law, family studies, communication and the various graduate programs in psychology:

- Clinical and counseling.
- Cognitive neuroscience.
- Developmental.
- Environmental.
- Experimental.
- Physiological.
- Social.

Contact:
Division of Social and Behavioral Sciences - W
http://newcollege.asu.edu/programs/psychology/
SBS.Dept@asu.edu
FAB N251
602/543-6058

Psychology (BS) ASPGSBS
New College of Interdisciplinary Arts and Sciences

Program Description: The B.S. in psychology within the New College of Interdisciplinary Arts and Sciences consists of basic and applied courses covering multiple perspectives within the field, including clinical, cognitive systems/behavioral neuroscience, cross-cultural, developmental, organizational and social psychology. Courses are presented in the context of cultural, socio-historical and transnational issues, enabling the student to understand the relationship between psychology and other social and behavioral sciences.
The B.S. program is distinguished from the B.A. in that it requires two additional lab sciences (a life science and a physical science) and MAT 210 Brief Calculus. This program adds practical experiences to enrich study through service learning, internships and research with faculty members. Strong emphasis is placed on developing skills in critical thinking and reasoning, quantitative and qualitative research methods and writing to round out preparation for a career or graduate studies.

Language Requirement: N | Program Fee: N

Career Opportunities: A B.S. in psychology will prepare students for a career in mental health professions (e.g., youth counselor, substance abuse counselor), social services (e.g., high school psychology teacher; occupational analyst) and government (e.g., sales and marketing, human resources management). The degree also provides an excellent foundation for graduate study in fields such as public administration, law, family studies, communication and the various graduate programs in psychology:

- Clinical and counseling.
- Cognitive neuroscience.
- Developmental.
- Environmental.
- Experimental.
- Physiological.
- Social.

Contact:
Division of Social and Behavioral Sciences - W
http://newcollege.asu.edu/programs/psychology/
SBS.Dept@asu.edu
FAB N251
602/543-6058

Religion & Applied Ethics Studies (BA) ASRELBA
New College of Interdisciplinary Arts and Sciences

Program Description: Many people make ethical decisions in the context of their religious beliefs or worldviews. By combining the disciplines of religion and applied ethics studies, students are able to analyze problems more realistically. Students in the B.A. in religion and applied ethics studies program within the New College of Interdisciplinary Arts and Sciences learn the applicable religious contexts for understanding why people choose to live or respond to ethical issues as they do. They learn to identify moral problems developing in society and develop the tools needed to formulate and critically evaluate various responses and to make careful and informed decisions about ethical matters in contemporary life. The religion and applied ethics studies program is capped with a thesis and internship experience.
Career Opportunities: Graduates can anticipate opportunities in the following fields explored through their required internships:

- Business.
- Criminal justice.
- Education.
- Government.
- Human resources.
- Law enforcement.
- Law.
- Media.
- Medicine.
- Religious organizations.
- Social services.

Contact:
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/programs/religious_studies/
harcs.dept@asu.edu
FAB N290
602/543-4444

Social & Behavioral Sciences (Behavioral Sciences) (BA) ASSBSBBA
New College of Interdisciplinary Arts and Sciences

Program Description: The B.A. curriculum in social and behavioral sciences provides basic understanding of assumptions underlying the social and behavioral sciences, develops research skills necessary for analysis of complex social issues, offers a flexible program tailored to the career goals of the individual student and offers both individual and group experiences in working with faculty on concrete intellectual and policy issues. Students choose either a social science or a behavioral science emphasis. All courses provide students with knowledge about the biological and/or social principles related to the behavior of individuals across multiple social contexts and institutions (family, community, society and culture).

Language Requirement: N | Program Fee: N

Career Opportunities: The interdisciplinary degree is an excellent means toward creating a degree program that matches the individual's interests and fulfills many employers' expectations of a bachelor's degree, namely, that it should expose the student to a variety of outlooks and challenges. Such a degree will be competitive in most situations where the disciplinary social and behavioral degrees are accepted and is advantageous when seeking entry to broad professional programs such as regional planning or urban studies.
Contact:
Division of Social and Behavioral Sciences - W
http://newcollege.asu.edu/programs/sbs/
SBS.Dept@asu.edu
FAB N251
602/543-6058

Social & Behavioral Sciences (Behavioral Sciences) (BS) ASSBBSBBS
New College of Interdisciplinary Arts and Sciences

Program Description: The social and behavioral sciences curriculum provides basic understanding of assumptions underlying the social and behavioral sciences, develops research skills necessary for analysis of complex social issues, offers a flexible program tailored to the career goals of the individual student and offers both individual and group experiences in working with faculty on concrete intellectual and policy issues. Students choose either a social science or a behavioral science emphasis. All courses provide students with knowledge about the biological and/or social principles related to the behavior of individuals across multiple social contexts and institutions (family, community, society and culture).

Language Requirement: N | Program Fee: N

Career Opportunities: The interdisciplinary degree is an excellent means of creating a degree program that matches the individuals interests and fulfills many employers expectations of a bachelor’s degree, namely that it should expose the student to a variety of outlooks and challenges. Such a degree will be competitive in most situations where the disciplinary social and behavioral degrees are accepted and is advantageous when seeking entry to broad professional programs such as regional planning or urban studies.

Contact:
Division of Social and Behavioral Sciences - W
http://newcollege.asu.edu/programs/sbs/
SBS.Dept@asu.edu
FAB N251
602/543-6058

Social & Behavioral Sciences (Social Sciences) (BA) ASSBSSBA
New College of Interdisciplinary Arts and Sciences

Program Description: The B.A. curriculum in social and behavioral sciences provides basic understanding of assumptions underlying the social and behavioral sciences, develops research skills necessary for analysis of complex social issues, offers a flexible program tailored to the career goals of the individual student and offers both individual and group experiences in working with faculty on concrete intellectual and policy issues. Students choose either a social science or a behavioral science emphasis. All courses provide students with knowledge about the biological
and/or social principles related to the behavior of individuals across multiple social contexts and institutions (family, community, society and culture).

**Language Requirement:** N | **Program Fee:** N

**Career Opportunities:** The interdisciplinary degree is an excellent means toward creating a degree program that matches the individual's interests and fulfills many employers’ expectations of a bachelor's degree, namely that it should expose the student to a variety of outlooks and challenges. Such a degree will be competitive in most situations where the disciplinary social and behavioral degrees are accepted and is advantageous when seeking entry to broad professional programs such as regional planning or urban studies.

**Contact:**
Division of Social and Behavioral Sciences - W
http://newcollege.asu.edu/programs/sbs
SBS.Dept@asu.edu
FAB N251
602/543-6058

**Social & Behavioral Sciences (Social Sciences) (BS) ASSBSSBS**
New College of Interdisciplinary Arts and Sciences

**Program Description:** The social and behavioral sciences curriculum provides basic understanding of assumptions underlying the social and behavioral sciences, develops research skills necessary for analysis of complex social issues, offers a flexible program tailored to the career goals of the individual student and offers both individual and group experiences in working with faculty on concrete intellectual and policy issues. Students choose either a social science or a behavioral science emphasis. All courses provide students with knowledge about the biological and/or social principles related to the behavior of individuals across multiple social contexts and institutions (family, community, society and culture).

**Language Requirement:** N | **Program Fee:** N

**Career Opportunities:** The interdisciplinary degree is an excellent means of creating a degree program that matches the individuals interests and fulfills many employers expectations of a bachelor's degree, namely that it should expose the student to a variety of outlooks and challenges. Such a degree will be competitive in most situations where the disciplinary social and behavioral degrees are accepted and is advantageous when seeking entry to broad professional programs such as regional planning or urban studies.

**Contact:**
Division of Social and Behavioral Sciences - W
http://newcollege.asu.edu/programs/sbs
SBS.Dept@asu.edu
Program Description: The B.A. curriculum in sociology within the New College of Interdisciplinary Arts and Sciences provides an understanding of theory, practice and policy underlying issues of social change, inequality and diversity from multiple perspectives, including race/ethnicity, gender, economic position, age, geographic location and position in the global political economy.

The program enhances students’ understanding of social realities and institutions at local, national and international levels, and how sociology contributes to the other social sciences and to the humanities. Students gain a basic understanding of assumptions underlying the discipline of sociology and develop the research skills necessary for analysis of complex social issues. This is a flexible program with opportunities to work collaboratively with faculty on concrete intellectual and policy issues.

Language Requirement: N | Program Fee: N

Career Opportunities: Graduates apply the sociological perspective to a wide variety of jobs in business, the health professions, the criminal justice system, social services and government. Course work in sociology provides a valuable preparation for careers in journalism, politics, public relations or public administration, all fields that involve investigative skills and an ability to work with diverse groups. Graduates with an advanced degree in sociology may become:

- Community developers.
- Criminologists.
- Demographers.
- Gerontologists.
- Research analysts.
- Statisticians.
- Survey researchers.
- Urban planners.

Contact:
Division of Social and Behavioral Sciences - W
http://newcollege.asu.edu/programs/sociology/
SBS.Dept@asu.edu
FAB N251
6025436058

Sociology (BS) ASSOCBS
New College of Interdisciplinary Arts and Sciences
Program Description: The B.S. curriculum in sociology within the New College of Interdisciplinary Arts and Sciences provides an understanding of theory, practice, and policy underlying issues of social change and of inequality and diversity from multiple perspectives, including race/ethnicity, gender, economic position, age, geographic location and position in the global political economy. The program enhances students' understanding of social realities and institutions at local, national and international levels, and how sociology contributes to the other social sciences and to the humanities. Students gain basic understanding of assumptions underlying the discipline of sociology and develop the research skills necessary for analysis of complex social issues. The B.S. program requires six more credit hours of methods courses (both qualitative and quantitative) than the B.A. This is a flexible program with individual and group experiences in working with faculty on concrete intellectual and policy issues.

Language Requirement: N | Program Fee: N

Career Opportunities: Graduates apply the sociological perspective to a wide variety of jobs in business, the health professions, the criminal justice system, social services and government. A valuable preparation for careers in journalism, politics, public relations or public administration, all fields that involve investigative skills and an ability to work with diverse groups. Graduates with an advanced degree in sociology may become:

- Community developers.
- Criminologists.
- Demographers.
- Gerontologists.
- Research analysts.
- Statisticians.
- Survey researchers.
- Urban planners.

Contact:
Division of Social and Behavioral Sciences - W
http://newcollege.asu.edu/programs/sociology/
SBS.Dept@asu.edu
FAB N251
602/543-6058

Spanish (BA) ASSPABA
New College of Interdisciplinary Arts and Sciences

Program Description: The B.A. in Spanish program within the New College of Interdisciplinary Arts and Sciences consists of three tracks: language, literature and cultures, integrated within the discipline and with other disciplines within the college. Classes are taught through an intensive language approach using the most recent electronic technologies.
Language Requirement: N | Program Fee: N

Career Opportunities: The Spanish program offers excellent preparation for graduate school or for employment as a teacher in either the elementary or secondary school system, especially in those districts where bilingual programs are integral to the curricula. Outside the education system, students majoring in Spanish can find employment as translators and interpreters in social agencies, federal and state courts, the diplomatic corps, law enforcement agencies and law firms. The business world also provides employment for those fluent in Spanish. This is especially true in the Southwest, with its proximity to Mexico, and through new outlets opened by the tri-national NAFTA agreement.

Contact:
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/programs/spanish/
harcs.dept@asu.edu
FAB N290
602/543-4444

Women's Studies (BA) ASWSTBA
New College of Interdisciplinary Arts and Sciences

Program Description: The B.A. in women's studies, within the New College of Interdisciplinary Arts and Sciences, is an interdisciplinary program emphasizing intersectional approaches to the study of gender, race, class, ethnicity and sexuality in national and transnational contexts. Consistent with the university's design imperatives of social embeddedness and use-inspired research, women's studies, through its course offerings, research initiatives and co-curricular programs, seeks to further the understanding of women and gender, and to promote social justice.

Language Requirement: N | Program Fee: N

Career Opportunities: The women's studies program builds a solid educational foundation, providing knowledge and critical thinking skills needed to deal with changing gender roles in society. The program also prepares students for opportunities in many settings:

- Business and professional schools.
- Education and training.
- Graduate study in the humanities and social sciences.
- Healthcare services.
- Human resources development.
- Public and business administration.
- Social services.

Contact:
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/programs/womens_studies/
Women’s Studies (BS) ASWSTBS
New College of Interdisciplinary Arts and Sciences

Program Description: The B.S. in women’s studies, within the New College of Interdisciplinary Arts and Sciences, is an interdisciplinary program emphasizing intersectional approaches to the study of gender, race, class, ethnicity and sexuality in national and transnational contexts. Consistent with the university’s design imperatives of social embeddedness and use-inspired research, women’s studies, through its course offerings, research initiatives and co-curricular programs, seeks to further the understanding of women and gender, and to promote social justice. The B.S. program is distinguished by its quantitative emphasis.

Language Requirement: N | Program Fee: N

Career Opportunities: The women’s studies program builds a solid educational foundation, providing knowledge and critical thinking skills needed to deal with changing gender roles in society. The program also prepares students for opportunities in many settings:

- Business and professional schools.
- Education and training.
- Graduate study in the humanities and social sciences.
- Healthcare services.
- Human resources development.
- Public and business administration.
- Social services.

Contact:
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/programs/womens_studies/
harcs.dept@asu.edu
FAB N290
602/543-4444

Nursing and Health Innovation, College of

Applied Science (Food Service Management) (BAS) ECNTRBAS
College of Nursing and Health Innovation

Program Description: The B.A.S. programs are a flexible, 60-credit-hour degree designed specifically for students who have earned an A.A.S. from a regionally accredited institutions. In completing the B.A.S., students complete all ASU
graduation requirements.

The concentration in food service management is aimed at those students with a specialty in culinary or hospitality science.

Language Requirement: N | Program Fee: N

Admission Requirements: Students applying to this program must have completed an Associate of Applied Science (A.A.S.) degree. Not available for freshmen.

Career Opportunities: This degree prepares students for careers in food production, service, management and marketing. With additional education and/or professional training, students may also become credentialed as certified dietary managers, school food service and nutrition specialists or registered sanitarians.

Contact:
College of Nursing & Health Innovation
http://www.poly.asu.edu/saas/nutrition
nutrition@asu.edu
HSC 1386
480/727-1728

Applied Science (Wellness) (BAS) ECEXWBAS
College of Nursing & Health Innovation

Program Description: The B.A.S. programs are a flexible, 60-credit-hour degree designed specifically for students who have earned an A.A.S. from a regionally accredited institution.

The concentration in wellness provides students with the knowledge, skills and professional expertise to assist individuals across their life span in adopting healthy lifestyles. Students are exposed to the latest research and practices designed to encourage behavioral changes that foster health and wellness.

Language Requirement: N | Program Fee: N

Admission Requirements: Students applying to this program must have completed an Associate of Applied Science (A.A.S.) degree. Not available for freshmen.

Career Opportunities: Opportunities range broadly across many sectors of the fitness and wellness industry and health promotion professions. Possible career settings include work site (corporate) health promotion/fitness, clinical/medical rehabilitation programs, community agencies and programs and private health/fitness clubs and spas.

Contact:
College of Nursing & Health Innovation
http://www.poly.asu.edu/saas/wellness
Program Description: The B.S. in exercise and wellness with a concentration in exercise and wellness provides students with the knowledge, skills and professional expertise to assist individuals across the life span in adopting physically active and healthy behaviors. Such behaviors lead to increased fitness, wellness and optimal health. Students are exposed to the latest research and practices designed to enhance physical activity and wellness, including both laboratory and field experiences. A distinctive aspect of the exercise and wellness concentration is an outstanding internship program that provides pre-professional experience in the fitness, wellness and health industry throughout the metropolitan Phoenix area.

Effective fall 2009, students offered admission into this degree program will pursue the degree at either the Polytechnic or Downtown Phoenix campus, based on the following criteria:

A. Students admitted immediately after earning a high school diploma, regardless of any earned college credit (or who have not attended any college since high school graduation), will pursue the program at the Downtown Phoenix campus.

B. Students admitted after attending community college or another university will pursue the program at the Polytechnic campus, and will be reviewed by an advisor to determine their level of progression in the program.

- Students who will not be enrolling in upper-division courses in the major may have their campus changed to the Downtown Phoenix campus, and may pursue the program at that campus, if it is deemed possible by an academic advisor.

Language Requirement: N | Program Fee: N

Career Opportunities: Opportunities range broadly across many sectors of the fitness and wellness industries and health promotion professions. Potential career settings include work site (corporate) health promotion/fitness programs, clinical/medical rehabilitation programs, community agencies and programs and private health/fitness clubs and spas. The degree is also ideal preparation for advanced study in such health professions as cardiopulmonary rehabilitation and physical therapy, as well as graduate study in exercise and wellness.

Contact:
College of Nursing & Health Innovation
Exercise & Wellness (Health Promotion) (BS) ECEXWHBS
College of Nursing & Health Innovation

Program Description: The B.S. in exercise and wellness with a concentration in health promotion provides students with the knowledge, skills and professional expertise to assist individuals across their life span in adopting healthy lifestyles. Students are exposed to the latest research and practices designed to encourage behavioral changes that foster health and wellness. A distinctive aspect of the health promotion concentration is an outstanding internship program which provides pre-professional experience in the health, health promotion, health education and wellness professions throughout the metropolitan Phoenix area.

Effective fall 2009, students offered admission into this degree program will pursue the degree at either the Polytechnic or Downtown Phoenix campus, based on the following criteria:

A. Students admitted immediately after earning a high school diploma, regardless of any earned college credit (or who have not attended any college since high school graduation), will pursue the program at the Downtown Phoenix campus.

B. Students admitted after attending community college or another university will pursue the program at the Polytechnic campus, and will be reviewed by an advisor to determine their level of progression in the program.

- Students who will not be enrolling in upper-division courses in the major may have their campus changed to the Downtown Phoenix campus, and may pursue the program at that campus, if it is deemed possible by an academic advisor.

Language Requirement: Y | Program Fee: N

Career Opportunities: Career opportunities range broadly across many sectors of the wellness industry and health promotion professions. Possible career settings include work site (corporate) health promotion, clinical and medical health promotion and educational programs and community and governmental health agencies and programs. This degree also provides preparation for advanced study in fields such as public health or health promotion.

Contact:
College of Nursing & Health Innovation
http://www.poly.asu.edu/saas/wellness
Nursing (BSN) NUNURDBSN
College of Nursing & Health Innovation

Program Description: Through a curriculum based upon evidence-based, critical thinking, sound knowledge and strong interpersonal communication skills, the B.S.N. program prepares students to provide the highest quality of healthcare. General education course work within the curriculum, including biology, social science and the humanities, provides a strong foundation for the nursing theory and clinical/experiential courses.

The program curriculum is being redesigned for implementation in fall 2009. Please contact program office for additional information.

In addition to the traditional B.S.N. program, ASU also offers these program options:

- The R.N.-to-B.S.N. entry option offers registered nurses the opportunity to complete upper-division nursing program requirements leading to a B.S.N. See http://nursing.asu.edu/programs/undergraduate/rnbsn/rnbsnchksht_nonalliance.pdf.
- The Arizona State University/Maricopa County Community College District Nursing Alliance Program is specifically designed for students in a Maricopa County Community College interested in the R.N.-B.S.N. track program. See http://nursing.asu.edu/programs/undergraduate/rnbsn/rnbsnchksht_alliance.pdf.

Language Requirement: N | Program Fee: Y

Career Opportunities: Graduates deliver nursing care to individuals, families and communities. B.S.N. graduates are eligible to sit for the national licensing examination for registered nurses. Completion of this degree program also prepares individuals for entrance into graduate study in nursing at the master's degree level, which is essential for teaching, administration, clinical specialization and nursing research.

Contact:
College of Nursing & Health Innovation
http://nursing.asu.edu
nursing@asu.edu
602/496-0852 or 602/496-0888
Nutrition (Dietetics) (BS) ECNTRDBS
College of Nursing & Health Innovation

Program Description: The dietetics concentration, under the B.S. in nutrition, provides all of the academic course work a student needs to qualify to become a registered dietitian (R.D.). A registered dietitian is a food and nutrition expert who has met the minimum academic and professional requirements to qualify for the credential. In addition to a core of professional nutrition courses, students must complete a broad range of science, management and communication classes. The program emphasizes the application of nutrition within clinical, community, food production and wellness sites. Graduates of the program can apply to complete a dietetic internship, which will further prepare them to take the exam to become an R.D. The dietetics program is currently granted accreditation by the Commission on Accreditation for Dietetics Education of the American Dietetic Association.

Effective fall 2009, students offered admission into this degree program will pursue the degree at either the Polytechnic or Downtown Phoenix campus, based on the following criteria:

A. Students admitted immediately after earning a high school diploma, regardless of any earned college credit (or who have not attended any college since high school graduation), will pursue the program at the Downtown Phoenix campus.

B. Students admitted after attending community college or another university will pursue the program at the Polytechnic campus, and will be reviewed by an advisor to determine their level of progression in the program.

- Students who will not be enrolling in upper-division courses in the major may have their campus changed to the Downtown Phoenix campus, and may pursue the program at that campus, if it is deemed possible by an academic advisor.

Language Requirement: N | Program Fee: N

Career Opportunities: The nutrition/dietetics field provides employment opportunities in:

- Consulting.
- Education.
- Food/nutrition marketing and sales.
- Hospitals and other healthcare facilities.
- Nutrition/health promotion.
- Public health agencies.
- School food services.
Contact:
College of Nursing & Health Innovation
http://www.poly.asu.edu/saas/nutrition/
nutrition@asu.edu
HSC 1386
480/727-1728

Nutrition (Food & Nutrition Management) (BS) ECNTRMBS
College of Nursing & Health Innovation

Program Description: The food and nutrition management concentration in the B.S. in nutrition is designed to provide students with an understanding of the food industry and the ability to apply nutrition principles to food production. Students will be able to manage and market food and develop a food or menu that meets a specific nutrition guideline.

Effective fall 2009, students offered admission into this degree program will pursue the degree at either the Polytechnic or Downtown Phoenix campus, based on the following criteria:

A. Students admitted immediately after earning a high school diploma, regardless of any earned college credit (or who have not attended any college since high school graduation), will pursue the program at the Downtown Phoenix campus.

B. Students admitted after attending community college or another university will pursue the program at the Polytechnic campus, and will be reviewed by an advisor to determine their level of progression in the program.

- Students who will not be enrolling in upper-division courses in the major may have their campus changed to the Downtown Phoenix campus, and may pursue the program at that campus, if it is deemed possible by an academic advisor.

Language Requirement: N | Program Fee: N

Career Opportunities: This degree prepares students to become food service directors at schools, healthcare facilities and corporate food service operations. Our graduates aspire to own restaurants or nutrition-related businesses, work in supplement or pharmaceutical sales, or work in food marketing and distribution.

Contact:
College of Nursing & Health Innovation
http://www.poly.asu.edu/saas/nutrition
nutrition@asu.edu
HSC 1386
480/727-1728
**Nutrition (Human Nutrition) (BS) ECNTRHBS**

College of Nursing & Health Innovation

*Program Description:* The human nutrition concentration, under the B.S. in nutrition, provides students with a strong foundation in nutrition and science, leading to medical school or health professions. Students from this program have gone on to study:

- Dentistry.
- Naturopathic medicine.
- Optometry and podiatry.
- Osteopathic medicine.
- Pharmacy.
- Physician assistants.

The focus on human nutrition offers students all of the science coursework they need to succeed in continued educational opportunities. Course work includes anatomy, physiology, chemistry and microbiology. Students gain knowledge of nutritional concepts that healthcare professionals sometimes lack.

Effective fall 2009, students offered admission into this degree program will pursue the degree at either the Polytechnic or Downtown Phoenix campus, based on the following criteria:

A. Students admitted immediately after earning a high school diploma, regardless of any earned college credit (or who have not attended any college since high school graduation), will pursue the program at the Downtown Phoenix campus.

B. Students admitted after attending community college or another university will pursue the program at the Polytechnic campus, and will be reviewed by an advisor to determine their level of progression in the program.

- Students who will not be enrolling in upper-division courses in the major may have their campus changed to the Downtown Phoenix campus, and may pursue the program at that campus, if it is deemed possible by an academic advisor.

*Language Requirement: N | Program Fee: N*

*Career Opportunities:* The nutrition field provides employment opportunities in healthcare, public health, education, food service, food/nutrition marketing and sales, and nutrition/health promotion and consulting. Graduates of the human nutrition program often go on to apply to other health education or M.S. programs. The area of research is also a good fit for nutrition majors. Several outstanding scientists have received their bachelor’s degree from this program; add a master’s degree or a Ph.D. and the opportunities within the research field are unlimited.
Contact:
College of Nursing & Health Innovation
http://www.poly.asu.edu/saas/nutrition
nutrition@asu.edu
HSC 1386
480/727‐1728

Nutrition (Nutrition Communication) (BS) ECNTRCBS
College of Nursing & Health Innovation

Program Description: The nutrition communication concentration, under the B.S. in nutrition, was developed in collaboration with the Walter Cronkite School of Journalism and Mass Communication. While focusing on human nutrition, students take classes designed to build a foundation toward becoming expert communicators on issues related to food and nutrition. Nutrition courses provide the content for articles that students write in their communication classes. This degree program provides students with a strong understanding of the scientific method, statistics, nutrition, healthcare, fitness and wellness that many traditional journalists lack. Faculty members teach students how to avoid sensationalism or sacrificing reality to get a better story.

Effective fall 2009, students offered admission into this degree program will pursue the degree at either the Polytechnic or Downtown Phoenix campus, based on the following criteria:

A. Students admitted immediately after earning a high school diploma, regardless of any earned college credit (or who have not attended any college since high school graduation), will pursue the program at the Downtown Phoenix campus.

B. Students admitted after attending community college or another university will pursue the program at the Polytechnic campus, and will be reviewed by an advisor to determine their level of progression in the program.

- Students who will not be enrolling in upper‐division courses in the major may have their campus changed to the Downtown Phoenix campus, and may pursue the program at that campus, if it is deemed possible by an academic advisor.

Language Requirement: N | Program Fee: N

Admission Requirements:

Career Opportunities: The nutrition communication field offers employment opportunities with newspapers, magazines, Web‐based corporations, community and healthcare agencies and private corporations (e.g., public relations firms). With this degree, graduates can pursue careers as authors, freelance writers for
newspapers and magazines, public relations representatives for food and beverage companies or consultants in program or product development.

Contact:
College of Nursing & Health Innovation
http://www.poly.asu.edu/saas/nutrition
nutrition@asu.edu
HSC 1386
480/727-1728

Public Programs, College of

Criminal Justice & Criminology (BS) PPCRIMJBS
College of Public Programs

Program Description: The study of criminal justice and criminology involves analysis of the theories, laws, policies and practices associated with understanding criminal and delinquent behavior, the law and the response to violations of law. The program provides an interdisciplinary social science perspective to the study crime and criminal justice. The focus is on the policies and practices of criminal justice system components, including law enforcement, corrections and the courts. Students receive a solid foundation of course work that provides the content, analytical and communication skills required for working in complex criminal justice occupations.

The School of Criminology and Criminal Justice administers the program from the Downtown Phoenix campus. While most criminal justice and criminology courses are offered on that campus, students may also take criminal justice and criminology courses at the Tempe and West campuses.

Language Requirement: N | Program Fee: N

Career Opportunities: Graduates of the criminal justice and criminology program find a strong job market in the public and private sectors. Employment opportunities exist in the areas of:

- Corrections.
- Court personnel.
- Law enforcement.
- Legal offices.
- Parole.
- Private security.
- Probation.
- Victim witness advocate agencies.

Graduates may also pursue advanced degrees in law, criminology and criminal justice and other social science disciplines.
Nonprofit Leadership & Management (BS) PPNLMBS
College of Public Programs

Program Description: Through the B.S. in nonprofit leadership and management program students are empowered to become successful professionals who positively impact the community in which they work. The nonprofit sector in the United States is unique in form and function. This sector includes institutions and individuals situated between government, public and business entities. It is this sector, with more than 1.2 million organizations in the U.S., that mediates, innovates and promotes social causes and services.

Philanthropy (voluntary action for the public good) is a hallmark of the nonprofit sector as individuals give their time, money and know-how to causes about which they care. Having completed the undergraduate program, a student may also earn national certification from American Humanics, Inc., which will prepare him or her to lead and strengthen nonprofit organizations. For more information, access the school’s Web site.

Language Requirement: N | Program Fee: N

Career Opportunities: Depending on their interests, graduates seek work in various areas of the nonprofit sector. They find employment in diverse settings that include affiliates of well-known national organizations, such as American Red Cross, America’s Second Harvest, March of Dimes, The Humane Society of the United States, National Urban League, United Way and primarily youth-serving entities such as Big Brothers Big Sisters, Boys and Girls Clubs, Boy Scouts of America, Girl Scouts of the USA, Camp Fire USA and the YMCA of the USA.

Increasing opportunities in the nonprofit sector include careers across the spectrum of community issues such as the arts, environment, healthcare and others. Typical positions include roles as program directors, development directors, field executives, volunteer coordinators and similar positions from a variety of agencies and organizations.
Program Description: The parks and recreation fields emerged from the youth development, recreation and park movements of the late 19th century. The B.S. in parks and recreation provides an interdisciplinary education in the management of parks, protected areas and community-based recreation services. Students learn to integrate the managerial, natural and social sciences to make informed decisions for recreation service delivery.

The curriculum combines classroom instruction with field experiences and covers parks and recreation policy, programming, planning, management, communication, inclusive services and history. The B.S. in parks and recreation management prepares students for professional positions in a variety of public, private and nonprofit organizations. The National Recreation and Park Association accredits this degree program.

Students interested in the B.S. in parks and recreation management may also be interested in the school’s therapeutic recreation program; see http://scrd.asu.edu/portal/programs/undergraduate/parks-recreation-management-prm/bs-in-parks-and-recreation-management-therapeutic-recreation-emphasis.

Language Requirement: N | Program Fee: N

Career Opportunities: This degree program prepares students for professional positions in a variety of public, private and nonprofit organizations. Graduates are employed in a variety of settings in Arizona, nationally and abroad. Graduates find employment in such diverse settings as youth agencies, city park and recreation departments, county and state park agencies, tour operations, sport venues, special event management, hospitals and federal natural resource agencies. In such settings, graduates design, develop and manage services that address the recreational needs of a particular clientele.

Contact:
School of Community Resources and Development
http://scrd.asu.edu
scrd@asu.edu
UCENT 550
602/496-0550

Program Description: The BS in parks and recreation management with a concentration in therapeutic recreation is the only program in Arizona that prepares students for national professional certification in therapeutic recreation.
The program is designed for students who have an interest in providing therapeutic interventions and adaptive recreation services for individuals with social problems, illnesses and disabling conditions. Students who choose this concentration are truly committed to improving people’s lives and contributing to their communities.

Language Requirement: N | Program Fee: N

Admission Requirements:

Career Opportunities: There are a range of job opportunities for therapeutic recreation professionals ranging from clinical settings such as hospitals and nursing homes to adventure programming for youth-at-risk and people with disabilities.  

Contact:
School of Community Resources and Development
http://scrd.asu.edu/portal/
scrd@asu.edu
UCENT 550
602/496-0550

Social Work (BSW) PPSWUSWU
College of Public Programs

Program Description: Social work practitioners are committed to the enhancement of individual, family and group problem-solving capacities and the creation of a more nurturing, just and humane social environment. The undergraduate curriculum leads to a B.S.W. Juniors and seniors majoring in social work focus on social work courses in social policy and services, human behavior in the social environment, social work practice, research and field instruction in community agencies. In addition, majors take elective courses in related areas.

Language Requirement: N | Program Fee: N

Career Opportunities: The B.S.W. practitioner is a generalist focusing on roles such as advocacy, referral, case management and problem-solving functions with individuals, groups, families, organizations and the community.

Employment in social work is expected to increase commensurately with the needs of a growing and diverse population.

Social workers are employed in public and private agencies dealing with a wide variety of social issues, including:

- Adoptions.
- Aging.
- AIDS.
- Child abuse.
- Corrections.
• Delinquency.
• Disability.
• Discrimination.
• Domestic violence.
• Family dysfunction.
• Foster care.
• Health.
• Homelessness.
• Mental health.
• Poverty.
• School-related problems.
• Substance abuse.
• Teen pregnancy.

Social work skills such as problem-solving, resource utilization, counseling, group work and community organization are also useful for positions with industry in employee relations and mediation.

Contact:
School of Social Work
http://chs.asu.edu/
social_work@asu.edu
602/543-6602

Tourism Development & Management (BS) PPTDMBS
College of Public Programs

Program Description: Through the B.S. in tourism development and management program, students acquire the planning and management skills related to the growth and development of tourism throughout the world. The curriculum prepares students for employment across a wide variety of occupations in the rapidly expanding travel and tourism industry, while taking full advantage of its strong connections with the professional tourism community of Phoenix.

Through the required internship component of the program, students gain practical experiences leading to professional positions in various travel, tourism and related fields. Exposure to the businesses of heritage tourism, nature-based tourism, resort management and meeting and convention planning prepare students for successful careers in the travel and tourism industry. Having completed the B.S. in tourism development and management, a student may also complete a certificate in convention sales and meeting planning.

In addition, students may also choose to complete a study abroad program. For more information, please see http://scrd.asu.edu/portal/ia/study-abroad-programs/.
Career Opportunities: The travel and tourism industry is the largest employer in the world and the second largest in Arizona. Based upon interests, graduates can seek work in the public, nonprofit or private/commercial sectors. Graduates find employment in such diverse settings as resorts, meeting planning, convention and visitor bureaus, tour operations and commercial recreation businesses. In such settings, graduates design, develop and manage services that address the needs of a particular clientele. The metropolitan Phoenix area is a major hub of tourism in the southwestern U.S. and has experienced rapid growth in the air transportation sector, sports tourism, resorts and hotels, meetings and conventions, state and national parks, business and corporate travel and the gaming and casino sectors.

Contact:
School of Community Resources and Development
http://scrd.asu.edu
scrd@asu.edu
UCENT 550
6024960550

Urban & Metropolitan Studies (BA) PPURBBA
College of Public Programs

Program Description: The B.A. program in urban and metropolitan studies offers students the opportunity to explore a wide range of issues that influence the quality of urban life. The Phoenix metropolitan region is one of the nation’s fastest growing urban centers and it’s projected that the area will continue this trajectory of rapid growth. Located in the heart of downtown Phoenix, the urban and metropolitan studies program provides an ideal setting for training future leaders to effectively address the challenges of rapid growth along with other contemporary urban issues. Students examine and engage these issues through multiple lenses—historic, social, cultural, economic and political.

Through course work and hands-on internships, students engage in scholarship, practice and stewardship. As scholars, they contribute and expand our body of knowledge at the highest level. And as stewards, they contribute to enhance the health and well being of our places, institutions and communities.

Language Requirement: Y | Program Fee: N

Career Opportunities: Graduates from this program work in public, private and not-for-profit fields dedicated to improving urban life. Many graduates also pursue advanced degrees in urban planning, public policy, public administration, law, business, real estate development, arts administration, historic preservation, journalism, education and other fields.

Contact:
School of Community Resources and Development
Urban & Metropolitan Studies (BS) PPURBBS
College of Public Programs

Program Description: The B.S. program in urban and metropolitan studies offers students the opportunity to explore a wide range of issues that influence the quality of urban life. The Phoenix metropolitan region is one of the nation’s fastest growing urban centers and it’s projected that the area will continue this trajectory of rapid growth. Located in the heart of downtown Phoenix, the urban and metropolitan studies program provides an ideal setting for training future leaders to effectively address the challenges of rapid growth along with other contemporary urban issues.

Students examine and engage these issues through multiple lenses—historic, social, cultural, economic and political. Applying quantitative as well as qualitative research methods, students develop and implement innovative means for enhancing quality of place and quality of life in the contemporary metropolis. Students in the B.S. program are required to complete an upper-division course in statistics.

Language Requirement: N | Program Fee: N

Career Opportunities: Graduates from this program work in public, private and not-for-profit fields dedicated to improving urban life. Many graduates also pursue advanced degrees in:

- Arts administration.
- Business.
- Education.
- Historic preservation.
- Journalism.
- Law.
- Public administration.
- Public policy.
- Real estate development.
- Urban planning.

Contact:
School of Public Affairs
http://spa.asu.edu/new/urban/default.htm
spa@asu.edu
UCENT 450
602/496-0450
Sustainability, School of

Sustainability (BA) SUSUSTBA
School of Sustainability

Program Description: The B.A. in sustainability introduces students to the concept of sustainability in the context of real-world problems, exploring the interaction of environmental, economic and social systems. Although the program is transdisciplinary, the B.A. in sustainability is best suited to those inclined towards social sciences, planning or related fields.

Students pursuing a B.A. in sustainability can pursue the following tracks:

- Society and sustainability.
- Policy and governance in sustainable systems.
- International development and sustainability.
- Sustainable urban dynamics.

Students will gain a general understanding of sustainability issues at the local, regional and global level. They will be adaptable, capable of both communicating and learning across a number of disciplines, and have a strong orientation towards problem solving.

Language Requirement: Y | Program Fee: N

Career Opportunities: School of Sustainability graduates are prepared for admission into strong graduate and professional schools. They may also assume positions in industry, consultancy, utilities, regulatory agencies, nonprofits, governmental agencies and nongovernmental organizations. Recent interest in sustainability within business and government has created new employment opportunities (e.g., sustainability coordinators, directors and managers). By engaging a breadth of knowledge and experience, and by acquiring the skills to integrate various domains of knowledge, sustainability students prepare themselves for a variety of careers to help find solutions to sustainability challenges.

Contact:
School of Sustainability
http://schoolofsustainability.asu.edu
schoolofsustainability@asu.edu
GIOS 108
480/727-6963

Sustainability (BS) SUSUSTBS
School of Sustainability
Program Description: The B.S. in sustainability introduces students to the concept of sustainability in the context of real-world problems, exploring the interaction of environmental, economic and social systems. Although the program is transdisciplinary, the B.S. in sustainability is best suited to those inclined towards natural sciences, economics or engineering.

Students pursuing a B.S. in sustainability can pursue the following tracks:

- Sustainable energy, materials and technology.
- Economics of sustainability.
- Sustainable ecosystems.

Students will gain a general understanding of sustainability issues at the local, regional and global level. They will be adaptable, capable of both communicating and learning across a number of disciplines, and have a strong orientation towards problem solving.

Language Requirement: Y | Program Fee: N

Career Opportunities: School of Sustainability graduates are prepared for admission into strong graduate and professional schools. They may also assume positions in industry, consultancy, utilities, regulatory agencies, nonprofits, governmental agencies and nongovernmental organizations. Recent interest in sustainability within business and government has created new employment opportunities (e.g., sustainability coordinators, directors and managers). By engaging a breadth of knowledge and experience, and by acquiring the skills to integrate various domains of knowledge, sustainability students prepare themselves for a variety of careers to help find solutions to sustainability challenges.

Contact:
School of Sustainability
http://schoolofsustainability.asu.edu
schoolofsustainability@asu.edu
GIOS 108
480/727-6963

Teacher Education and Leadership, College of

Early Childhood Teaching & Leadership (BAE) TEECTLBAE
College of Teacher Education and Leadership

Program Description: The B.A.E. in early childhood teaching and leadership program in the College of Teacher Education and Leadership is available at all campuses. This program offers students a firm grounding in early childhood teaching and programming with special emphasis on community connectedness, technology integration, administration, policy analysis and advocacy related to young children.
and their families.

The program and faculty members have earned several national awards on integrating technology into teaching. Every semester students engage in field experiences and internships that align with their academic program. Graduates are recommended for the new Arizona birth-grade 3 teacher certification and a provisional endorsement to work with English language learners. All graduates desiring to teach in a public school preschool and kindergarten or the primary grades will have to pass the state certification test in both content area knowledge and professional knowledge.

Language Requirement: N | Program Fee: N

Career Opportunities: Changes in Arizona state certification will require all individuals teaching in public schools, early childhood programs and serving children birth through kindergarten to meet new early childhood certification or endorsement requirements by 2009. According to a policy study on the condition of early childhood education in 2005, the demand for early childhood teachers in Arizona is much greater than the current supply. Thus, job opportunities in center-based programs and public school early childhood programs are numerous. Many graduates with a degree in early childhood teaching and leadership hold leadership positions in Head Start, private nonprofit and private for-profit, center-based programs and public school early childhood centers. More than 98 percent of graduates accept employment offers within the first year of completing this program.

Contact:
Teacher Preparation, Division W
http://ctel.asu.edu/programs/
CTELquestions@asu.edu
FAB S210-1
602/543-6354

Elementary Education (BAE) TEEEDBAE
College of Teacher Education and Leadership

Program Description: The B.A.E. in elementary education program in the College of Teacher Education and Leadership is available on all campuses. This program offers students a firm grounding in academic content with current research and best practices, accompanied by real-world classroom experiences. Students engage in field experiences and internships that align with their elementary education academic program. The faculty members in the program are experienced in working successfully with first-generation college students.

All students graduate from the program with extensive experience in integrating technology into teaching and a provisional endorsement to work with English language learners. Students who complete the B.A.E. in elementary education are
recommended for grades one-eight teacher certification. All graduates of this program will have to pass a state certification test in content area knowledge and professional knowledge.

Language Requirement: N | Program Fee: N

Career Opportunities: According to recent research on teacher supply and demand, the demand for well-prepared elementary education teachers is strong. Job opportunities in a fast growing state such as Arizona are numerous. Demand for elementary teachers will continue to be strong. Many graduates with a degree in elementary education work in public elementary schools, charter schools and in private school settings. More than 98 percent of graduates accept employment offers within the first year of completing this program.

Contact:
Teacher Preparation, Division W
http://ctel.asu.edu/programs/
CTELquestions@asu.edu
FAB S210-1
602/543-6354

Elementary Education (English as a Second Language) (BAE) TEESLBAE
College of Teacher Education and Leadership

Program Description: The elementary education, diversity in languages and literature with an English as a second language endorsement program in the College of Teacher Education and Leadership is available at all four campuses. This program is designed to give students a firm grounding in academic content with current research and best practices, accompanied by real-world classroom experiences. Students are engaged in field experiences and internships that align with their English as a second language program. This program requires six credit hours of a foreign language or its equivalent and will enable the student to work with second-language learners.

Students who complete the B.A.E. in elementary education, diversity in languages and literature with an English as a second language endorsement are recommended for grades one-eight teacher certification. All graduates of this program will have to pass the state certification test in content area knowledge and professional knowledge.

Language Requirement: N | Program Fee: N

Career Opportunities: According to recent studies on teacher supply and demand, the demand for well-prepared elementary education teachers is strong. Job opportunities in a fast growing state such as Arizona are numerous. Students seeking endorsements in bilingual and English as a second language will find that demand is great in these areas. Many graduates with a degree in elementary education work in public elementary schools, charter schools and in private school
settings. More than 98 percent of graduates receive employment offers within the first year of completing this program.

Contact:
Teacher Preparation, Division W
http://ctel.asu.edu/programs/
CTELquestions@asu.edu
FAB S210-1
602/543-6354

Secondary Education (Biological Sciences) (BAE) TEBIOBAE
College of Teacher Education and Leadership

Program Description: The B.A.E. in secondary education program prepares educators who wish to teach students in seventh through 12th grade. While students develop a strong theoretical background, the program focuses on developing the requisite teaching knowledge and abilities to be a successful middle or high school teacher. In order to integrate teacher education preparation with the secondary education requirement for an academic specialization, the College of Teacher Education and Leadership maintains connections with academic departments across the university. Internships are required in the schools, and some courses are taught in the field.

Secondary Education-Biological Sciences is offered in its entirety on ASU's Tempe, West, and Polytechnic campus. Students have the option to take the Professional Teacher Preparation Program courses at any of the four campuses (Downtown, Polytechnic, Tempe and West) as well as general studies courses that are part of this curriculum. Please consult with an Academic Success Specialist for additional information./p

Language Requirement: N | Program Fee: N

Career Opportunities: Graduates of this program have a 95 percent placement rate for secondary education teaching positions within the first year. While there is a demand for all teachers due to the retirement of the workforce and increased population growth, the highest demand is for teachers of mathematics and science. The career of teaching offers rich personal rewards. The fiscal compensation, although not as high as some other fields, has been increasing and the benefits are strong. Many other states accept Arizona certification through reciprocity agreements.

Contact:
Teacher Preparation, Division W
http://ctel.asu.edu/programs
CTELquestions@asu.edu
FAB S210-1
602/543-6354
Secondary Education (Business) (BAE) EDBUSBAE

College of Teacher Education and Leadership

Program Description: The B.A.E. in secondary education program prepares educators who wish to teach students in seventh through 12th grade. While students develop a strong theoretical background, the program focuses on developing the requisite teaching knowledge and abilities to be a successful middle or high school teacher. In order to integrate teacher education preparation with the secondary education requirement for an academic specialization, the College of Teacher Education and Leadership maintains connections with academic departments across the university. Internships are required in the schools, and some courses are taught in the field.

Secondary Education-Business is offered primarily on ASU’s Tempe campus. Students have the option to take the Professional Teacher Preparation Program courses at any of the four campuses (Downtown, Polytechnic, Tempe and West), as well as general studies courses that are part of this curriculum. A limited portion of specialization courses are also offered at the Downtown and West campus. Please consult with an academic success specialist for additional information.

Language Requirement: N | Program Fee: N

Career Opportunities: Graduates are recommended for secondary teacher certification in grades seven to 12 in an area of academic specialization:

- Art.
- Biological sciences.
- Business.
- Chemistry.
- Dance.
- Earth and space sciences.
- Economics.
- English.
- French.
- Geography.
- German.
- History.
- Japanese.
- Mathematics.
- Music, choral.
- Music, instrumental.
- Physics.
- Political science.
- Social studies.
- Spanish.
Students in art, music and dance complete a K-12 endorsement in their field.

Contact:
Teacher Preparation, Division W
http://ctel.asu.edu/programs
CTELquestions@asu.edu
FAB S210-1
602/543-6354

Secondary Education (Chemistry) (BAE) TECHMAE
College of Teacher Education and Leadership

Program Description: The B.A.E. in secondary education program prepares educators who wish to teach students in seventh through 12th grade. While students develop a strong theoretical background, the program focuses on developing the requisite teaching knowledge and abilities to be a successful middle or high school teacher. In order to integrate teacher education preparation with the secondary education requirement for an academic specialization, the College of Teacher Education and Leadership maintains connections with academic departments across the university. Internships are required in the schools, and some courses are taught in the field.

Secondary Education (Chemistry) is offered in its entirety on ASU’s Tempe campus. Students have the option to take the Professional Teacher Preparation Program courses at any of the four campuses (Downtown, Polytechnic, Tempe and West), as well as general studies courses that are part of this curriculum. Please consult with an Academic Success Specialist for additional information.

Language Requirement: N | Program Fee: N

Contact:
Teacher Preparation, Division W
http://ctel.asu.edu/programs/
CTELquestions@asu.edu
FAB S210-1
602/543-6354

Secondary Education (Earth & Space Sciences) (BAE) EDESSBAE
College of Teacher Education and Leadership

Program Description: The B.A.E. in secondary education program prepares educators who wish to teach students in seventh through 12th grade. While students develop a strong theoretical background, the program focuses on developing the requisite teaching knowledge and abilities to be a successful middle or high school teacher. In order to integrate teacher education preparation with the secondary education requirement for an academic specialization, the College of Teacher Education and Leadership maintains connections with academic
departments across the university. Internships are required in the schools, and some courses are taught in the field.

Secondary Education (Earth and Space Sciences) is offered in its entirety on ASU’s Tempe campus. Students have the option to take the Professional Teacher Preparation Program courses at any of the four campuses (Downtown, Polytechnic, Tempe and West), as well as general studies courses that are part of this curriculum. Please consult with an Academic Success Specialist for additional information.

Language Requirement: N | Program Fee: N

Career Opportunities: Graduates are recommended for secondary teacher certification in grades seven to 12 in an area of academic specialization:

- Art.
- Biological sciences.
- Business.
- Chemistry.
- Dance.
- Earth and space sciences.
- Economics.
- English.
- French.
- Geography.
- German.
- History.
- Japanese.
- Mathematics.
- Music, choral.
- Music, instrumental.
- Physics.
- Political science.
- Social studies.
- Spanish.

Students in art, music and dance complete a K-12 endorsement in their field.

Contact:
Teacher Preparation, Division W
http://ctel.asu.edu/programs
CTELquestions@asu.edu
FAB S210-1
602/543-6354

Secondary Education (Economics) (BAE) EDECNBAE
College of Teacher Education and Leadership
Program Description: The B.A.E. in secondary education program prepares educators who wish to teach students in seventh through 12th grade. While students develop a strong theoretical background, the program focuses on developing the requisite teaching knowledge and abilities to be a successful middle or high school teacher. In order to integrate teacher education preparation with the secondary education requirement for an academic specialization, the College of Teacher Education and Leadership maintains connections with academic departments across the university. Internships are required in the schools, and some courses are taught in the field.

Secondary Education (Economics) is offered primarily on ASU's Tempe campus. Students have the option to take the Professional Teacher Preparation Program courses at any of the four campuses (Downtown, Polytechnic, Tempe and West), as well as general studies courses that are part of this curriculum. A limited portion of specialization courses are also offered at the Downtown and West campus. Please consult with an Academic Success Specialist for additional information.

Language Requirement: N | Program Fee: N

Career Opportunities: Graduates are recommended for secondary teacher certification in grades seven to 12 in an area of academic specialization:

- Art.
- Biological sciences.
- Business.
- Chemistry.
- Dance.
- Earth and space sciences.
- Economics.
- English.
- French.
- Geography.
- German.
- History.
- Japanese.
- Mathematics.
- Music, choral.
- Music, instrumental.
- Physics.
- Political science.
- Social studies.
- Spanish.

Students in art, music and dance complete a K-12 endorsement in their field.
**Secondary Education (English) (BAE) TEENGBAE**  
College of Teacher Education and Leadership

*Program Description:* The B.A.E. in secondary education program prepares educators who wish to teach students in seventh through 12th grade. While students develop a strong theoretical background, the program focuses on developing the requisite teaching knowledge and abilities to be a successful middle or high school teacher. In order to integrate teacher education preparation with the secondary education requirement for an academic specialization, the College of Teacher Education and Leadership maintains connections with academic departments across the university. Internships are required in the schools, and some courses are taught in the field.

Secondary Education (English) is offered in its entirety on the Tempe, West, and Polytechnic campuses. A portion of specialization courses are also available at the Downtown Campus. Students have the option to take the Professional Teacher Preparation Program courses at any of the four campuses (Downtown, Polytechnic, Tempe and West), as well as general studies courses that are part of this curriculum. Please consult with an Academic Success Specialist for additional information.

*Language Requirement: N | Program Fee: N*

*Career Opportunities:* Graduates of this program have a 95 percent placement rate for secondary education teaching positions within the first year. While there is a demand for all teachers due to the retirement of the workforce and increased population growth, the highest demand is for teachers of mathematics and science. The career of teaching offers rich personal rewards. The fiscal compensation, although not as high as some other fields, has been increasing and the benefits are strong. Many other states accept Arizona certification through reciprocity agreements.

**Contact:**  
Teacher Preparation, Division W  
http://ctel.asu.edu/programs  
CTELquestions@asu.edu  
FAB S210-1  
602/543-6354

**Secondary Education (French) (BAE) EDFREBAE**  
College of Teacher Education and Leadership
Program Description: The B.A.E. in secondary education program prepares educators who wish to teach students in seventh through 12th grade. While students develop a strong theoretical background, the program focuses on developing the requisite teaching knowledge and abilities to be a successful middle or high school teacher. In order to integrate teacher education preparation with the secondary education requirement for an academic specialization, the College of Teacher Education and Leadership maintains connections with academic departments across the university. Internships are required in the schools, and some courses are taught in the field.

Secondary Education (French) is offered in its entirety on ASU's Tempe campus. Students have the option to take the Professional Teacher Preparation Program courses at any of the four campuses (Downtown, Polytechnic, Tempe and West), as well as general studies courses that may be available that are part of this curriculum. A limited portion of specialization courses are also offered at the Downtown campus. Please consult with an academic success specialist for additional information.

Language Requirement: N | Program Fee: N

Career Opportunities: Graduates are recommended for secondary teacher certification in grades seven to 12 in an area of academic specialization:

- Art.
- Biological sciences.
- Business.
- Chemistry.
- Dance.
- Earth and space sciences.
- Economics.
- English.
- French.
- Geography.
- German.
- History.
- Japanese.
- Mathematics.
- Music, choral.
- Music, instrumental.
- Physics.
- Political science.
- Social studies.
- Spanish.

Students in art, music and dance complete a K-12 endorsement in their field.
Secondary Education (Geography) (BAE) EDGCUBAE
College of Teacher Education and Leadership

Program Description: The B.A.E. in secondary education program prepares educators who wish to teach students in seventh through 12th grade. In order to integrate teacher education preparation with the secondary education requirement for an academic specialization, the College of Teacher Education and Leadership maintains connections with academic departments across the university. Internships are required in the schools, and some courses are taught in the field.

Secondary Education (Geography) is offered in its entirety on ASU’s Tempe campus. Students have the option to take the Professional Teacher Preparation Program courses at any of the four campuses (Downtown, Polytechnic, Tempe and West), as well as general studies courses that are part of this curriculum. Please consult with an Academic Success Specialist for additional information.

Language Requirement: N | Program Fee: N

Career Opportunities: Graduates are recommended for secondary teacher certification in grades seven to 12 in an area of academic specialization:

- Art.
- Biological sciences.
- Business.
- Chemistry.
- Dance.
- Earth and space sciences.
- Economics.
- English.
- French.
- Geography.
- German.
- History.
- Japanese.
- Mathematics.
- Music, choral.
- Music, instrumental.
- Physics.
- Political science.
- Social studies.
- Spanish.

Students in art, music and dance complete a K-12 endorsement in their field.

Contact:
Teacher Preparation, Division W
http://ctel.asu.edu/programs
CTELquestions@asu.edu
FAB S210-1
602/543-6354

Secondary Education (German) (BAE) EDGERBAE
College of Teacher Education and Leadership

Program Description: The B.A.E. in secondary education program prepares educators who wish to teach students in seventh through 12th grade. While students develop a strong theoretical background, the program focuses on developing the requisite teaching knowledge and abilities to be a successful middle or high school teacher. In order to integrate teacher education preparation with the secondary education requirement for an academic specialization, the College of Teacher Education and Leadership maintains connections with academic departments across the university. Internships are required in the schools, and some courses are taught in the field.

Secondary Education (German) is offered in its entirety on ASU’s Tempe campus. Students have the option to take the Professional Teacher Preparation Program courses at any of the four campuses (Downtown, Polytechnic, Tempe and West), as well as general studies courses that may be available that are part of this curriculum. A limited portion of specialization courses are also offered at the Downtown campus. Please consult with an academic success specialist for additional information.

Language Requirement: N | Program Fee: N

Career Opportunities: Graduates are recommended for secondary teacher certification in grades seven to 12 in an area of academic specialization:

- Art.
- Biological sciences.
- Business.
- Chemistry.
- Dance.
- Earth and space sciences.
- Economics.
- English.
- French.
Students in art, music and dance complete a K-12 endorsement in their field.

**Contact:**
Teacher Preparation, Division W
http://ctel.asu.edu/programs
CTELquestions@asu.edu
FAB S210-1
602/543-6354

**Secondary Education (History) (BAE) TEHISBAE**
College of Teacher Education and Leadership

**Program Description:** The B.A.E. in secondary education program prepares educators who wish to teach students in seventh through 12th grade. While students develop a strong theoretical background, the program focuses on developing the requisite teaching knowledge and abilities to be a successful middle or high school teacher. In order to integrate teacher education preparation with the secondary education requirement for an academic specialization, the College of Teacher Education and Leadership maintains connections with academic departments across the university. Internships are required in the schools, and some courses are taught in the field.

Secondary Education (History) is offered in its entirety on ASU’s Tempe, West, and Polytechnic campuses. A portion of specialization courses are also available at the Downtown Campus. Students have the option to take the Professional Teacher Preparation Program courses at any of the four campuses (Downtown, Polytechnic, Tempe and West), as well as general studies courses that are part of this curriculum. Please consult with an academic success specialist for additional information.

**Language Requirement:** N | **Program Fee:** N

**Career Opportunities:** Graduates of this program have a 95 percent placement rate for secondary education teaching positions within the first year. While there is a demand for all teachers due to the retirement of the workforce and increased
population growth, the highest demand is for teachers of mathematics and science. The career of teaching offers rich personal rewards. The fiscal compensation, although not as high as some other fields, has been increasing and the benefits are strong. Many other states accept Arizona certification through reciprocity agreements.

Contact:
Teacher Preparation, Division W
http://ctel.asu.edu/programs/
CTELquestions@asu.edu
FAB S210-1
602/543-6354

Secondary Education (Japanese) (BAE) EDJPNBAE
College of Teacher Education and Leadership

Program Description: The B.A.E. in secondary education program prepares educators who wish to teach students in seventh through 12th grade. While students develop a strong theoretical background, the program focuses on developing the requisite teaching knowledge and abilities to be a successful middle or high school teacher. In order to integrate teacher education preparation with the secondary education requirement for an academic specialization, the College of Teacher Education and Leadership maintains connections with academic departments across the university. Internships are required in the schools, and some courses are taught in the field.

Secondary Education (Japanese) is offered in its entirety on ASU’s Tempe campus. Students have the option to take the Professional Teacher Preparation Program courses at any of the four campuses (Downtown, Polytechnic, Tempe and West), as well as general studies courses that are part of this curriculum. Please consult with an Academic Success Specialist for additional information.

Language Requirement: N | Program Fee: N

Career Opportunities: Graduates are recommended for secondary teacher certification in grades seven to 12 in an area of academic specialization:

- Art.
- Biological sciences.
- Business.
- Chemistry.
- Dance.
- Earth and space sciences.
- Economics.
- English.
- French.
- Geography.
Students in art, music and dance complete a K-12 endorsement in their field.

**Contact:**
Teacher Preparation, Division W
http://ctel.asu.edu/programs
CTELquestions@asu.edu
FAB S210-1
602/543-6354

**Secondary Education (Mathematics) (BAE) TEMATBAE**
College of Teacher Education and Leadership

**Program Description:** The B.A.E. in secondary education program prepares educators who wish to teach students in seventh through 12th grade. While students develop a strong theoretical background, the program focuses on developing the requisite teaching knowledge and abilities to be a successful middle or high school teacher. In order to integrate teacher education preparation with the secondary education requirement for an academic specialization, the College of Teacher Education and Leadership maintains connections with academic departments across the university. Internships are required in the schools, and some courses are taught in the field.

Secondary Education (Mathematics) is offered in its entirety on ASU’s Tempe and West campus. Students have the option to take the Professional Teacher Preparation Program courses at any of the four campuses (Downtown, Polytechnic, Tempe and West), as well as general studies courses that are part of this curriculum. Please consult with an Academic Success Specialist for additional information.

**Language Requirement:** N  |  **Program Fee:** N

**Career Opportunities:** Graduates of this program have a 95 percent placement rate for secondary education teaching positions within the first year. While there is a demand for all teachers due to the retirement of the workforce and increased population growth, the highest demand is for teachers of mathematics and science. The career of teaching offers rich personal rewards. The fiscal compensation, although not as high as some other fields, has been increasing and the benefits are
strong. Many other states accept Arizona certification through reciprocity agreements.

Contact:
Teacher Preparation, Division W
http://ctel.asu.edu/programs/
CTELquestions@asu.edu
FAB S210-1
602/543-6354

Secondary Education (Natural Sciences) (BAE) TENSCBAE
College of Teacher Education and Leadership

Program Description: The B.A.E. in secondary education program prepares educators who wish to teach students in seventh through 12th grade. While students develop a strong theoretical background, the program focuses on developing the requisite teaching knowledge and abilities to be a successful middle or high school teacher. In order to integrate teacher education preparation with the secondary education requirement for an academic specialization, the College of Teacher Education and Leadership maintains connections with academic departments across the university. Internships are required in the schools, and some courses are taught in the field.

Secondary Education (Natural Sciences) is offered in its entirety on ASU's West and Tempe campuses. Students have the option to take the Professional Teacher Preparation Program courses at any of the four campuses (Downtown, Polytechnic, Tempe and West), as well as general studies courses that are part of this curriculum. A portion of specialization courses can be completed at the Downtown campus. Please consult with an Academic Success Specialist for additional information.

Language Requirement: N | Program Fee: N

Career Opportunities: Graduates of this program have a 95 percent placement rate for secondary education teaching positions within the first year. While there is a demand for all teachers due to the retirement of the workforce and increased population growth, the highest demand is for teachers of mathematics and science. The career of teaching offers rich personal rewards. The fiscal compensation, although not as high as some other fields, has been increasing and the benefits are strong. Many other states accept Arizona certification through reciprocity agreements.

Contact:
Teacher Preparation, Division W
http://ctel.asu.edu/programs/
CTELquestions@asu.edu
FAB S210-1
602/543-6354
Secondary Education (Physical Education) (BAE) ECPPEBAE
College of Teacher Education and Leadership

Program Description: The physical education concentration under the B.A.E. in secondary education prepares future teachers to deliver quality K-12 physical education programs. This program is unique in its practice-oriented focus on intensive field experiences, practical application of current knowledge, a field-tested and widely used curriculum and classroom management model, and an emphasis on current technology. The curriculum directly aligns with Arizona’s standards for teachers and the National Association for Sport and Physical Education’s beginning teacher standards.

During the first two years of the program, students explore education as a career field and gain experience in local community schools and agencies. During the final two years, students complete content-specific teaching methodology courses and intensive field experiences at both the elementary and secondary levels. Course instructors use their experience teaching in a variety of K-12 settings and coaching environments to augment class experiences with many practical applications.

Secondary Education (Physical Education) is offered in its entirety on ASU’s Polytechnic campus. Please consult with an Academic Success Specialist for additional information on this major.

Language Requirement: N | Program Fee: N

Admission Requirements: Students will be admitted to the preprofessional status and must complete additional requirements for entrance to the professional status. See department web site for more information.

Career Opportunities: The physical education program prepares educators who wish to teach in kindergarten through 12th grade and related professions in the broader discipline. Students receive a secondary teaching certificate with a K-12 endorsement for physical education. School districts often offer additional stipends for coaching sport teams, English as a second language, and bilingual education endorsements, extracurricular activities and administrative responsibilities. With advanced training, graduates can pursue careers in a range of areas including school administration, instructional design, special education, counseling and sports administration.

Contact:
Teacher Preparation, Division W
http://ctel.asu.edu/programs/polytechniceducation@asu.edu
SANCA 140
480/727-1103
Secondary Education (Physics) (BAE) EDPHYBAE

College of Teacher Education and Leadership

*Program Description:* The B.A.E. in secondary education program prepares educators who wish to teach students in seventh through 12th grade. While students develop a strong theoretical background, the program focuses on developing the requisite teaching knowledge and abilities to be a successful middle or high school teacher. In order to integrate teacher education preparation with the secondary education requirement for an academic specialization, the College of Teacher Education and Leadership maintains connections with academic departments across the university. Internships are required in the schools, and some courses are taught in the field.

Secondary Education (Physics) is offered entirely on ASU's Tempe campus. Students have the option to take the Professional Teacher Preparation Program courses at any of the four campuses (Downtown, Polytechnic, Tempe and West), as well as general studies courses that are part of this curriculum. Please consult with an Academic Success Specialist for additional information.

*Language Requirement:* N  |  *Program Fee:* N

*Career Opportunities:* Graduates are recommended for secondary teacher certification in grades seven to 12 in an area of academic specialization:

- Art.
- Biological sciences.
- Business.
- Chemistry.
- Dance.
- Earth and space sciences.
- Economics.
- English.
- French.
- Geography.
- German.
- History.
- Japanese.
- Mathematics.
- Music, choral.
- Music, instrumental.
- Physics.
- Political science.
- Social studies.
- Spanish.

Students in art, music and dance complete a K-12 endorsement in their field.
**Secondary Education (Political Science) (BAE) EDPOSBAE**

College of Teacher Education and Leadership

*Program Description:* The B.A.E. in secondary education program prepares educators who wish to teach students in seventh through 12th grade. In order to integrate teacher education preparation with the secondary education requirement for an academic specialization, the College of Teacher Education and Leadership maintains connections with academic departments across the university. Internships are required in the schools, and some courses are taught in the field.

*Language Requirement:* N | *Program Fee:* N

*Career Opportunities:* Graduates are recommended for secondary teacher certification in grades seven to 12 in an area of academic specialization:

- Art.
- Biological sciences.
- Business.
- Chemistry.
- Dance.
- Earth and space sciences.
- Economics.
- English.
- French.
- Geography.
- German.
- History.
- Japanese.
- Mathematics.
- Music, choral.
- Music, instrumental.
- Physics.
- Political science.
- Social studies.
- Spanish.

Students in art, music and dance complete a K-12 endorsement in their field.

*Contact:*
Teacher Preparation, Division W
Secondary Education (Social Studies) (BAE) EDSSTBAE
College of Teacher Education and Leadership

Program Description: The B.A.E. in secondary education program prepares educators who wish to teach students in seventh through 12th grade. In order to integrate teacher education preparation with the secondary education requirement for an academic specialization, the College of Teacher Education and Leadership maintains connections with academic departments across the university. Internships are required in the schools, and some courses are taught in the field.

Minimum Math Requirement: MAT 142 - College Mathematics

Language Requirement: N | Program Fee: N

Career Opportunities: Graduates are recommended for secondary teacher certification in grades seven to 12 in an area of academic specialization:

- Art.
- Biological sciences.
- Business.
- Chemistry.
- Dance.
- Earth and space sciences.
- Economics.
- English.
- French.
- Geography.
- German.
- History.
- Japanese.
- Mathematics.
- Music, choral.
- Music, instrumental.
- Physics.
- Political science.
- Social studies.
- Spanish.

Students in art, music and dance complete a K-12 endorsement in their field.
Secondary Education (Spanish) (BAE) TESPABAE
College of Teacher Education and Leadership

Not accepting applications.

Program Description: The Department of Secondary Education in the College of Teacher Education in Leadership offers a three-semester professional program leading to a degree in Secondary Education. In addition, students may complete one of seven secondary specializations at the West or Downtown Phoenix campuses: biological sciences, English, history, mathematics, natural sciences, social studies, and Spanish. While students develop a strong theoretical background, the program focuses on developing the requisite teaching knowledge and abilities to be a successful middle or high school teacher. Students who successfully complete the required course work and student teaching are recommended for Arizona secondary education certification, grades 7-12.

Language Requirement: N | Program Fee: N

Career Opportunities: Graduates of this program have a 95% placement rate for secondary education teaching positions within the first year. While there is a demand for all teachers due to the retirement of the workforce and increased population growth, the highest demand is for teachers of mathematics and science. The career of teaching offers rich personal rewards. The fiscal compensation, although not as high as some other fields, has been increasing and the benefits are strong. Many other states accept Arizona certification through reciprocity agreements.

Contact:
http://ctel.asu.edu/programs/
FAB S5251A
CTELquestions@asu.edu
602/543-6445

Selected Studies (BAE) EDSLSTBAE
Program information not available at time of publication.

Not accepting applications.

Contact Information:
College of Teacher Education and Leadership
http://ctel.asu.edu/programs/
Program Description: The B.A.E. in special education in the College of Teacher Education and Leadership is available at the West and Downtown Phoenix campuses. Special education for children and adolescents with diverse learning needs is viewed as a service not a place. Our primary goals are to prepare teachers to provide a variety of educational options based on individual needs and to design curriculum based on the whole child in the context of their family, culture, community and learning needs.

Because the general education classroom is a viable placement option for many students with mild and moderate learning and behavior disabilities, teaching special education teachers to collaborate is emphasized throughout the professional preparation sequence. Students receive additional training in using interpersonal communication and problem-solving skills. They also learn adaptive techniques and about assistive technologies that facilitate the successful integration of students with diverse leaning needs in general education classrooms.

This is a dual-certificate program which leads to certification in both special education in mild cross-categorical disabilities and first through eighth grade elementary education.

Language Requirement: N | Program Fee: N

Career Opportunities: National and state studies report the current and projected need over the next 5-10 years will be foremost for special education teachers. Graduates of the B.A.E. in special education program will be eligible to teach kindergarten through grade 12 for the spectrum of mild disabilities (learning disabilities, behavior disabilities and mild mental retardation) in cross-categorical special education classes. In general education classes, graduates serve in resource rooms and self-contained classes as itinerant teachers, consulting teachers and co-teachers. Graduates also have the opportunity to consult with governmental agencies, curriculum publishers and parent organizations.

Contact:
Teacher Preparation, Division W
http://ctel.asu.edu/programs/
CTELquestions@asu.edu
FAB S210-1
602/543-6354
Technology and Innovation, College of

Aeronautical Management Technology (Air Transportation Management) (BS) TSAMTMBS
College of Technology and Innovation

*Program Description:* The air transportation management concentration, under the B.S. in aeronautical management technology, provides students with a thorough technical background combined with an interdisciplinary general university education. The student gains a background in aircraft structures, reciprocating and turbine engines, aircraft performance and design, management skills, business principles, systems analysis and a variety of course work specific to aircraft flight, airport operations and air transportation systems. The Aviation Accreditation Board International accredits this program.

*Language Requirement:* N | *Program Fee:* Y

*Career Opportunities:* A degree in air transportation management prepares graduates for careers as air traffic control specialist, air carrier manager, airport manager and general aviation operations manager. To facilitate career options, the student selects a focus area in either air carrier management or airport management.

*Contact:*
Department of Technology Management
http://technology.asu.edu/aviation
aerotech@asu.edu
SIM BLDG
480/727-1381

Aeronautical Management Technology (Professional Flight) (BS) TSAMTFBS
College of Technology and Innovation

*Program Description:* The professional flight concentration, under the B.S. in aeronautical management technology, is designed for students who are seriously interested in becoming professional airline pilots. This program combines a thorough technical education with an interdisciplinary general university education. This combination prepares graduates to assume responsibilities in a wide variety of technically related areas within professional aviation flight operations. The concentration features flight instruction as a curriculum requirement and an airline bridge training program with Mesa Airlines. The Aviation Accreditation Board International accredits this program. The Federal Aviation Administration (FAA) certifies flight instruction.

*Language Requirement:* N | *Program Fee:* Y

*Admission Requirements:* This major has additional admission requirements including Federal Aviation Administration requirements. Students will be admitted
to the pre-professional status and then complete additional requirements for admission to the professional program. See http://eastair.poly.asu.edu/for more information.

**Career Opportunities:** The professional flight concentration offers students private pilot, commercial pilot and flight instructor certificates, and instrument pilot, instrument instructor and multiengine pilot ratings. With these flight qualifications and the technically based bachelor’s degree, the graduate has a wide variety of career opportunities, including flight crew service on commercial and business aircraft.

**Contact:**
Department of Technology Management
http://technology.asu.edu/aviation
aerotech@asu.edu
SIM BLDG
480/727-1381

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**Air Traffic Management (BS) TSATMBS**
College of Technology and Innovation

**Program Description:** Air traffic control specialists guide aircraft to ensure a safe, orderly and expeditious flow of aircraft traffic both on the ground and in the air. The B.S. in air traffic management is designed to provide a technical foundation in air traffic control procedures and operations. Students gain a background in aircraft operations, management skills and business principles through a variety of course work specific to air traffic control. This program is designed for students who are seriously interested in becoming air traffic controllers.

**Language Requirement:** N  |  **Program Fee:** Y

**Admission Requirements:** This major has additional admission requirements including Federal Aviation Administration requirements. Students who do not have US citizenship status cannot be admitted to the program. Students will be admitted to the pre-professional status and then complete additional requirements for admission to the professional program. See www.poly.asu.edu/aviation for more information.

**Career Opportunities:** It is estimated that the Federal Aviation Administration (FAA) will hire approximately 15,000 air traffic controllers in the next 10 years. Increases in the volume of air traffic will require more controllers to handle the additional work. New computerized systems will assist controllers by automatically making many of the routine decisions. This will allow controllers to handle more traffic, thus increasing their productivity. Despite the obvious demand for new controllers in the immediate future, competition to get into the FAA-approved training programs is expected to remain intense, as there generally are many more applicants than there are openings. However, graduates from this program have an excellent opportunity of being hired as air traffic controllers.
Applied Biological Sciences (Applied Biological Sciences) (BS) TSABSABS
College of Technology and Innovation

Program Description: The applied biological sciences concentration, under the B.S. in applied biological sciences, focuses on the application of biological principles to challenges in the life sciences. This concentration is designed for students that have strong interests in the life sciences and the interaction of these sciences with the ecosystem and human society within the ecosystem. Mastery of fundamental biological principles is emphasized through classroom learning and hands-on activities in laboratories and in the living laboratories of the Sonoran desert, the surrounding ecosystems and the landscape of the greater Phoenix area.

Language Requirement: N | Program Fee: N

Career Opportunities: Graduates can pursue entry-level careers in wildlife and restoration ecology, urban horticulture, and secondary education.

The general program in applied biological sciences also prepares graduates to succeed in graduate and professional schools in disciplines such as animal health, environmental biotechnology, medicine, dentistry, physical therapy, ecology, horticulture, veterinary medicine and wildlife biology.

Contact:
Department of Applied Biological Sciences
http://www.poly.asu.edu/saas/appliedbiologicalsciences/
appliedbiologicalsciences@asu.edu
WANER 340
480/727-1444

Applied Biological Sciences (Secondary Education in Biology) (BS) TSABSSBS
College of Technology and Innovation

Program Description: The secondary education in biology concentration of the B.S. in applied biological sciences qualifies students for State of Arizona Certification in Secondary Biology Education. Students in this program will have advisors in both the Department of Applied Biological Sciences and the School of Educational Innovation and Teacher Preparation.

Language Requirement: N | Program Fee: N
Career Opportunities: Graduates can pursue numerous entry-level careers in biology. Specific career fields include secondary education, wildlife and restoration ecology and urban horticulture. Numerous employment opportunities exist in both private and public sectors. The general program in applied biological sciences also prepares graduates to succeed in graduate or professional schools in disciplines such as animal health, environmental biotechnology, medicine, dentistry, physical therapy, ecology, horticulture and wildlife biology.

Contact:
Department of Applied Biological Sciences
http://www.poly.asu.edu/saas/appliedbiologicalsciences/
appliedbiologicalsciences@asu.edu
WANER 340
480/727-1444

**Applied Biological Sciences (Urban Horticulture) (BS) TSABSUBS**
College of Technology and Innovation

*Program Description:* The urban horticulture concentration, under the B.S. in applied biological sciences degree, emphasizes the relationship of plants and people in city environments. Set in a unique southwestern desert location, the program teaches students how to practice urban horticulture principles and develop skills that help to create aesthetically pleasing urban environments. This approach is coupled with an appreciation of environmental conservation and stewardship.

*Language Requirement: N | Program Fee: N*

Career Opportunities: Graduates can pursue numerous entry-level careers in biology. Specific career fields include secondary education, wildlife and restoration ecology and urban horticulture. Numerous employment opportunities exist in both private and public sectors. The general program in applied biological sciences also prepares graduates to succeed in graduate or professional schools in disciplines such as animal health, environmental biotechnology, medicine, dentistry, physical therapy, ecology, horticulture and wildlife biology.

Contact:
Department of Applied Biological Sciences
http://www.poly.asu.edu/saas/appliedbiologicalsciences/
appliedbiologicalsciences@asu.edu
WANER 340
480/727-1444

**Applied Biological Sciences (Wildlife & Restoration Ecology) (BS) TSABSRBS**
College of Technology and Innovation

*Program Description:* The wildlife and restoration ecology concentration, under the B.S. in applied biological sciences degree, focuses on the application of ecological principles to the management of wildlife and the restoration of ecosystems.
concentration examines the management of wildlife species and their habitat. The reconstruction of degraded ecosystems, to improve ecological structure and function and meet societal needs for sustainable and functional ecosystems, is also emphasized.

Language Requirement: N | Program Fee: N

Career Opportunities: Graduates can pursue numerous entry-level careers in biology. Specific career fields include secondary education, wildlife and restoration ecology and urban horticulture. Numerous employment opportunities exist in both private and public sectors. The general program in applied biological sciences also prepares graduates to succeed in graduate or professional schools in disciplines such as animal health, environmental biotechnology, medicine, dentistry, physical therapy, ecology, horticulture and wildlife biology.

Contact:
Department of Applied Biological Sciences
http://www.poly.asu.edu/saas/appliedbiologicalsciences/
appliedbiologicalsciences@asu.edu
WANER 340
480/727-1444

Applied Computer Science (BS) TSACSBS
College of Technology and Innovation

Program Description: The B.S in applied computer science is designed to provide students with an education that targets the computing profession. Computer scientists use mathematics, science and economics along with technological knowledge and skill in the application of programming languages and software processes to design, analyze, implement and test software systems and applications. The program is problem- and project-based, utilizing the languages, tools and methods of computing best practices.

Language Requirement: N | Program Fee: N

Career Opportunities: Graduates find opportunities as members of an engineering team in software applications areas such as Web, database, limited device (cell phones) or network and security. The current demand for software and computer hardware personnel is high, and the starting salaries for these employees are typically well above the average.

Contact:
Department of Engineering
http://technology.asu.edu/engineering/
egr@asu.edu
SANTN 230
602/727-2727
Applied Psychology (BS) ECPSYBS
College of Technology and Innovation

Program Description: This major offers a traditional psychology core preparation, leading to graduate school and/or to applications in human factors with emphasis on human-computer interaction, aviation and manufacturing. The rigor of the major provides strong preparation for further graduate study in psychology. The program serves students in other Polytechnic campus programs, such as manufacturing engineering technology, aviation management technology, industrial technology and business administration.

Language Requirement: N | Program Fee: N

Career Opportunities: Most careers in psychology require a master’s or a Ph.D., but there are some opportunities for employment in applied areas with good training at the undergraduate level. Such positions may involve working as a research assistant or working in some aspect of human factors. For example, there is a pressing need for people who can help evaluate and improve the usability of products and software. Have you ever had difficulty using a Web site? These sites can be improved by considering the way people think. The applied psychology program aims to provide the background and skills necessary to assist in such work.

Contact:
Faculty of Applied Psychology
http://www.poly.asu.edu/saas/appliedpsych/
SAAS@asu.edu
SANCA 150
480/727-1177

Applied Science (BAS) TSAPSBAS
College of Technology and Innovation

Program Description: The B.A.S. program has a flexible degree plan designed specifically for students who have earned an A.A.S from a community college. This major combines the technical experience gained in the student’s associate degree program with a broader education of management, leadership, critical thinking and communication skills. Students in the B.A.S. program within the College of Technology and Innovation select a field of study from a list of numerous concentrations. These concentrations include:

- Aviation management technology.
- Electronic and energy systems.
- Emergency management.
- Graphic information technology.
- Internet and Web development.
- Manufacturing technology and management.
- Operations management.
Software and computing systems.

Language Requirement: N | Program Fee: N

Admission Requirements: Students applying to this program must have completed an Associate of Applied Science (AAS) degree. This program is not available for freshmen.

Career Opportunities: The wide range of concentrations to choose from offer B.A.S. program graduates a great deal of diversity in terms of career opportunities. In general, course work provided by the B.A.S. program gives the graduate a broader understanding of what is required of a professional working in a technical area. B.A.S. graduates have the ability to supervise and manage people in highly specialized technical and service industry positions.

Contact:
Dean, College of Technology & Applied Sciences
http://technology.asu.edu
technology@asu.edu
SANTN 330
480/727-1089

Applied Science (Aviation Management Technology) (BAS) TSAMTABAS
College of Technology and Innovation

Program Description: The B.A.S. programs are a flexible, 60-credit-hour degree designed specifically for students who have earned an A.A.S. from a regionally accredited institution.

The concentration in Aviation Management Technology is for students who have received training and education in some aspect of the air transportation industry (other than aviation maintenance), such as flight certificates and ratings as part of their A.A.S. degree. Students receive an orientation in management practices that prepares them for advanced positions in the aviation management field.

Language Requirement: N | Program Fee: N

Admission Requirements: Students applying to this program must have completed an Associate of Applied Science (A.A.S.) degree from a regionally accredited institution. Not available for freshmen.

Contact:
Department of Technology Management
http://technology.asu.edu/aviation
technology@asu.edu
SIM BLDG
480/727-1381
Applied Science (Electronic & Energy Systems) (BAS) TSEESBAS
College of Technology and Innovation

Program Description: The B.A.S. program is a flexible, 60-credit-hour degree designed specifically for students who have earned an A.A.S. from a regionally accredited institution. The Department of Engineering Technology offers the Electronic and Energy Systems concentration to serve students with an electronics background by providing three paths or emphasis areas within this BAS concentration. These three emphasis areas are alternative energy, electronic systems, and integrated electronic systems (focused on the semiconductor industry).

The alternative energy technologies emphasis area explores the demands of various alternative energy resources. At the heart of the program is the solar-hydrogen cycle, a renewable energy scenario that comprises production of electricity from solar energy, and utilizing that electricity to split water into its elemental parts. Then, this program provides hands-on laboratory experience on energy conversion and storage technologies, including photovoltaics, fuel cells, batteries, electrolyzers and supercapacitors.

The electronic systems emphasis area allows students to continue to develop a knowledge of electrical/electronic fundamentals with an applications perspective and a focus on general topics of microcontrollers and advanced digital controllers and their use in industry.

The integrated electronic systems emphasis area covers the processes and technology used to develop, design, manufacture and exploit integrated electronic functions on silicon, in packages and on boards. The program provides hands-on laboratory experience in integrated circuit device fabrication and manufacturing in a setting that emulates the industry.

Language Requirement: N | Program Fee: N

Admission Requirements: Students applying to this program must have completed an Associate of Applied Science (A.A.S.) degree from a regionally accredited institution. Not available for freshmen.

Career Opportunities: Graduates with the alternative energy emphasis area are able to work in a number of different companies involved in alternative energy. These companies may be traditional energy production companies expanding into new production technologies or start-up companies involved in solar energy or fuel cells.

Graduates with the electronic systems emphasis area are able to work as members of engineering teams in applied design, product development, manufacturing, production or operations. They may also be employed in technical services capacities, including field engineering, marketing or sales.
Graduates with the integrated electronic systems emphasis area work in integrated circuit processing, testing, field applications and as system integrators.

Contact:
Dean, College of Technology & Applied Sciences
engrtech@asu.edu
TECH 101
480/727-1584

Applied Science (Emergency Management) (BAS) TSIMCEBAS
College of Technology and Innovation

Program Description: The B.A.S. programs are a flexible, 60-credit-hour degree designed specifically for students who have earned an A.A.S. from a regionally accredited institution. The concentration in emergency management opens the door to a challenging career as a professional emergency manager. The advancement of technology has created the potential for more devastating disasters than ever before. As a result, there is an increasing demand for emergency managers who have a solid foundation in scientific and technical disciplines as well as management skills.

Language Requirement: N | Program Fee: N

Admission Requirements: Students applying to this program must have completed an Associate of Applied Science (A.A.S.) degree from a regionally accredited institution. Not available for freshmen.

Contact:
Department of Technology Management
http://etmonline.asu.edu/
TECH 102
480/727-1100

Applied Science (Graphic Information Technology) (BAS) TSGITBAS
College of Technology and Innovation

Program Description: The B.A.S. programs are a flexible, 60-credit-hour degree designed specifically for students who have earned an A.A.S. from a regionally accredited institution. The concentration in Graphic Information Technology is designed to prepare graduates in the cross media graphic industry that includes: traditional printing and publishing, variable data printing, Internet and web development, commercial digital photography, engineering graphics, 3D modeling, multimedia, and animation.

Language Requirement: N | Program Fee: N
Admission Requirements: Students applying to this program must have completed an Associate of Applied Science (A.A.S.) degree from a regionally accredited institution. Not available for freshmen.

Career Opportunities: Graduates of the GIT program combine the technical course work with the management content to assume supervisory positions in industry such as: Production Manager, Designer, Web Developer, Commercial Photographer, Animation specialist, Quality Assurance Manager, Customer Service Representative, and Plant Manager.

Contact:
Dean, College of Technology & Applied Sciences
http://technology.asu.edu/git
DTM@asu.edu
Technology Center 102
480/727-1781

Applied Science (Internet & Web Development) (BAS) TSIWDBAS
College of Technology and Innovation

Program Description: The B.A.S. programs are a flexible, 60-credit-hour degree designed specifically for students who have earned an A.A.S. from a regionally accredited institution.

The concentration in Internet and Web development provides you with management, leadership, critical thinking and communication skills.

Language Requirement: N | Program Fee: N

Admission Requirements: Students applying to this program must have completed an Associate of Applied Science (A.A.S.) degree from a regionally accredited institution. Not available for freshmen.


The Web site design option prepares graduates for careers in the ever-expanding arena of Web site design and publishing. This degree is available as an entirely online degree program.

The Digital Publishing concentration prepares graduates for lead technical and entry-level management positions in the Printing and Publishing industry.

The Digital Media Management concentration prepares graduates for technical positions in industries implementing, planning, and producing interactive communications, integrated media, and multimedia for design, training, and marketing.
Applied Science (Manufacturing Technology & Management) (BAS) TSMETFBAS
College of Technology and Innovation

Program Description: The B.A.S. programs are a flexible, 60-credit-hour degree designed specifically for students who have earned an A.A.S. from a regionally accredited institution.

The manufacturing technology and management concentration under the B.A.S. program includes a series of manufacturing-related courses to provide a broad understanding of the complex world of manufacturing.

Language Requirement: N | Program Fee: N

Admission Requirements: Students applying to this program must have completed an Associate of Applied Science (A.A.S.) degree from a regionally accredited institution. Not available for freshmen.

Career Opportunities: Typically, students who graduate with this B.A.S. concentration work in manufacturing, production or operations.

Contact:
Department of Engineering Technology
http://technology.asu.edu/engrtech
engrtech@asu.edu
SIM 295
480/727-1584

Applied Science (Operations Management Technology) (BAS) TSIMCOBAS
College of Technology and Innovation

Program Description: The B.A.S. programs are a flexible, 60-credit-hour degree designed specifically for students who have earned an A.A.S. from a regionally accredited institution.

The concentration in operations management technology provides the tools needed for success as a manager. An effective manager is someone who can organize work, understands the work environment and can create a safe and healthful work environment, hires qualified workers that can do the job or can be trained/educated to perform the job, motivates and develops the workforce, effectively utilizes the resources available to create quality products and/or services and accomplishes his/her unit goals.
Admission Requirements: Students applying to this program must have completed an Associate of Applied Science (A.A.S.) degree from a regionally accredited institution. Not available for freshmen.

Career Opportunities: The BAS in Operations Management Technology prepares undergraduate students for supervisory and management functions in industry, manufacturing, public service, and other service organizations.

Contact:
Department of Technology Management
http://technology.asu.edu/omt
ets@asu.edu
TECH 102
480/727-1781

Applied Science (Software & Computing Systems) TSCSTBAS
College of Technology & Innovation

Program Description: The BAS program with a concentration in Software and Computing Systems is a 60-credit-hour degree designed specifically for students who have earned an AAS from a regionally accredited institution. Students are expected to have an AAS degree with coursework object-oriented programming, data structures, and microcomputer organization / assembly language programming. Students without this background will have to make up this background before they are prepared to enroll in upper-division major courses. Upper division coursework and laboratories are offered in two emphasis senior project:

Computer Systems Administration This area is designed to broaden and provide more in-depth knowledge in networked computer systems. Graduates from this concentration will be prepared to specify, install, maintain and administer various computer-networking systems.

Cyber Security This area is designed to broaden and provide more in-depth knowledge in securing systems, intrusion detection and various other aspects of information assurance and cyber forensics. Graduates from this concentration will understand the various threats to computer-networking systems, and best practices for securing systems from these threats.

Language Requirement: N | Program Fee: N

Admission Requirements: Students applying to this program must have completed an Associate of Applied Science (A.A.S.) degree from a regionally accredited institution. Not available for freshmen.
Career Opportunities: The BAS degree exposes students to advanced concepts and critical thinking skills that prepare them for expanded career opportunities and professional advancement. Graduates from this concentration are especially prepared to work in systems administration and cybersecurity for internet and telecommunication companies, a wide variety of information technology providers and information technology centers within most midsize to large corporations. Demand for graduates with these skills continues to rise even while the job market in many other areas is stagnant or declining.

Contact:
Dean, College of Technology & Applied Sciences
http://technology.asu.edu/engineering
Santan Hall 230
480/727-2727

Computer Systems (Computer Hardware Technology) (BS) TSCSTHBS
College of Technology and Innovation

Program Description: The computer hardware technology concentration, under the B.S. in computer systems, offers students the opportunity to develop knowledge and skills in the broad area of digital systems, computer hardware and computer network applications. Current computing industry needs drive the program's curriculum. The computer systems program uses mathematics, science and economics along with technological knowledge and skill in the application of programming languages, computer hardware, operating systems and networking to design, analyze, implement and test systems that integrate hardware and low-level software. The program is problem-based with exercises utilizing the languages, tools and methods of computing best practices.

Language Requirement: N | Program Fee: N

Career Opportunities: Graduates find employment opportunities as members of engineering teams working in computer hardware technology, systems development and system analysis. The current demand for highly trained software and computer hardware personnel is high, and the starting salaries for these employees are typically well above the average.

Contact:
Department of Engineering
http://technology.asu.edu/engineering/
egr@asu.edu
SANTN 230
480/727-2727

Computer Systems (Embedded Systems Technology) (BS) TSCSTMBS
College of Technology and Innovation
**Program Description:** The embedded systems technology concentration, under the B.S. in computer systems, provides students with an opportunity to develop knowledge and skills in the broad area of digital systems, computer hardware and computer network applications. Current computing industry needs drive the program's curriculum. Computer systems uses mathematics, science and economics along with technological knowledge and skill in the application of programming languages, computer hardware, operating systems and networking to design, analyze, implement and test systems that integrate hardware and low-level software. The program is problem-based with exercises utilizing the languages, tools and methods of computing best practices.

*Language Requirement: N | Program Fee: N*

*Career Opportunities:* Graduates find employment opportunities as members of engineering teams working in computer embedded systems technology, systems development and system analysis. The current demand for highly trained software and computer hardware personnel is high, and the starting salaries for these employees are typically well above the average.

**Contact:**
Department of Engineering
http://technology.asu.edu/engineering/
egr@asu.edu
SANTN 230
480/727-2727

**Electronics Engineering Technology (Alternative Energy Technologies) (BS) TSEETABS**

*Program Description:* The alternative energy technologies concentration, under the B.S. in electronics engineering technology, explores the demands of energy resources in the new economy. This program strives to educate individuals in the use of energy sources such as solar, wind, ocean, geothermal and biomass. At the heart of the program is the concept of the solar-hydrogen cycle, an energy scenario that comprises production of electricity from solar energy, and utilizing electricity to split water into its elemental parts. This program provides hands-on laboratory experience on several energy conversion and storage technologies including photovoltaics, fuel cells, batteries, electrolyzers and supercapacitors.

*Language Requirement: N | Program Fee: N*

*Career Opportunities:* The alternative energy technologies concentration is generally aimed at preparing graduates for careers in electric power conditioning, control systems, electronics and instrumentation. The specific positions might include system design, process control, application interface, technology analysis, policy analysis, environmental and reliability analysis.
**Program Description:** The field of electronics engineering technology applies mathematics, science and economics, along with state-of-the-art electronics techniques, materials and devices to solve technological problems and to produce useful products. The concentration in electronic systems, under the B.S. in electronics engineering, allows students to develop a broad-based knowledge of electrical/electronic fundamentals with an applications perspective. The Technology Accreditation Commission of ABET accredits this program.

**Language Requirement:** N | **Program Fee:** N

**Career Opportunities:** The electronic systems concentration prepares persons for careers in control, electronics, instrumentation and power systems applications. Engineering technologists typically work as members of engineering teams in applied design, product development, manufacturing, production or operations. They may also be employed in technical services capacities, including field engineering, marketing or sales.

**Contact:**
Department of Engineering Technology
http://technology.asu.edu/engrtech
engrtech@asu.edu
TECH 101
480/727-1584

**Program Description:** The integrated electronic systems concentration, under the B.S. in electronics engineering technology, covers the processes and technology used to develop, design, manufacture and exploit integrated electronic functions on silicon, in packages and on boards. The program provides hands-on laboratory experience in integrated circuit device fabrication and manufacturing in a setting that emulates the real industry.

**Language Requirement:** N | **Program Fee:** N

**Career Opportunities:** Upon completion of this concentration, graduates are prepared for careers in microelectronics industry. Graduates of this concentration
secure positions in integrated circuit processing, testing, field applications, system integrators and as members of diverse scientific engineering teams.

Contact:
Department of Engineering Technology
http://technology.asu.edu/engrtech
engrtech@asu.edu
TECH 101
480/727-1584

Electronics Engineering Technology (Telecommunications) (BS) TSEETTBS
College of Technology and Innovation
Not accepting applications.

Program Description: The telecommunications concentration, under the B.S. in electronics engineering technology, covers the processes and technology used to develop, design, implement and exploit reliable information transfer throughout the whole frequency spectrum with wired and wireless links. Applications include cable TV, fiber optic links and satellite transmission circuits and systems.

Language Requirement: N | Program Fee: N

Career Opportunities: Upon completion of this concentration, graduates are prepared for careers in communications industry. Graduates of this concentration secure positions as communications specialists, system integrator, testing, field applications and as members of diverse scientific engineering teams.

Contact:
Department of Engineering Technology
http://technology.asu.edu/engrtech
engrtech@asu.edu
TECH 101
480/727-1584

Engineering (BSE) TSEGRBSE
College of Technology and Innovation

Program Description: The emerging problems that engineers must solve require a broad set of interdisciplinary skills. Engineers are challenged with improving the quality of life for humankind, designing new innovative products, preparing for potential catastrophes, and providing society with technological leadership.

The B.S.E. is a unique program designed to produce creative engineers who can meet these challenges. The structure of this degree program is flexible and responsive to emerging engineering fields. The program integrates a broad knowledge base with study in multiple concentrations, providing both breadth and depth. This provides a greater flexibility in curricular and career pathways allowing
for multidisciplinary experiences and novel combinations of expertise. It approaches this task by a heavy reliance on projects in which student teams design and build devices that solve realistic problems.

Language Requirement: N | Program Fee: N

Career Opportunities: Engineers normally work as a member of a team that is designing, manufacturing and delivering technological objects and services. These teams are often multidisciplinary and employers often seek specific technical skills as opposed to a specific type of engineering degree. While large corporations and governments employ many engineers, others work in small companies or start companies of their own.

Contact:
Department of Engineering
http://technology.asu.edu/engineering/
egr@asu.edu
Santan 230
480/727-2727

Environmental Technology Management (BS) TSETMBS
College of Technology and Innovation

Program Description: This degree program is designed to provide graduates with the critical scientific, technical and management skills needed to solve the environmental challenges faced by industry and by society in today’s highly regulated and competitive business climate. The B.S. in environmental technology management curriculum includes courses in biology, chemistry, physics, calculus, computer science and statistics. The core of course work includes courses in:

- Emergency management.
- Environmental chemistry.
- Environmental law.
- International environmental management.
- Occupational hygiene.
- Technologies for control of air pollution, water treatment and hazardous waste remediation.

In addition to the technical course, students take management courses such as technical communications, project management and management dynamics.

Language Requirement: N | Program Fee: N

Career Opportunities: Graduates are prepared to be environmental managers in an industrial setting, to work in an environmental regulatory agency or to work for an environmental engineering firm. Industry and government entities value environmental technology management graduates because they have a practical and solid understanding of not only the scientific and technical aspects of controlling
environmental pollution, but also the economic, political and legal problems facing managers in today's business climate.

Contact:
Department of Technology Management
http://technology.asu.edu/dtm
ts@asu.edu
TECH 102
480/727-1781

Graphic Information Technology (BS) TSGITBS
College of Technology and Innovation

Program Description: The cross-media nature of the graphic information industry requires today's graduates to understand the full spectrum of graphic imaging and reproduction processes, and current business practices. The B.S. in graphic information technology degree program prepares graduates for a seamless career in the graphics industry from traditional printing and publishing to the Internet and multimedia. This is an intensive program of study emphasizing theory and hands-on laboratory practice. Students develop skills to plan and execute graphic solutions using visualization and prepress, engineering graphic standards, technical document design, higher-level graphic programming languages, computer drawing and illustration, commercial digital photography, multimedia and 3-D modeling, project management, quality assurance and e-commerce practices. The National Association of Industrial Technology professionally accredits the graphic information technology program.

Language Requirement: N | Program Fee: N

Career Opportunities: The graphic information technology concentration prepares graduates for technical and management positions in the diverse graphic communication and information technology industries, such as:

- Digital printing and publishing.
- Management of graphic information assets.
- Planning and evaluation of print, Internet, multimedia and computer-based communications.
- Quality assurance of graphic products.
- Technical/digital media production.

Contact:
Department of Technology Management
http://technology.asu.edu/dtm
ts@asu.edu
TECH 102
480/727-1781
Manufacturing Engineering Technology (Manufacturing Engineering Technology) (BS)  
TSMETBS  
College of Technology and Innovation

Program Description: The manufacturing engineering technology program emphasizes applied engineering practice through a B.S. program. In the program, engineering, math and science principles are applied to the solution of technical problems in a lecture/laboratory environment. The program's educational approach focuses on producing a work-ready graduate by incorporating knowledge practicing manufacturing engineers use in their work in industry. This is accomplished by students “learning by doing” via the use of equipment typical of that found in industry. The program's manufacturing laboratories are among the best in the nation. Industrial-strength manufacturing equipment, including computer numerical control (CNC) machining centers, welding, casting and forming, automation and material testing facilities support the curriculum. Laboratory sections are restricted to 12-15 or fewer students when possible. All faculty in the program have industry experience in addition to doctoral degrees.

Language Requirement: N | Program Fee: N

Career Opportunities: The B.S. in manufacturing engineering technology and its specialty concentration offer great flexibility in both type of work and location. Career employment opportunities include design and development, direct manufacturing support, quality control and assurance, sales and management. Companies large and small, in this region and outside, provide a wide range of opportunities for graduates.

Contact:  
Department of Engineering Technology  
http://technology.asu.edu/engrtech  
engrtech@asu.edu  
SIM 295  
480/727-1584

Manufacturing Engineering Technology (Mechanical Engineering Technology) (BS)  
TSMETMBS  
College of Technology and Innovation

Program Description: The manufacturing engineering technology program emphasizes applied engineering practice through a B.S. program. In the program, engineering, math and science principles are applied to the solution of technical problems in a lecture/laboratory environment. The program's educational approach focuses on producing a work-ready graduate by incorporating knowledge practicing manufacturing engineers use in their work in industry. This is accomplished by students “learning by doing” via the use of equipment typical of that found in industry. The program’s manufacturing laboratories are among the best in the nation.
Students can customize manufacturing engineering technology degree with a specialized mechanical concentration. The primary objective of the mechanical engineering technology concentration is to offer manufacturing students an emphasis in mechanics and design.

Language Requirement: N | Program Fee: N

Career Opportunities: Graduates often achieve employment as manufacturing engineers. The mechanical concentration enables students to also work in the design field where interfacing with manufacturing operations is an important part of the job.

Contact:
Department of Engineering Technology
http://technology.asu.edu/engrtech
engrtech@asu.edu
SIM 295
480/727-1584

Mechanical Engineering Technology (Aeronautical Engineering Technology) (BS)
TSMCEBS
College of Technology and Innovation

Program Description: The mechanical engineering technology program emphasizes applied engineering practice through a B.S. program. Students can customize their degree with a specialized concentration in aeronautical engineering technology. The aeronautical engineering technology concentration provides a specialty content area in aircraft airframe, propulsion and aircraft production and operations. It prepares students for employment in areas such as aircraft design and manufacturing, aerodynamics, propulsion and wind tunnel testing. However, aeronautical concentration graduates have a good general background in mechanical engineering technology and are not limited to employment opportunities in just the aviation industry.

Language Requirement: N | Program Fee: N

Career Opportunities: The B.S. in mechanical engineering technology and its specialty concentrations offer great flexibility in both type of work and location. Employment opportunities exist in companies that design, develop, manufacture, implement and improve products, machinery and systems. Employment areas include engineering design, manufacturing, research and development. Companies large and small, in this region and elsewhere, provide a wide range of opportunities for graduates. The aeronautical concentration prepares students for employment in areas such as aircraft design and manufacturing, aerodynamics, propulsion and wind tunnel testing.
Mechanical Engineering Technology (Automation Engineering Technology) (BS)

Program Description: The mechanical engineering technology program emphasizes applied engineering practice through a B.S. program. Students can customize their degree with a specialized concentration in automation engineering technology. The automation engineering technology concentration provides specialty content in mechanical automation. Automated assembly and testing are major components of most modern, high-volume mechanical systems and manufacturing operations. As a specialty area, this concentration provides students with an opportunity to develop knowledge and skill in the broad area of automation. It also dovetails well with the semiconductor industry where most process tools are highly automated.

Language Requirement: N | Program Fee: N

Career Opportunities: The B.S. in mechanical engineering technology and its specialty concentrations offer great flexibility in both type of work and location. Employment opportunities exist in companies that design, develop, manufacture, implement and improve products, machinery and systems. Employment areas include engineering design, manufacturing, research and development. Companies large and small, in this region and elsewhere, provide a wide range of opportunities for graduates. Automation concentration graduates have special knowledge focused on designing and implementing automated manufacturing and assembly equipment. This includes industrial robots. Thus graduates can work in the wide variety of companies that design, build or utilize high speed automated machinery. This includes the semiconductor, automotive or electronics industries.
Program Description: The mechanical engineering technology program emphasizes applied engineering practice through a B.S. program. Students can customize their degree a specialized concentration in automotive engineering technology. The automotive concentration provides comprehensive exposure to modern automobiles. The concentration’s course configuration is based on the functional structure of an automotive company and emphasizes system integration. Courses include an introduction to automotive engineering including interior and exterior body design, powertrains, chassis design, electrical and control systems, thermal design and system integration and testing.

Language Requirement: N | Program Fee: N

Career Opportunities: The B.S. in mechanical engineering technology and its specialty concentrations offer great flexibility in both type of work and location. Employment opportunities exist in companies that design, develop, manufacture, implement and improve products, machinery and systems. Employment areas include engineering design, manufacturing, research and development. Companies large and small, in this region and elsewhere, provide a wide range of opportunities for graduates. The automotive concentration provides students the additional option of being prepared to work for automotive companies, small or large, or their suppliers. Students have a broad background in vehicle engineering and can quickly contribute in a variety of positions within a company.

Contact:
Department of Engineering Technology
http://technology.asu.edu/engrtech
engrtech@asu.edu
SIM 295
480/727-1584

Mechanical Engineering Technology (Mechanical Engineering Technology) (BS)
TSEMCBS
College of Technology and Innovation

Program Description: The mechanical engineering technology program emphasizes applied engineering practice through a B.S. program. Students in this program are people who enjoy the practice of engineering. As graduates, they often work as members of design and development teams, cooperating with other people both in and outside of their company. The program emphasizes understanding how engineering principles are applied in practice. Graduates have an understanding of:

- Energy and power technology including alternative energy systems.
- The behavior of fluids.
- The design of machines and components.
- The selection of machine components and engineering measurements.
The mechanical engineering technology program has a practice-based approach and uses both laboratories and industry projects to make mechanical engineering “real” to students. Engineering, math and science principles are applied to the solution of technical problems in a lecture/laboratory environment.

Language Requirement: N | Program Fee: N

Career Opportunities: The B.S. in mechanical engineering technology and its specialty concentrations offer great flexibility in both type of work and location. Employment opportunities exist in companies that design, develop, manufacture, implement and improve products, machinery and systems. Employment areas include engineering design, manufacturing, research and development. Companies large and small, in this region and elsewhere, provide a wide range of opportunities for graduates.

Contact:
Department of Engineering Technology
http://technology.asu.edu/engrtech
engrtech@asu.edu
SIM 295
480/727-1524

Operations Management Technology (BS) TSOMTBS
College of Technology and Innovation

Program Description: The B.S. in operations management technology degree program prepares students for supervisory and administrative positions within a broad range of industries. Course work includes:

- Economics.
- Effective decision making.
- Ethical studies.
- Finance.
- Human resource management.
- Industrial organization.
- International management.
- Labor relations.
- Lean manufacturing.
- Legal issues in technology.
- Marketing.
- Operations management.
- Project management.
- Quality management.
- Safety management.

Students who lack previous work experience are encouraged to complete an industry internship before graduation.
Language Requirement: N | Program Fee: N

Career Opportunities: Career opportunities for graduates with a degree in operations management technology include, but are not limited to, positions in technical operations, technical sales, municipal management, industrial management, quality control, industrial planning, design, customer relations, personnel training and development. Degree outcomes advance careers in business and industry to include the manufacturing, healthcare and service sectors.

Contact:
Department of Technology Management
http://technology.asu.edu/dtm
ts@asu.edu
TECH 102
480/727-1781
Undergraduate Programs

Undergraduate Exploratory Programs (Program Descriptions)

University College

Exploratory Health & Life Sciences UCHSCIEXPL
University College

Program Description: The exploratory health and life sciences track affords students an opportunity to explore a variety of majors related to the health and life science professions. For a complete list of all majors included in this exploratory major, reference the Major Map.

Language Requirement: N | Program Fee: N

Admission Requirements: This is not a degree granting major. Transfer students with more than 45 transfer hours will not be admitted to this program and should select a different major on the application for admission.

Career Opportunities: Career opportunities are specific to the ultimate major of choice.

Contact:
University College
http://uc.asu.edu/
exploratory@asu.edu
4809654464

Exploratory Humanities, Fine Arts & Design UCHUFAEXPL
University College

Program Description: The exploratory humanities, fine arts and design track affords students an opportunity to explore a variety of majors related to the humanities, fine arts and design professions. For a complete list of all majors included in this exploratory major, reference the Major Map.

Language Requirement: N | Program Fee: N

Admission Requirements: This is not a degree granting major. Transfer students with more than 45 transfer hours will not be admitted to this program and should select a different major on the application for admission.

Career Opportunities: Career opportunities are specific to the ultimate major of choice.
Contact:
University College
http://uc.asu.edu/
exploratory@asu.edu
480/965-4464

Exploratory Math, Physical Sciences, Engineering & Technology UCEMTPEXPL
University College

Program Description: The exploratory mathematics, physical sciences, engineering and technology track affords students an opportunity to explore a variety of majors related to the mathematics, physical sciences, engineering and technology professions. For a complete list of all majors included in this exploratory major, reference the Major Map.

Language Requirement: N | Program Fee: N

Admission Requirements: This is not a degree granting major. Transfer students with more than 45 transfer hours will not be admitted to this program and should select a different major on the application for admission.

Career Opportunities: Career opportunities are specific to the ultimate major of choice.

Contact:
University College
http://uc.asu.edu/
exploratory@asu.edu
480/965-4464

Exploratory Social & Behavioral Sciences UCSBSEXPL
University College

Program Description: The exploratory social and behavioral sciences track affords students an opportunity to explore a variety of majors related to the social and behavioral sciences and business-related careers. For a complete list of all majors included in this exploratory major, reference the Major Map.

Language Requirement: N | Program Fee: N

Admission Requirements: This is not a degree granting major. Transfer students with more than 45 transfer hours will not be admitted to this program and should select a different major on the application for admission.

Career Opportunities: Career opportunities are specific to the ultimate major of choice.

Contact:
University College
Undergraduate Programs

Undergraduate Programs - Other (Program Descriptions)

Art Exploratory FAARTPREBA

Program information not available at time of publication.

Contact Information:
Herberger Institute of Design and the Arts
http://herbergercollege.asu.edu/

Business – Bachelor of Arts (BA) BABUSBA
W. P. Carey School of Business

Not accepting applications.

Program Description: Coming soon! ASU will soon start accepting applications to the new BA in Business in the W.P. Carey School of Business.

The Bachelor of Arts (BA) in Business is an innovative, interdisciplinary program providing attractive concentrations that are valuable in a business context. Students in the Bachelor of Arts in Business program will take a set of lower-division "skill" courses (Accounting, Computer Information Systems, Economics, Mathematics, and Statistics), the business core (Finance, Legal and Ethical Studies, Management, Marketing, and Supply Chain Management), plus courses in a specific major outside of the business school that we believe will be valuable in a business context.

In consultation with our university partners, we have identified four concentration areas, Communication, Sustainability, Tourism, and Urban Policy, that will produce graduates to meet market demands. Students must select a concentration by the end of their second semester. More may be added as the program evolves.

Freshman and transfer students must submit either a SAT Reasoning test scores or an ACT test score (we do not require the writing portion of these tests) by the end of the first semester in the program. There is no minimum score requirement.

Language Requirement: N | Program Fee: N

Admission Requirements: Transfer Students: This major has admission requirements in addition to those of the university. 3.0 GPA for all transfer work.

Freshmen Students: Freshman admission requirements for this program are the same as the University's freshman admission requirements.
Career Opportunities: The Bachelor of Arts in Business is intended to prepare students for positions in a variety of professions where business plays an important role in ensuring success. The program will produce graduates with the capability and motivation for continued learning throughout their careers.

Contact:
Dean, W.P. Carey School of Business
http://wpcarey.asu.edu/

Dance Interview FADANPRE

Program information not available at time of publication.

Contact Information:
Herberger Institute of Design and the Arts
http://herbergercollege.asu.edu/

Music Audition FAMUSPRE

Program information not available at time of publication.

Contact Information:
Herberger Institute of Design and the Arts
http://herbergercollege.asu.edu/

Pre-Health/Pre-Med Professions LAMEDPRE
College of Liberal Arts and Sciences

Program Description: Students who are interested in pursuing a medical, dental or other health career can major in any area they wish, as long as they fulfill the particular professional school’s prerequisite requirements. Successful applicants have majored in such diverse fields as:

- Art
- Biology
- Chemistry
- Economics
- Engineering
- Music
- Psychology

The College of Liberal Arts and Sciences health career services office provides ongoing academic career advising for pre-health students who wish to pursue a career in:

- Chemistry
Medicine
Optometry
Pharmacy
Physical therapy
Podiatry

Language Requirement: N | Program Fee: Y

Admission Requirements: Students must meet the admission requirements of the major to which they apply.

Career Opportunities: The health career services office is devoted to helping students make important decisions about their futures and assisting them with the technical aspects of the application process for professional health programs. The very competitive nature of admission to these programs makes it essential for students to work closely with the office from the beginning of their studies at ASU.

Contact:
http://prehealth.asu.edu/
prehealth@asu.edu
FULTN 110
480/965-2365

Pre-Law LALAWPRE
College of Liberal Arts and Sciences

Program Description: This program is designed for students interested in pursuing a legal career. Law school admission policies do not favor one major over another, provided the pre-law student’s chosen major requires substantive course work. Instead of recommending a single program, the Association of American Law Schools suggests that an undergraduate education develop certain skills, qualities, knowledge and insights essential to the law student and ultimately to the profession. At the point that the student is ready to take the LSAT and begin the application process, he or she is encouraged to meet with a pre-law professional either in the student's major or in the Office of Student and Academic Programs.

Language Requirement: N | Program Fee: N

Career Opportunities: Pre-law advisors can help students make important decisions about their futures and assist them with the technical aspects of the application process for law school programs.

Contact:
http://prelaw.asu.edu/
clasundergrad@asu.edu
FULTN 110
480/965-6506