### Academic Programs

#### Concurrent and Dual Degrees

<table>
<thead>
<tr>
<th>Degrees</th>
<th>Administered By</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Administration (MBA)/Health Sector Management (MHSM) [6]</td>
<td>W. P. Carey School of Business [3]</td>
</tr>
<tr>
<td>Business Administration (MBA)/Industrial Engineering (MSE)</td>
<td>W. P. Carey School of Business [3]/Ira A. Fulton Schools of Engineering [5]</td>
</tr>
<tr>
<td>Business Administration (MBA)/Information Management (MS) [7]</td>
<td>W. P. Carey School of Business [3]</td>
</tr>
<tr>
<td>Business Administration (MBA)/International Management (MIM)</td>
<td>W. P. Carey School of Business [3]/Carlos III University of Madrid [8] (Spain); Graduate School of Business Administration [9] (Peru); Graduate School of Commerce [10] (France); and Monterrey Institute for Technical and Superior Studies [11], Mexico State Campus (Mexico)</td>
</tr>
<tr>
<td>Business Administration (MBA)/Master of Engineering (MEng) Specialization in Embedded Systems</td>
<td>W. P. Carey School of Business [3]/Ira A. Fulton Schools of Engineering [5]</td>
</tr>
<tr>
<td>Business Administration (MBA)/Master of Engineering (MEng) Specialization in Software Engineering</td>
<td>W. P. Carey School of Business [3]/Ira A. Fulton Schools of Engineering [5]</td>
</tr>
<tr>
<td>Business Administration (MBA)/Master of Engineering (MEng) Specialization in Systems Engineering</td>
<td>W. P. Carey School of Business [3]/Ira A. Fulton Schools of Engineering [5]</td>
</tr>
<tr>
<td>Business Administration (MBA)/Taxation (MTax)</td>
<td>W. P. Carey School of Business [3]</td>
</tr>
<tr>
<td>Construction with a concentration in Management (MS)/Maestria en Ciencias con Especialidad en Ingenieria y Administracion de la Construccion</td>
<td>Ira A. Fulton Schools of Engineering [5]/Instituto Tecnologico y de Estudios Superiores de Monterrey, Monterrey Campus (ITESM)</td>
</tr>
<tr>
<td>Law (JD)/Business Administration (MBA)</td>
<td>Sandra Day O’Connor College of Law [12]/W. P. Carey School of Business [3]</td>
</tr>
</tbody>
</table>
Law (JD)/Health Sector Management (MHSM)  Sandra Day O’Connor College of Law [12]/W. P. Carey School of Business [3]

Law (JD)/Justice Studies (PhD)  Sandra Day O’Connor College of Law [12]/Justice and Social Inquiry [13]

Law (JD)/Medicine (MD) [14]  Sandra Day O’Connor College of Law [12]/Mayo Medical School

Law (JD)/Psychology (PhD)  Sandra Day O’Connor College of Law [12]/Department of Psychology [15]

Public Administration (MPA)/Social Work (MSW) [16]  College of Public Programs [17]

* 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

<table>
<thead>
<tr>
<th>Degrees</th>
<th>Administered By</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting (BS)/Accountancy (MAcc)</td>
<td>W. P. Carey School of Business [1]</td>
</tr>
<tr>
<td>Accounting (BS)/Taxation (MTax)</td>
<td>W. P. Carey School of Business [1]</td>
</tr>
<tr>
<td>Aerospace Engineering (BSE/MS)</td>
<td>Ira A. Fulton Schools of Engineering [2]</td>
</tr>
<tr>
<td>Aerospace Engineering (BSE/MSE)</td>
<td>Ira A. Fulton Schools of Engineering [2]</td>
</tr>
<tr>
<td>American Studies (BA)/Interdisciplinary Studies (MA)</td>
<td>New College of Interdisciplinary Arts and Sciences [3]</td>
</tr>
<tr>
<td>Biochemistry (BS/MS) - Emphasis in Medicinal Chemistry</td>
<td>College of Liberal Arts and Sciences [4]</td>
</tr>
<tr>
<td>Bioengineering (BSE/MS)</td>
<td>Ira A. Fulton Schools of Engineering [2]</td>
</tr>
<tr>
<td>Biological Sciences (BS)/Biology (MS)</td>
<td>College of Liberal Arts and Sciences [4]</td>
</tr>
<tr>
<td>Civil Engineering (BSE)/Civil and Environmental Engineering (MS)</td>
<td>Ira A. Fulton Schools of Engineering [2]</td>
</tr>
<tr>
<td>Civil Engineering (BSE)/Civil and Environmental Engineering (MSE)</td>
<td>Ira A. Fulton Schools of Engineering [2]</td>
</tr>
<tr>
<td>Communication Studies (BA or BS/MA)</td>
<td>New College of Interdisciplinary Arts and Sciences [3]</td>
</tr>
<tr>
<td>Computational Mathematical Sciences (BS)/Mathematics (MA)</td>
<td>College of Liberal Arts and Sciences [4]</td>
</tr>
<tr>
<td>Computer Science (BS/MS) [S]</td>
<td>Ira A. Fulton Schools of Engineering [2]</td>
</tr>
<tr>
<td>Construction (BS/MS)</td>
<td>Ira A. Fulton Schools of Engineering [2]</td>
</tr>
<tr>
<td>Criminal Justice and Criminology (BS)/Criminal Justice (MA)</td>
<td>College of Public Programs [7]</td>
</tr>
<tr>
<td>Criminal Justice and Criminology (BS)/Criminology and Criminal Justice (MS)</td>
<td>College of Public Programs [7]</td>
</tr>
<tr>
<td>Electrical Engineering (BSE/MSE)</td>
<td>Ira A. Fulton Schools of Engineering [2]</td>
</tr>
<tr>
<td>Chemical Engineering (BSE/MS or MSE)</td>
<td>Ira A. Fulton Schools of Engineering [2]</td>
</tr>
<tr>
<td>Ethnicity, Race and First Nation Studies (BA)/Interdisciplinary Studies (MA)</td>
<td>New College of Interdisciplinary Arts and Sciences [3]</td>
</tr>
<tr>
<td>Program</td>
<td>College/Institute</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>--------------------------------------------------------</td>
</tr>
<tr>
<td>Family and Human Development (BS/MS)</td>
<td>College of Liberal Arts and Sciences [4]</td>
</tr>
<tr>
<td>Global Health (BA/MA)</td>
<td>College of Liberal Arts and Sciences [4]</td>
</tr>
<tr>
<td>History (BA/MA)</td>
<td>College of Liberal Arts and Sciences [4]</td>
</tr>
<tr>
<td>Industrial Engineering (BSE/MS or MSE)</td>
<td>Ira A. Fulton Schools of Engineering [2]</td>
</tr>
<tr>
<td>Integrative Studies (BA)/Interdisciplinary Studies (MA)</td>
<td>New College of Interdisciplinary Arts and Sciences [3]</td>
</tr>
<tr>
<td>Journalism and Mass Communication (BA)/Mass Communication (MMC)</td>
<td>Walter Cronkite School of Journalism and Mass Communication [8]</td>
</tr>
<tr>
<td>Materials Science and Engineering (BSE/MS)</td>
<td>Ira A. Fulton Schools of Engineering [2]</td>
</tr>
<tr>
<td>Materials Science and Engineering (BSE/MSE)</td>
<td>Ira A. Fulton Schools of Engineering [2]</td>
</tr>
<tr>
<td>Mathematics (BS/MA)</td>
<td>College of Liberal Arts and Sciences [4]</td>
</tr>
<tr>
<td>Mechanical Engineering (BSE/MS or MSE)</td>
<td>Ira A. Fulton Schools of Engineering [2]</td>
</tr>
<tr>
<td>Parks and Recreation Management (BS)/Recreation and Tourism Studies (MS)</td>
<td>College of Public Programs, School of Community Resources and Development [9]</td>
</tr>
<tr>
<td>Urban Planning (BSP)/Urban and Environmental Planning (MUEP)</td>
<td>College of Liberal Arts and Sciences [4], Herberger Institute for Design and the Arts [10]</td>
</tr>
<tr>
<td>Political Science (BA/MA)</td>
<td>College of Liberal Arts and Sciences [4]</td>
</tr>
<tr>
<td>Social and Behavioral Sciences (BA or BS)/Interdisciplinary Studies (MA)</td>
<td>New College of Interdisciplinary Arts and Sciences [3]</td>
</tr>
<tr>
<td>Sociology (BS/MA)</td>
<td>College of Liberal Arts and Sciences [4]</td>
</tr>
<tr>
<td>Tourism Development and Management (BS)/Recreation and Tourism Studies (MS)</td>
<td>College of Public Programs, School of Community Resources and Development [9]</td>
</tr>
<tr>
<td>Women's Studies (BA or BS)/Interdisciplinary Studies (MA)</td>
<td>New College of Interdisciplinary Arts and Sciences [3]</td>
</tr>
</tbody>
</table>

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)
Online Degree Search Title: Accountancy (MACC)

Program Description: The Master of Accountancy (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.

Degree Requirements: 30 credit hours including a Capstone (ACC 588)

The M.Acc. program is a cohort-based, full-time program which requires a bachelor's degree in accounting and spans three, 10-week trimesters (Aug. through May). Applicants must complete program prerequisites prior to admission to the program. Refer to the School of Accountancy website for a current listing of required course prerequisites.

Graduate-level accounting courses are only open to students admitted to the graduate program.

Admission Requirements:

1. All applicants are required to submit an online application to the Graduate College. Complete application instructions may be obtained from the school Web site.

2. Applicants must submit scores from the Graduate Management Admissions Test (GMAT).

3. All applicants are also required to submit the supplemental application materials required by the School.

4. 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 Information:
Business, W. P. Carey School of
School of Accountancy
http://wpcarey.asu.edu/accounting
wpcareyacc@asu.edu
BA 223Q
480/965-3631

Agribusiness, MS (AGAGRIBMS)
Online Degree Search Title: Agribusiness (Polytechnic Campus) (MS)

Program Description: The Morrison School of Management and Agribusiness at the Polytechnic campus, offers the M.S. in agribusiness. 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.
Degree Requirements: 36 credit hours and a Thesis, 36 credit hours including a Capstone Course (AGB 589), 36 credit hours, a Written Comprehensive Exam and including a Capstone Course (AGB 589) (MIP)

Core requirements for this program include 21 credit hours of course work. 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 IAGB 528 Advanced Agribusiness Marketing (3) AGB 560 Advanced Agribusiness Management Systems (3) AGB 561 Agribusiness Research Methods (3) Semester IIAGB 511 Advanced Agribusiness Management (3) AGB 532 Advanced Agribusiness Finance (3) AGB 570 Managerial Economics for Agribusiness (3) Semester IIIAGB 589 Agribusiness Capstone (3) 500-level AGB emphasis electives (6) Semester IVNonthesis 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 submit the Graduate College online application and 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 Information:
Business, W. P. Carey School of
Morrison School of Agribusiness and Resource Mgmt
http://www.poly.asu.edu/msma
morrison@asu.edu
PRLTA 330X
480/727-1312

Business Administration (Accountancy), PHD (BAACCTPHD)
Online Degree Search Title: Accountancy (PhD)

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:

- Auditing.
- Financial accounting.
- Managerial accounting.
- Taxation.

This program allows students to develop the capability to review, analyze, conduct and publish research through a series of research seminars, 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.
Degree Requirements: 84 credit hours, a Dissertation and a Written Comprehensive Exam

Plan of Study

This program consists of 12 hours of dissertation and 72 hours of course work and research. 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 academic unit's discretion, students may apply up to 30 credit hours from a previously awarded master's degree toward their doctoral plan of study.

Students work with their study committees to determine an appropriate plan of study. Common areas of functional specialization among doctoral studies include financial and managerial accounting, auditing 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 12 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 plan 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 director of Ph.D. programs 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 Information:
Business, W. P. Carey School of
Business Administration
http://wpcarey.asu.edu/accounting
wpcareyacc@asu.edu
BA 223Q
480/965-3631
Business Administration (Agribusiness), PHD (BAAGRIPHD)

Online Degree Search Title: Computer Information Systems (PhD)

Program Description: The objective of the agribusiness Ph.D. program is to produce scholars who are trained in the latest methods of business and economic analysis and who can apply these methods to critical research problems faced by firms in the agribusiness industry. With this background, graduates with a concentration in agribusiness are qualified to assume teaching and research positions at top-ranked research universities.

Agribusiness Ph.D. students are involved with research in:

- Consumer behavior in food markets.
- Derivatives, commodity trading and risk management.
- Food and fiber supply-chain management.
- International agricultural trade and policy.
- Strategic marketing by food retailers.

Degree Requirements: 84 credit hours, a Dissertation and a Written Comprehensive Exam.

Plan of Study

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 plan of study.

Agribusiness Ph.D. students are expected to develop a program of study that consists of three elements:

1. A core of theory and quantitative methods course work in economics and management from the W. P. Carey School.
2. Advanced courses in at least one of economics, finance, marketing, supply chain management or management from the W. P. Carey School.
3. A three-course sequence of Ph.D.-level theory and methods as applied to issues and concepts specific to the agribusiness sector from the Morrison School of Management and Agribusiness.

The agribusiness Ph.D. is designed to allow "flexibility with focus," so each student's program of study is unique, but is designed to produce the highest level of research competency in the student's chosen area of interest.

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 GRE or 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 Information:
Business, W. P. Carey School of Business Administration
http://wpcarey.asu.edu/grad/phd
wpcareyphd@asu.edu
BA 171
480/965-3368

Business Administration (Computer and Information Systems), PHD (BAINFSYPHD)

Online Degree Search Title: Computer Information Systems (PhD)

Program Description: The objective of the Ph.D. in business administration with a concentration in computer information systems is to prepare scholars for careers at leading educational institutions. This program allows students to develop the capability to review, analyze, conduct and publish research through a series of seminars and additional supporting course work. In addition, Ph.D. students participate in ongoing research projects in conjunction with faculty members in the Department of Information Systems.

Degree Requirements: 84 credit hours, a Dissertation and a Written Comprehensive Exam.

Plan of Study

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 program committees to determine an appropriate program of study. Common areas of specialization for doctoral studies include:

- Decision support systems.
- Database management systems.
- Artificial intelligence in business.
- Systems analysis and design.
- Distributed information systems.
- Data mining.
- IT infusion and human interface.

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: Please review the Graduate College Web site for specific ASU admission requirements at http://graduate.asu.edu/admissions/

Applications are reviewed by the department's faculty committee using a portfolio approach. The committee will review each individual application and examine all parts equally.

Contact Information:
Business, W. P. Carey School of
Business Administration
http://wpcarey.asu.edu/is
wpcareyis@asu.edu
BA 301P
480/965-3252

Business Administration (Finance), PHD (BAFINANPHD)
Online Degree Search Title: Finance (PhD)

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.

Degree Requirements: 84 credit hours, a Dissertation and a Written Comprehensive Exam

Plan of Study
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 résumé. 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 Information:
Business, W. P. Carey School of Business Administration
http://wpcarey.asu.edu/fin
wpcareyfin@asu.edu
BAC 519
480/965-3131

Business Administration (Management), PHD (BAMGMTPHD)

Online Degree Search Title: Management (PhD)

Program Description: The Department of Management offers students the opportunity to obtain a Ph.D. in business with a concentration in management. Although management is a broad field, this doctoral program is best suited for students interested in specializing in organizational behavior and/or strategic management. The doctoral program places primary emphasis on the development of research competence and also emphasizes teaching as a vehicle to academic professionalism. The mission of the program is to provide an environment that is conducive to the development of scholars who are prepared to assume the diverse responsibilities of positions at leading research universities.
**Degree Requirements:** 84 credit hours, a Dissertation and a Written Comprehensive Exam.

**Plan of Study**
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.

Doctoral students are required to commit full-time attention to the program, at least until they have successfully defended the dissertation proposal. Full-time enrollment entails a minimum of six hours of course work in any regular academic semester. To reach a total of 84 credit hours for the program, most students enroll for nine to 12 credit hours per semester. In addition, students work closely with faculty members through a research assistantship. The program is relatively small with an emphasis on high quality; we provide a great deal of individual attention and mentoring to our students.

**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 proposal.

**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 plan of study or one hour of appropriate graduate-level credit (such as 795 Continuing Registration) during the semester (including summer sessions) 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 research interests and those of 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 Information:
Business, W. P. Carey School of
Business Administration
http://wpcarey.asu.edu/mgt/degree/phd-program-description.cfm
wpcareymgt@asu.edu
BA 323  
480/965-3431  

**Business Administration (Marketing), PHD (BAMARKPHD)**  

Online Degree Search Title: Marketing (PhD)  

**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.

**Degree Requirements:** 84 credit hours, a Dissertation and a Written Comprehensive Exam

**Plan of Study**

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 Information:
Business, W. P. Carey School of Business Administration
http://www.wpcarey.asu.edu/mkt
wpamacareykt@asu.edu
BAC 460
480/965-3621

Business Administration (Supply Chain Management), PHD (BASCMPHD)
Online Degree Search Title: Supply Chain Management (PhD)

Program Description: The objective of the Ph.D. in business administration with a concentration in supply chain management (SCM) is to prepare scholars to conduct high-quality research and teach in the field of supply chain management. Supply chain management incorporates the core areas of logistics, operations management and sourcing/purchasing. It is a full-time residential program for students whose career goals are full-time university research and teaching upon completion of the degree. Students are trained to develop the capability to recognize SCM-related problems, frame these problems into research questions, and address them in a scholarly way. Students are encouraged to exercise their creativity and critical thinking. They are required to review, analyze, conduct, and publish research through a series of doctoral seminars and other course work that supplements and complements students’ abilities and desires.

Degree Requirements: 84 credit hours, a Dissertation and a Written Comprehensive Exam

The Ph.D. program consists of 12 hours in the basic program, at least 30 hours in the advanced program, and 30 hours of additional course work. Also required are 12 hours of dissertation. The SCM department requires doctoral students to follow the lock-step curriculum during the first two years. The curriculum will offer students 48 credit hours of formal graduate course work in residence at ASU. This minimum leaves a maximum of 12 credits to be imported from previous graduate course work. Students are encouraged to continue taking the methodology courses beyond the first two years.

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 Information:
Business, W. P. Carey School of Business Administration
http://wpcarey.asu.edu/scm
wpcarey.scm@asu.edu
BA 446
480/965-6044

Commerce, MS (BACMRMS)
Online Degree Search Title: Commerce (MS)

Program Description: Arizona State University's W. P. Carey School of Business Master of Science in commerce is an innovative business degree program providing new liberal arts, science, engineering and other non-business graduates with the intellectual and professional skills needed to succeed in today's business environment. The M.S. in commerce is a one-year program designed to develop critical thinking skills as applied to fundamental business procedures and processes, leadership skills, and to bridge the gap between academic preparation and real-world business applications. Courses will be offered on a trimester basis with the students taking four courses per trimester. Graduates of this program will have the capability and motivation to rapidly progress in any profession where business plays an important role. The M.S. in commerce program differs substantially from a traditional M.B.A. program in that no work experience is required for admission and the course work is completed in one year giving a broad overview of the essentials of managerial decision making.

Degree Requirements: 36 credit hours including a Capstone Course (MGT 591)
The following three credit courses are required:

- ACC 502 Financial Accounting
- CIS 502 Information Systems
- ECN 501 Statistics for Managers
- ECN 502 Managerial Economics
- FIN 502 Managerial Finance
- MGT 502 Organization Theory and Behavior
- MGT 588 Strategic Leadership
- MGT 587 Topic: Entrepreneurial Consulting Projects
- MGT 591 Topic: Negotiations
- MGT 591 Topic: Leadership
- MKT 502 Marketing Management
- SCM 591 Topic: Sustainability & Social Responsibility

Admission Requirements: The W. P. Carey School of Business seeks exceptional individuals who have completed all of their undergraduate degree requirements prior to enrolling in the M.S. in commerce program. This program is open only to non-business majors who want to add business knowledge and skills to their portfolio. Applicants must be highly motivated and have strong intellectual capabilities. The admissions committee looks for outstanding academic credentials, character qualities such as maturity, integrity, leadership and diversity in perspectives and experiences.
Students must complete the online application form to apply to the Graduate College for admission to the program. They must also submit the following to the W. P. Carey School:

1. Resume.
2. Statement of purpose.
3. Official transcripts of all course work completed at institutions other than ASU.
4. GMAT and/or GRE test scores.
5. One letter of recommendation.

Applicants should have a cumulative GPA of 3.50 or higher and a competitive GMAT or GRE score. Applicants with a GPA below 3.50 should have an overall GMAT score of 690 or an overall GRE score of 1400. Students with an undergraduate degree in business are not eligible to apply. International applicants must meet the Graduate College’s English proficiency requirements. Application deadlines: Priority will be given to applicants who apply early. For a list of deadlines please visit the school Web site.

Contact Information:
Business, W. P. Carey School of
Dean, W. P. Carey School of Business
http://wpcarey.asu.edu/ms-commerce/
wpcarey.mscommerce@asu.edu
BAC 160
480/965-3332

Economics, PHD (BAECONPHD)
Online Degree Search Title: Economics (PhD)

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.

Degree Requirements: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

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, the Ph.D. student must accomplish five tasks:

1. Meet the qualification requirement.
2. Present at least one area of emphasis.
3. Pass the comprehensive examination.

See the Department of Economics graduate student handbook for details concerning these tasks.

Admission Requirements:

1. All applicants to the Ph.D. program in economics must have a bachelor's degree or the equivalent.
2. 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.
3. 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.
4. 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.

5. 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 Information:
Business, W. P. Carey School of
Department of Economics
http://wpcarey.asu.edu/grad/phd/phd_economics.cfm
wpcareyecn@asu.edu
BAC 659
480/965-3531

Health Sector Management, MHSM (BADAYMHSM)
Online Degree Search Title: Health Sector Management (MHSM)

Program Description: The School of Health Management and Policy offers an evening program leading to the Master of Health Sector Management (M.H.S.M.) with a variety of elective courses and is offered cooperatively with the W. P. Carey School of Business MBA full-time program, allowing students the option to earn a concurrent M.H.S.M./M.B.A. In the managerial epidemiology and the managing clinical trials courses students learn how to use evidence, gathered in the course of clinical and epidemiological research, to make managerial decisions that enhance delivery of health care, improve system performance, and maximize safety and clinical outcomes. The comparative health policy and health policy management and evaluation courses provide an understanding of how health policy affects both the business of health care and economic health of businesses. Students are trained to manage the implementation and evaluation of health policy in a variety of settings, including: federal and state agencies, health consulting firms and advocacy groups. Health management courses provide an understanding of how a variety of approaches can be applied to a wide spectrum of health care delivery and financing settings.

Degree Requirements: 48 credit hours, an Applied Project (Internship Paper with an Oral Presentation) and including a Capstone (HSM 584)

Students take:

1. Business core. (15)
2. Health care core. (24)
3. Electives. (6)
4. Internship. (3)

Students may concentrate in:

1. Managerial epidemiology, learning how to use epidemiologic data to make managerial decisions that enhance delivery of health care, improve system performance and maximize safety and clinical outcomes.
2. Health policy, learning how to manage the implementation, evaluation and revision of health policies to utilize health resources most efficiently.
3. Or, students may choose a set of electives across concentrations.

Admission Requirements: Applications are submitted online to the Graduate College. For general requirements, see admission to the Graduate College. Applicants are required to submit evidence of their ability to pursue a graduate degree program successfully. All applicants must submit a test score from either the GMAT, GRE, PCAT, DAT, or the MCAT, but the GMAT is recommended. Licensed physicians with an M.D. or D.O. from a U.S. accredited medical school are not required to provide a test score, nor are licensed dentists with a D.D.S. from a U.S. accredited dental school nor
applicants with a Doctor of Pharmacy degree from a U.S. accredited school. Applicants who hold a Ph.D. in which they have had one or more graduate courses in statistics, mathematics, accountancy or finance are not required to provide a test score. Applicants to the M.H.S.M. program submit one application for the M.H.S.M./M.B.A. Three letters of recommendation are required. In addition, applicants are required to provide answers to essay questions.

**Contact Information:**
Business, W. P. Carey School of
Department of Economics
http://www.wpcarey.asu.edu/shmp/index.cfm
wpcareyhmp@asu.edu
BA 318
480/965-7778

**Health Sector Management, MHSM (BADAYMHSM)**

**Online Degree Search Title:** Health Sector Management (MHSM)

**Program Description:** The M.H.S.M. is the only accredited health management program in Arizona. The two-year program prepares students for leadership roles in the broad spectrum of organizations in the health sector. The curriculum is designed for full-time students or working professionals; all courses are in the evening. The program takes two years to complete. The M.H.S.M. emphasizes a strong business core, identical to the core of the W. P. Carey M.B.A. programs, and close engagement with leaders of health organizations throughout Arizona.

**Degree Requirements:** 48 credit hours, an Applied Project (Internship Paper with an Oral Presentation) and including a Capstone (HSM 584).

Students take:

- Fifteen credit hours business core.
- Twenty-four credit hours health care core.
- Six hours electives.
- Three hours internship.

Students may concentrate in:

1. Managerial epidemiology, learning how to use epidemiologic data to make managerial decisions that enhance delivery of health care, improve system performance and maximize safety and clinical outcomes.
2. Health policy, learning how to manage the implementation, evaluation and revision of health policies to utilize health resources most efficiently.
3. Or, students may choose a set of electives across concentrations.

**Admission Requirements:** Applications must be submitted online to the Graduate College and meet all Graduate College admissions requirements. All applicants must possess a bachelor's degree from an accredited college/university or international equivalent at the time they commence their graduate studies. A minimum undergraduate 3.00 GPA is required. Applicants from countries whose native language is other than English must meet the university's English proficiency requirements. Applicants must submit:

1. Transcripts from all colleges universities.
2. One application for the M.H.S.M.
3. Three letters of recommendation.
4. Responses to three essay questions.
5. A test score from either the GMAT, GRE, MCAT, PCAT, or DAT; the GMAT is preferred. (Applicants with a Ph.D., M.D., D.O., Pharm.D., or D.D.S. are not required to submit a test score.)

**Contact Information:**
Business, W. P. Carey School of
Information Management, MS (BAINFOMS)

Online Degree Search Title: Information Management (MS)

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.

Degree Requirements: MSIM Evening: 30 credit hours and an Applied Project, or MSIM/MBA Dual Degree: 30 credit hours and an Applied Project

The M.S.I.M. is a one-year program 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:

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 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 Information:
Business, W. P. Carey School of
Department of Information Systems
http://www.wpcarey.asu.edu/is/msim
wpcareymsim@asu.edu
BA 301P
480/965-3252

Real Estate Development, MREDev (ARREMREDEV)

Online Degree Search Title: Real Estate Development (MRED)

Program Description: The Arizona State University Master of Real Estate Development (M.R.E.D.) is one of the leading programs offered through the nationally ranked and recognized W. P. Carey School of Business, in partnership with the Sandra Day O’Connor College of Law, the Herberger Institute for Design and the Arts and the Del E. Webb School of Construction. The M.R.E.D. program offers a truly transdisciplinary approach to real estate development education through a full-immersion curriculum that explores the development process in its entirety. The program partnerships are the key to encompassing all facets of the real estate development process. Students receive core knowledge through a transdisciplinary curriculum that offers real-world application through synthesis projects utilizing actual locations with variable situations. During the one-year program, students learn how to locate, analyze and consider the physical, legal, economic, political and financial conditions impacting the use of property and the critical analysis required for a successful project. Graduates of the M.R.E.D. program are prepared to undertake mid- and senior-level management responsibility for small to large development and investment companies. They enter the real estate development industry with a keen awareness of developing projects that are financially viable, economically desirable, politically
acceptable, environmentally respectful, socially responsible and contextually and artfully designed. For more information, visit the program Web site.

**Degree Requirements**: 30 credit hours and an Applied Project

This program is offered in an intense format over two academic semesters. Students take required core course modules in a variety of formats, including:

- Face-to-face classroom instruction.
- Independent research.
- Group work.
- Weekly assignments.
- Topical quizzes.
- Comprehensive module exams to assess aggregate knowledge.

**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.

Additional supplemental application materials include:

1. A GMAT, LSAT, GRE test score or a petition to waive (if the applicant has five or more years of industry relevant experience).
2. Letters of recommendation.
3. A personal statement.

**Contact Information**:
Business, W. P. Carey School of Department of Marketing
http://mred.wpcarey.asu.edu/
mred@asu.edu
CAM 205
480/965-8517

**Supply Chain Management (certificate), CERT (BASCMCERT)**

Online Degree Search Title: Supply Chain Management (Grad Certificate)

**Program Description**: The certificate is composed of five (three credit) online courses in supply chain management, each six weeks in length (five content weeks and one reading/final assignment completion week), each of which will be offered twice in a calendar year. The content of the courses is tightly integrated and offers a comprehensive coverage of core topics in supply chain management. The intended audiences for the certificate include working professionals who are graduates of general management undergraduate or graduate business programs who wish to supplement their degrees with focused, graduate-level courses in supply chain management, and fall into one of the following categories:

1. Relatively new to supply chain management and desire a foundational knowledge of supply chain management complexities as well as a strong understanding of how companies leverage their supply chains to achieve competitive advantage.
2. Experienced supply chain management professionals who wish to update their knowledge of current thinking and best practices through interaction with faculty engaged in broad-based research and consulting.

**Degree Requirements**: 15 credit hours including a Capstone Course (SCM 532)

The following courses are required for this certificate:

---

**Academic Catalog Archive 2010-2011  171**
SCM 502 (3)
SCM 520 (3)
SCM 521 (3)
SCM 532 (3)
SCM 541 (3)

**Admission Requirements**: All applicants must submit the Graduate College online application and meet Graduate College admission requirements. In addition applicants should have a minimum of two years full-time work experience.

**Contact Information**:  
Business, W. P. Carey School of  
Business Administration  
http://wpcarey.asu.edu/professional-development/SCM/scm.cfm  
wpcarey.execed@asu.edu  
BA 452  
480/965-8617

**Taxation, MTax (BATAMTAX)**  
Online Degree Search Title: Taxation (MTax)

**Program Description**: The faculty in the School of Accountancy offer a specialized professional program leading to the Master of Taxation (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.

**Degree Requirements**: 30 credit hours and a Written Comprehensive Exam, 30 credit hours including a Capstone (ACC 589)

The M.Tax. program offers two cohort-based programs; one evening, part-time program and one evening, full-time program. The part-time program is spread over the course of two academic years, and the full-time program is completed in one academic year. Applicants must complete program pre-requisites prior to admission to the M.Tax program. Please refer to the School of Accountancy Web site for a current listing of required course prerequisites. Graduate-level accounting courses are only open to students admitted to the graduate program.

**Admission Requirements**:  
1. Applicants to the M.Tax. program are required to submit an online application to the Graduate College. Complete application instructions may be obtained from the School's Web site.  
2. Applicants must submit scores from the GMAT.  
3. All applicants are also required to submit the supplemental application materials required by the school.  
4. 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, finance and business, although other exceptional candidates are considered.

**Contact Information**:  
Business, W. P. Carey School of  
School of Accountancy  
http://wpcarey.asu.edu/accounting  
wpcareyacc@asu.edu  
BA 223Q  
480/965-3631

**W. P. Carey MBA, MBA (BACORPMBA)**  
Online Degree Search Title: W. P. Carey MBA - Custom Corporate Program
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.

Degree Requirements: 48 credit hours including a Capstone Course (MGT 589)

The custom corporate M.B.A. program requires that students be nominated into the program by the sponsoring company.

Admission Requirements: Applicants must submit the Graduate College online application and meet Graduate College admission requirements and the guidelines established by the custom corporate M.B.A. program.

Contact Information:
Business, W. P. Carey School of
MBA Programs
http://wpcarey.asu.edu/mba/custom-corporate/index.cfm
wpcarey.execed@asu.edu
480/965-7579

W. P. Carey MBA, MBA (BAEVEAMBA)
Online Degree Search Title: W. P. Carey MBA - Evening Accelerated Program

Program Description: The purpose of the W. P. Carey M.B.A. program is to provide a solid foundation and knowledge base in the core business disciplines, to develop analytic capabilities, decision-making and leadership skill sets essential to making sound business decisions. The curriculum is delivered in a case-based, team oriented, and discussion learning environment. Elective courses or technical certificates provide additional depth and breadth to further enhance students’ knowledge base and focus career goals. The evening accelerated program is designed for working professionals seeking to continue working full-time while attending school. The accelerated evening program starts in February each year and is completed in 18 months. 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 https://wpcarey.asu.edu/mba/.

Degree Requirements: 48 credit hours including a Capstone Course (MGT 589)

While there are no business course prerequisites, potential students must demonstrate strong quantitative ability, and effective written and oral communication skills. The core courses are designed to provide a foundation in business knowledge and skills, and must be taken in the prescribed sequence. Elective courses build upon the business core and center on the further development of an area of emphasis. There may be additional requirements that vary by area of emphasis. The program is completed in 18 months. The business school does not accept graduate credits earned while students are in non-degree status and/or courses taken prior to admission to the M.B.A. program, or taken while enrolled in another MBA program outside the W. P. Carey School of Business. Registration in school of business courses numbered 501 and above is limited to students who have been admitted to a graduate degree program and have the approval of the M.B.A. program office.

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. 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:
1. All applicants must submit the Graduate College online application.
2. All students applying to the evening accelerated M.B.A. program are required to take the GMAT.
3. 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. For more information on GMAT, see http://www.mba.com; for more information on TOEFL, see http://www.ets.org.

4. Applicants to the evening accelerated M.B.A. program should have at least two years of full-time work experience by the date of enrollment.

5. Applicants should submit three essays for the degree program addressing commitment, career goals, professional accomplishments, qualifications and reasons for interest in the program.

6. One set of sealed, official transcripts from every college and university attended must be submitted.

7. Applicants also provide two letters of recommendation commenting on their motivation, commitment, achievements, work experience and opportunity for success in the program.

8. A personal interview may also be required.

Contact Information:
Business, W. P. Carey School of
MBA Programs
http://www.wpcarey.asu.edu/mba
wpcareymba@asu.edu
BA 160
480/965-3332

W. P. Carey MBA, MBA (BAEVENMBA)

Online Degree Search Title: W. P. Carey MBA - Evening Program

Program Description: The purpose of the W. P. Carey M.B.A. program is to provide a solid foundation and knowledge base in the core business disciplines, to develop analytic capabilities, decision-making and leadership skill sets essential to making sound business decisions. The curriculum is delivered in a case-based, team oriented, and discussion learning environment. Elective courses provide additional depth and breadth to enhance an area of emphasis students’ knowledge base and focus career goals. The evening program is designed for working professionals seeking to continue working full-time while attending school. The evening program starts in August and is completed in 21 months. 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 https://wpcarey.asu.edu/mba/.

Degree Requirements: 48 credit hours including a Capstone Course (MGT 589)

While there are no business course prerequisites, potential students must demonstrate strong quantitative ability, and effective written and oral communication skills. The core courses are designed to provide a foundation in business knowledge and skills and must be taken in the prescribed sequence. Elective courses build upon the business core and center on the further development of an area of emphasis. There may be additional requirements that vary by area of emphasis. The program is completed in 21 months. The business school does not accept graduate credits earned while students are in non-degree status and/or courses taken prior to admission to the M.B.A. program, or taken while enrolled in another M.B.A. program outside the W. P. Carey School of Business. Registration in school of business courses numbered 501 and above is limited to students who have been admitted to a graduate degree program and have the approval of the M.B.A. program office.

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. 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:
1. All applicants must submit the Graduate College online application.
2. Applicants to the evening M.B.A. program are required to take the GMAT.
3. 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. For more information on GMAT, see http://www.mba.com; for more information on TOEFL, see http://www.ets.org.
4. Applicants to the evening M.B.A. program should have at least two years of full-time work experience by the date of enrollment.
5. Applicants should submit three essays for the degree program addressing commitment, career goals, professional accomplishments, qualifications and reasons for interest in the program.
6. One set of sealed, official transcripts from every college and university attended must be submitted.
7. Applicants also provide two letters of recommendation commenting on their motivation, commitment, achievements, work experience and opportunity for success in the program.
8. A personal interview may also be required.

Contact Information:
Business, W. P. Carey School of
MBA Programs
http://www.wpcarey.asu.edu/mba
wpcareymba@asu.edu
BA 160
480/965-3332

W. P. Carey MBA, MBA (BAEXECMBA)
Online Degree Search Title: W. P. Carey MBA - Executive Program

Program Description: The purpose of the W. P. Carey School of Business M.B.A. program is to provide a solid foundation and knowledge base in the core business disciplines, to develop analytic capabilities and decision-making and leadership skill sets to effectively integrate decisions into the business environment. The executive program is designed for managers who have significant responsibility managing people, projects and budgets. Classes begin in the fall and meet twice monthly on Fridays and Saturdays, allowing the opportunity to minimize time away from work and maximize time for studying and class preparation. The executive program is completed in 21 months. 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 https://wpcarey.asu.edu/mba/.

Degree Requirements: 48 credit hours including a Capstone Course (MGT 589)

While there are no business course prerequisites, potential students must demonstrate strong quantitative ability, and effective written and oral communication skills. The executive curriculum must be taken in the prescribed sequence, and are augmented by a series of lectures on thought leadership along with off-site learning programs, including a Business and Public Policy course in Washington, D.C. An additional off-site course exploring issues and strategies in the international business environment will be held in partnership with an international business school. The program is completed in 21 months. The business school does not accept graduate credits earned while students are in non-degree status and/or courses taken prior to admission to the M.B.A. program, or taken while enrolled in another M.B.A. program outside of the W. P. Carey School of Business. Registration in school of business courses numbered 501 and above is limited to students who have been admitted to a graduate degree program and have the approval of the M.B.A. program office.

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:

1. All applicants must submit the Graduate College online application.
2. Applicants applying to the executive M.B.A. program should have significant work experience managing projects, people and budgets.
3. 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.
4. Applicants should submit three essays for the degree program addressing commitment, goals, qualifications, professional accomplishments and reasons for interest in the program.
5. Applicants also provide two letters of recommendation commenting on their motivation, commitment, achievements, work experience and opportunity for success in the program.
6. One set of sealed, official transcripts from every college and university attended must be submitted.
7. A personal interview is also required.

Contact Information:
Business, W. P. Carey School of
MBA Programs
http://www.wpcarey.asu.edu/mba/exe
wpcareymba@asu.edu
BA 160
480/965-3332

W. P. Carey MBA, MBA (BAFULLMBA)

Online Degree Search Title: W. P. Carey MBA - Full-Time Program

Program Description: The purpose of the W. P. Carey School of Business M.B.A. program is to provide a solid foundation and knowledge base in the core business disciplines, to develop analytic capabilities, decision-making and leadership skill sets essential to making sound business decisions. The curriculum is delivered in a case-based, team oriented, and discussion learning environment. A specialization in a functional area provides additional depth and breadth to further enhance students’ knowledge base and focus career goals. The full-time program is designed for individuals who want to immerse in full-time graduate studies and take classes during the day. Class size in the full-time program averages 50 or fewer students, and supports individual learning, promotes student-faculty interaction, and encourages personal and professional development. 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 https://wpcarey.asu.edu/mba/.

Degree Requirements: 48 credit hours including a Capstone Course (MGT 589)

While there are no business course prerequisites, potential students must demonstrate strong quantitative ability, as well as effective written and oral communication skills. The core courses are designed to provide a foundation in business knowledge and skills, and must be taken in the prescribed sequence. Elective or specialization courses build upon the business core and center on the further development of a specialization. There may be additional requirements that vary by specialization. The program is typically completed in two years, with a required internship in the summer between the first and second year of study. The business school does not accept graduate credits earned while students are in non-degree status and/or courses taken prior to admission to the M.B.A. program, or taken while enrolled in another MBA program outside of the W. P. Carey School of Business. Registration in school of business courses numbered 501 and above is limited to students who have been admitted to a graduate degree program and have the approval of the M.B.A. program office.
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:

1. Applicants to the full-time M.B.A. program should have at least two years of full-time work experience by the date of enrollment.
2. Applicants should submit three essays for the degree program addressing commitment, career goals, professional accomplishments, qualifications and reasons for interest in the program.
3. One set of sealed, official transcripts from every college and university attended must be submitted.
4. Applicants also provide two letters of recommendation commenting on their motivation, commitment, achievements, work experience and opportunity for success in the program.
5. A personal interview is required by invitation only.

Contact Information:
Business, W. P. Carey School of MBA Programs
http://www.wpcarey.asu.edu/mba
wpcareymba@asu.edu
BA 160
480/965-3332

W. P. Carey MBA, MBA (BAONLINMBA)
Online Degree Search Title: W. P. Carey MBA - Online Program

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.

Degree Requirements: 48 credit hours including a Capstone Course (MGT 589)

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 (Jan.) 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 and have the approval of the M.B.A. program office.

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. 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. Standardized tests for English proficiency are required of all international applicants whose native language is not English, or who are not graduates of an institution located in the U.S. The Test of Spoken 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 English language testing, see http://graduate.asu.edu/admissions/international.html. Students applying to the W. P. Carey M.B.A. - Online Program should have at least two years of full-time work experience from the date of enrollment. Applicants should submit:

1. Three essays for the degree program addressing commitment, career goals, professional accomplishments, qualifications and reasons for interest in the program.
2. One set of sealed, official transcripts from every college and university attended must be submitted.
3. 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.
4. A personal interview may also be required.

**Contact Information:**
Business, W. P. Carey School of MBA Programs
http://www.wpcarey.asu.edu/mba/online
wpcareymba@asu.edu
BA 160
480/965-3332

**W. P. Carey MBA, MBA (BASHANGMBA)**
Online Degree Search Title: W. P. Carey MBA - Shanghai Program

**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.

**Degree Requirements:** 48 credit hours including a Capstone Course (MGT 589)
The curriculum consists of 12 courses. It is based on the integration of core management principle with an immersion in 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 on a scale of 4.00) 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.

**Contact Information:**
Business, W. P. Carey School of
MBA Programs
http://wpcarey.asu.edu/mba/china
wpcareychina@asu.edu
BA 160
480/965-4203

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

**Architecture, MArch (ARARCMARCH)**
Online Degree Search Title: Architecture (MArch)

**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.

**Degree Requirements:** 56 credit hours and an Applied Project, 78 credit hours and an Applied Project

Two-year program

Requirements involve 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 Plan 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.

Three-plus-year program

The three-plus-year graduate program requires 24 credit hours of deficiency course work in addition to the master's level coursework, which make up the total number of 102 credit hours of approved courses and electives. 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:

1. Applicants to the two-year program must: 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 pre-professional 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.

Contact Information:
Design and the Arts, Herberger Institute for School of Architecture and Landscape Architecture
http://herbergerinstitute.asu.edu/
sala.grad@asu.edu
CDN 162D
480/965-1033

Art (Art Education), MA (FAARTEDMA)
Online Degree Search Title: Art Education (MA)

Program Description: The M.A. in art education is a research-oriented degree. M.A. students investigate issues in art teaching and learning from multiple perspectives, including art inquiry, studio, visual culture, development, and context. The degree culminates with an original thesis study proposed and carried out by the student. Students admitted to the M.Ed. program with a major in secondary education may also elect art as the subject matter field. Students admitted to the Secondary Education M.Ed. plus certification program in the College of Teacher Education and Leadership may select Art as an area of concentration.

Degree Requirements: 30 credit hours, a Thesis and a Written Comprehensive Exam (Qualifying Research Paper)
The degree program requires:

1. Eighteen hours of core courses.
2. Six hours of special topics on research related to integrating the teaching of studio art, art history and criticism or aesthetics.
3. 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:

1. A formal art education research paper for review
2. Resume.
4. Three letters of recommendation.

Applications are accepted throughout the year.

Contact Information:
Design and the Arts, Herberger Institute for
School of Art
http://art.asu.edu
soagrad@asu.edu
ART 121
480/965-6303

Art (Ceramics), MFA (FACERAMMFA)

Online Degree Search Title: Ceramics (MFA)

Program Description: The M.F.A. (ceramics) program seeks to provide a stimulating and challenging environment for artistic and intellectual growth. With the realization that discipline, familiarity with historical precedents, and freedom go hand in hand with creative activities, the area strives to strike a balance between the acquisition of traditional skills and the promotion of independence and innovation. Responsibility is placed on the individual student to find personally meaningful content and an effective means to express that content within the ceramic arts. The ceramics program features a complete and varied line of kilns, wheels and other equipment. In addition, graduate students enjoy private studio spaces and a graduate facility. 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. The 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.

Degree Requirements: 60 credit hours and an Oral Comprehensive Exam (Defense of MFA Exhibition)

The 60 hours of graduate credit are subject to committee approval and must include:

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: All applicants must complete the Graduate College online application. A bachelor’s degree from a regionally accredited college or university recognized by ASU is required. Applications include the following
components: portfolio with image list, statement of intent, current resume or curriculum vitae and three letters of recommendation.

- The portfolio and image list should be sized with a maximum dimension of 1024 pixels. Video files must be under 60MB each.
- The statement of intent should address the applicant's artistic interests, reasons for applying to graduate school in general and the ASU School of Art in particular as well as professional goals. It should not exceed 1000 words.
- A current resume or curriculum vitae.
- Three letters of recommendation are required from faculty with whom you have studied or from recognized professionals in the field. No form letters are used.

The preferred method for submission is online via SLIDEROOM: http://asuherberger.slideroom.com. Applicants may upload images (.jpg), video (.mov, .wmv, .flv), music (mp3) or PDF documents. The deadline to submit is Dec. 31 for fall admissions; we do not admit for the spring semester.

Contact Information:
Design and the Arts, Herberger Institute for
School of Art
http://art.asu.edu
soagrad@asu.edu
ART 102
480/965-6303

Art (Digital Technology), MFA (FADIGITMFA)
Online Degree Search Title: Art - Digital Technology (MFA)

Program Description: The M.F.A. in digital technology is offered by the School of Art in collaboration with the School of Arts, Media and Engineering (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.

Degree Requirements: 60 credit hours and an Oral Comprehensive Exam

Graduate credit is subject to committee approval and includes:

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. 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. If appropriate, a DVD is also acceptable.
2. Three letters of recommendation.
3. A current curriculum vitae.
4. Statement of intent pertaining to the students 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 Information:
Design and the Arts, Herberger Institute for
School of Art
http://art.asu.edu
soagrad@asu.edu
ART 102
480/965-6303

Art (Drawing), MFA (FADRAWMFA)
Online Degree Search Title: Drawing (MFA)

Program Description: The M.F.A. (drawing) program offers a learning environment for creative, intellectual, and technical growth that leads to quality art practice and professionalism. The program encourages a wide spectrum of approaches to contemporary drawing as visual expression, ranging from traditional to innovative. Students work under the guidance and one-on-one mentorship of a large full-time faculty of active professionals who are nationally and internationally recognized. A building devoted to the drawing and painting M.F.A. program provides private graduate studios, a central gathering place, a woodshop, and computer room. The Martin Wong Painting/Drawing Studio is a dedicated space where graduate critiques and seminars are held. Visiting artists of national statue enhance the program with lectures and individual graduate critiques.

Degree Requirements: 60 credit hours and an Oral Comprehensive Exam (Defense of MFA Exhibition)
The 60 hours of graduate credit are subject to committee approval and must include:
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: All applicants must complete the Graduate College online application. A bachelor’s degree from a regionally accredited college or university recognized by ASU is required. Applications include the following components: portfolio with image list, statement of intent, current resume or curriculum vitae and three letters of recommendation.
1. The portfolio and image list should be sized with a maximum dimension of 1024 pixels. Video files must be under 60MB each.
2. The statement of intent should address the applicant’s artistic interests, reasons for applying to graduate school in general and the ASU School of Art in particular as well as professional goals. It should not exceed 1000 words.
3. A current resume or curriculum vitae.
4. Three letters of recommendation are required from faculty with whom you have studied or from recognized professionals in the field. No form letters are used.

The preferred method for submission is online via SLIDEROOM: http://asuherberger.slideroom.com. Applicants may upload images (.jpg), video (.mov, .wmv, .flv), music (mp3) or PDF documents. The deadline to submit is Dec. 31 for fall admissions; we do not admit for the spring semester.

Contact Information:
Design and the Arts, Herberger Institute for
School of Art
http://art.asu.edu
soagrad@asu.edu
ART 102
480/965-6303

Art (Fibers), MFA (FAFIBERMFA)
Online Degree Search Title: Fibers (MFA)

Program Description: The M.F.A. (fibers) program promotes independent and guided research relevant to the relationships among materials, process, content and form. Students are challenged to utilize and interpret textile traditions while considering innovative and interdisciplinary approaches to contemporary art. The fibers area cultivates an environment that stimulates creative and intellectual maturity by encouraging students to discover their distinctive expression informed by knowledge and skills related to surface design, woven structures and 3-D structures. The expected outcomes of students in the Master of Fine Arts degree program in fibers relate to artistic commitment, professional preparation and the confidence to pursue a career as a studio artist, teacher or related position in the fibers/textile field.

Degree Requirements: 60 credit hours and an Oral Comprehensive Exam (Defense of MFA Exhibition)

The 60 hours of graduate credit are subject to committee approval and must include:

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: All applicants must complete the Graduate College online application. A bachelor’s degree from a regionally accredited college or university recognized by ASU is required. Applications include the following components: portfolio with image list, statement of intent, current resume or curriculum vitae and three letters of recommendation.

1. The portfolio and image list should be sized with a maximum dimension of 1024 pixels. Video files must be under 60MB each.
2. The statement of intent should address the applicant’s artistic interests, reasons for applying to graduate school in general and the ASU School of Art in particular as well as professional goals. It should not exceed 1000 words.
3. A current resume or curriculum vitae.
4. Three letters of recommendation are required from faculty with whom you have studied or from recognized professionals in the field. No form letters are used.
The preferred method for submission is online via SLIDEROOM: http://asuherberger.slideroom.com. Applicants may upload images (.jpg), video (.mov, .wmv, .flv), music (mp3) or PDF documents. The deadline to submit is Dec. 31 for fall admissions; we do not admit for the spring semester.

Contact Information:
Design and the Arts, Herberger Institute for
School of Art
http://art.asu.edu
soagrad@asu.edu
ART 102
480/965-6303

Art (Intermedia), MFA (FAMEDIAMFA)
Online Degree Search Title: Intermedia (MFA)

Program Description: The M.F.A. (intermedia) program is a conceptually driven program with an interdisciplinary approach to art-making. Students work with experimental studio practices, performance, and digital media to explore new avenues for self-expression, collaborative practice, and community action. Led by exceptional faculty, the intermedia program covers a wide range of conceptual and media orientations reflecting the professional practices of a growing team of faculty members. Currently, emphases in performance, installation, mixed media, digital video, digital sculpture, animation, and Web art are offered. The ideal student not only is well-grounded in traditional studio practice, but is interested in exploring experimental processes. In addition to taking 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.

Degree Requirements: 60 credit hours and an Oral Comprehensive Exam (Defense of MFA Exhibition)

The Program must include:

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: All applicants must complete the Graduate College online application. A bachelor’s degree from a regionally accredited college or university recognized by ASU is required. Applications include the following components: portfolio with image list, statement of intent, current resume or curriculum vitae and three letters of recommendation.

1. The portfolio and image list should be sized with a maximum dimension of 1024 pixels. Video files must be under 60MB each.
2. The statement of intent should address the applicant’s artistic interests, reasons for applying to graduate school in general and the ASU School of Art in particular as well as professional goals. It should not exceed 1000 words.
3. A current resume or curriculum vitae.
4. Three letters of recommendation are required from faculty with whom you have studied or from recognized professionals in the field. No form letters are used.
The preferred method for submission is online via SLIDEROOM: http://asuherberger.slideroom.com. Applicants may upload images (.jpg), video (.mov, .wmv, .flv), music (mp3) or PDF documents. The deadline to submit is Dec. 31 for fall admissions; we do not admit for the spring semester.

**Contact Information:**
Design and the Arts, Herberger Institute for School of Art http://art.asu.edu soograd@asu.edu ART 102 480/965-6303

**Art (Metals), MFA (FAMETALMFA)**
Online Degree Search Title: Metals (MFA)

**Program Description:** The M.F.A. (metals) program offers a wide range of traditional and non-traditional approaches to metalworking. The program's goals are to assist students in the development of technical and conceptual ability to express their insights and ideas. We seek to generate self-motivated, self-directed, flexible artists that can problem solve and think creatively, and have a thorough familiarity with established techniques, materials and traditions of the craft. Alongside a full range of other art practices, the program provides a comprehensive approach to graduate education that combines art production, criticism, aesthetics, historic references and personal experiences, and promotes the artist as an active participant in contemporary society. Students have the opportunity to gain knowledge and skills through additional educational opportunities that include workshops, lectures, visiting artists, internship possibilities, conferences and symposia, visits to artist studios, museums and exhibitions. ASU is located in proximity to numerous galleries and museums as well as local organizations such as the Arizona Designer Craftsmen, Metalink and the Arizona Artist-Blacksmith Association.

**Degree Requirements:** 60 credit hours and an Oral Comprehensive Exam (Defense of MFA Exhibition)

The 60 hours of graduate credit are subject to committee approval and must include:

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 complete the Graduate College online application. A bachelor's degree from a regionally accredited college or university recognized by ASU is required. Applications include the following components: portfolio with image list, statement of intent, current resume or curriculum vitae and three letters of recommendation.

1. The portfolio and image list should be sized with a maximum dimension of 1024 pixels. Video files must be under 60MB each.
2. The statement of intent should address the applicant's artistic interests, reasons for applying to graduate school in general and the ASU School of Art in particular as well as professional goals. It should not exceed 1000 words.
3. A current resume or curriculum vitae.
4. Three letters of recommendation are required from faculty with whom you have studied or from recognized professionals in the field. No form letters are used.

The preferred method for submission is online via SLIDEROOM: http://asuherberger.slideroom.com. Applicants may upload images (.jpg), video (.mov, .wmv, .flv), music (mp3) or PDF documents. The deadline to submit is December 31 for fall admissions; we do not admit for the spring semester.
Contact Information:
Design and the Arts, Herberger Institute for School of Art
http://art.asu.edu
soagrad@asu.edu
ART 102
480/965-6303

Art (Painting), MFA (FAPaintMFA)

Online Degree Search Title: Painting (MFA)

Program Description: The M.F.A. (painting) program offers a learning environment for creative, intellectual, and technical growth that leads to quality art practice and professionalism. The program encourages a wide spectrum of approaches to contemporary painting as visual expression, ranging from traditional to innovative. Students work under the guidance and one-on-one mentorship of a large full-time faculty of active professionals who are nationally and internationally recognized. A building devoted to the drawing and painting M.F.A. program provides private graduate studios, a central gathering place, a woodshop and computer room. The Martin Wong Painting/Drawing Studio is a dedicated space where graduate critiques and seminars are held. Visiting artists of national statue enhance the program with lectures and individual graduate critiques.

Degree Requirements: 60 credit hours and an Oral Comprehensive Exam (Defense of MFA Exhibition)

The program must include:

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 complete the Graduate College online application. A bachelor’s degree from a regionally accredited college or university recognized by ASU is required. Applications include the following components: portfolio with image list, statement of intent, current resume or c.v. and three letters of recommendation.

1. The portfolio and image list should be sized with a maximum dimension of 1024 pixels. Video files must be under 60MB each.
2. The statement of intent should address the applicant’s artistic interests, reasons for applying to graduate school in general and the ASU School of Art in particular as well as professional goals. It should not exceed 1000 words.
3. A current resume or curriculum vitae.
4. Three letters of recommendation are required from faculty with whom you have studied or from recognized professionals in the field. No form letters are used.

The preferred method for submission is online via SLIDEROOM: http://asuherberger.slideroom.com. Applicants may upload images (.jpg), video (.mov, .wmv, .flv), music (mp3) or PDF documents. The deadline to submit is Dec. 31 for fall admissions; we do not admit for the spring semester.

Contact Information:
Design and the Arts, Herberger Institute for School of Art
http://art.asu.edu
soagrad@asu.edu
ART 102
480/965-6303
Art (Photography), MFA (FAPHOTOMFA)

Online Degree Search Title: Photography (MFA)

Program Description: The M.F.A. (photography) program offers students a broad-based educational experience centering around light sensitive systems. The photography faculty at ASU is significant in size and diverse both in background and creative practice making possible a wide range of options for students working together in a closely knit yet rigorous educational setting. M.F.A. candidates work in 19th century processes, a state of the art digital lab, traditional black and white darkrooms and in collaboration with printmakers and intermedia artists. The program includes course work in criticism and theory as well as gallery and museum practice. The Northlight Gallery grants students the opportunity to engage with photographic artists from around the world, as well as providing experience with collections and exhibition opportunities for graduate students.

Degree Requirements: 60 credit hours and an Oral Comprehensive Exam

The 60 hours of graduate credit are subject to committee approval and must include:

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 complete the Graduate College online application. A bachelor’s degree from a regionally accredited college or university recognized by ASU is required. Applications include the following components: portfolio with image list, statement of intent, current resume or c.v. and three letters of recommendation.

1. The portfolio and image list should be sized with a maximum dimension of 1024 pixels. Video files must be under 60MB each.
2. The statement of intent should address the applicant’s artistic interests, reasons for applying to graduate school in general and the ASU School of Art in particular as well as professional goals. It should not exceed 1000 words.
3. A current resume or curriculum vitae.
4. Three letters of recommendation are required from faculty with whom you have studied or from recognized professionals in the field. No form letters are used.

The preferred method for submission is online via SLIDEROOM: http://asuherberger.slideroom.com. Applicants may upload images (.jpg), video (.mov, .wmv, .flv), music (mp3) or PDF documents. The deadline to submit is Dec. 31 for fall admissions; we do not admit for the spring semester.

Contact Information:
Design and the Arts, Herberger Institute for School of Art
http://art.asu.edu/
soagrad@asu.edu
ART 102
480/965-6303

Art (Printmaking), MFA (FAPRINTMFA)

Online Degree Search Title: Printmaking (MFA)

Program Description: The M.F.A. (printmaking) program is an exciting, vital degree program that provides a complete studio experience with regular courses in intaglio, lithography, relief, screen-print, monotype, book arts, papermaking and other graphic applications. Accomplished faculty teach in spacious, well-equipped studios, offering a complete range of print media. While individual students are encouraged to pursue a personal direction, the faculty encourages students to become well-rounded printmakers; experiencing and understanding many media and processes including experimentation and interdisciplinary approaches to making art. No style, technique, or aesthetic approach is stressed
over another, so that the individual quality of each student's work is the essential measure of achievement. The printmaking program at ASU boasts several unique study options for graduate students including photogravure, collotype, artists' books, papermaking and digital processes for printmaking. The book arts program is one of the select programs in the country and home to the renowned Pyrancantha Press as well as a significant collection of print work at the ASU Museum of Art. 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, studio jobs in some of the country's best fine art print publishing studios and professional artists who exhibit nationally.

Degree Requirements: 60 credit hours and an Oral Comprehensive Exam (Defense of MFA Exhibition)

This program must include:

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 complete the Graduate College online application. A bachelor’s degree from a regionally accredited college or university recognized by ASU is required. Applications include the following components: portfolio with image list, statement of intent, current resume or c.v. and three letters of recommendation.

1. The portfolio and image list should be sized with a maximum dimension of 1024 pixels. Video files must be under 60MB each.
2. The statement of intent should address the applicant’s artistic interests, reasons for applying to graduate school in general and the ASU School of Art in particular as well as professional goals. It should not exceed 1000 words.
3. A current resume or curriculum vita.
4. Three letters of recommendation are required from faculty with whom you have studied or from recognized professionals in the field. No form letters are used.

The preferred method for submission is online via SLIDEROOM: http://asuherberger.slideroom.com. Applicants may upload images (.jpg), video (.mov, .wmv, .flv), music (mp3) or PDF documents. The deadline to submit is Dec. 31 for fall admissions; we do not admit for the spring semester.

Contact Information:
Design and the Arts, Herberger Institute for School of Art
http://art.asu.edu
soagrad@asu.edu
ART 102
480/965-6303

Art (Sculpture), MFA (FASCULPMFA)

Online Degree Search Title: Sculpture (MFA)

Program Description: The M.F.A. (sculpture) program recognizes the broadly encompassing interdisciplinary nature of sculpture today. A wide range of media now fall within an expanded definition of sculpture. Directed graduate courses include interactive and kinetic sculpture, video installation, neon, architectural sculpture and foundry. 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 contemporary art and the history of sculpture. Critical inquiry is augmented by courses in the art history program. Visiting artists, curators and critics connect students to the contemporary context.

Degree Requirements: 60 credit hours and an Oral Comprehensive Exam (Defense of MFA Exhibition)
This program must include:

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 complete the Graduate College online application. A bachelor’s degree from a regionally accredited college or university recognized by ASU is required. Applications include the following components: portfolio with image list, statement of intent, current resume or c.v. and three letters of recommendation.

1. The portfolio and image list should be sized with a maximum dimension of 1024 pixels. Video files must be under 60MB each.
2. The statement of intent should address the applicant’s artistic interests, reasons for applying to graduate school in general and the ASU School of Art in particular as well as professional goals. It should not exceed 1000 words.
3. A current resume or curriculum vitae.
4. Three letters of recommendation are required from faculty with whom you have studied or from recognized professionals in the field. No form letters are used.

The preferred method for submission is online via SLIDEROOM: http://asuherberger.slideroom.com. Applicants may upload images (.jpg), video (.mov, .wmv, .flv), music (mp3) or PDF documents. The deadline to submit is Dec. 31 for fall admissions; we do not admit for the spring semester.

**Contact Information:**
Design and the Arts, Herberger Institute for School of Art
http://art.asu.edu
soagrad@asu.edu
ART 102
480/965-6303

**Art (Wood), MFA (FAWOODMFA)**
Online Degree Search Title: Wood (MFA)

**Program Description:** The M.F.A. (wood) program offers a wide range of traditional and non-traditional approaches to woodworking. The program’s goals are to assist students in the development of technical and conceptual ability to express their insights and ideas. We seek to generate self-motivated, self-directed, flexible artists that can problem solve and think creatively, and have a thorough familiarity with established techniques, materials, and traditions of the craft. The School of Art offers one of the best equipped fine woodworking shops in the Southwest. It includes equipment for laminating, carving, turning and fabricating. Alongside a full range of other art practices, the program provides a comprehensive approach to graduate education that combines art production, criticism, aesthetics, historic references and personal experiences, and promotes the artist as an active participant in contemporary society.

**Degree Requirements:** 60 credit hours and an Oral Comprehensive Exam (Defense of MFA Exhibition)

The 60 hours of graduate credit are subject to committee approval and must include:

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 complete the Graduate College online application. A bachelor’s degree from a regionally accredited college or university recognized by ASU is required. Applications include the following components: portfolio with image list, statement of intent, current resume or c.v. and three letters of recommendation.

1. The portfolio and image list should be sized with a maximum dimension of 1024 pixels. Video files must be under 60MB each.
2. The statement of intent should address the applicant’s artistic interests, reasons for applying to graduate school in general and the ASU School of Art in particular as well as professional goals. It should not exceed 1000 words.
3. A current resume or curriculum vitae.
4. Three letters of recommendation are required from faculty with whom you have studied or from recognized professionals in the field. No form letters are used.

The preferred method for submission is online via SLIDEROOM: http://asuherberger.slideroom.com. Applicants may upload images (.jpg), video (.mov, .wmv, .flv), music (mp3) or PDF documents. The deadline to submit is Dec. 31 for fall admissions; we do not admit for the spring semester.

Contact Information:
Design and the Arts, Herberger Institute for School of Art
http://art.asu.edu
soagrad@asu.edu
ART 102
480/965-6303

Art History, MA (FAARTHISMA)
Online Degree Search Title: Art History (MA)

Program Description: The M.A. in art history is a comprehensive degree designed to train students to engage with visuality in multiple ways. It offers a diverse curriculum intended to foster critical understanding of aesthetics, production, patronage, and consumption of art. Eleven, internationally recognized faculty offer classes across many cultures and time periods, geographies, and multiple approaches and methodologies. The degree program stresses intersections between disciplines, borders, margins, points of mediation, and technological developments throughout history. The graduate curriculum offers focused study in the areas of images and digital technologies, art in social and political contexts, and histories and theories of visual culture.

Degree Requirements: 30 credit hours, a Thesis and a Foreign Language Exam

This program must include 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:

- Ancient/medieval.
- Modern.
- Non-Western.
- Renaissance/baroque.

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 December 31.

Contact Information:
Design and the Arts, Herberger Institute for School of Art
http://art.asu.edu
soagrad@asu.edu
ART 102
480/965-6303

Built Environment (Energy Performance & Climate Responsive Architecture), MS (ARENERGYMS)

Program Description: The built environment 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.

Degree Requirements: 30 credit hours and a Thesis

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)
ATE 599 Thesis (3)

Spring (3)
ATE 599 Thesis (3)

*This is not a required courses for the degree; however, it is a recommended elective.

Admission Requirements: Applicants must hold a baccalaureate or graduate degree from a college or university recognized by ASU, in one of the professions or fields of study outlined below:
1. Individuals who hold a previous five- or six-year NAAB (National Architectural Board) accredited professional degree in Architecture (BArch or MArch degree). See the NAAB website for more information.

2. Individuals who are licensed landscape architects or those who have completed a four-year Bachelor of Science in Landscape Architecture degree, or a Master in Landscape Architecture degree. The undergraduate or graduate degree must be granted by an institution that offers the Landscape Architectural Accreditation Board (LAAB) accredited degree program in architecture.

3. Individuals who have an Engineering degree (BS or MS) with a background in building sustainability issues. (Mechanical and Civil Engineering, and Construction majors are particularly suited for application to this program.)

4. Individuals who have a Science degree (BS or MS degree) with a background in building sustainability issues.

5. Applicants must meet the minimum GPA requirements as established by the Graduate College.

6. Official copy of GRE scores (unofficial copies will not be accepted). For more information on the GRE www.gre.org, or if you live near ASU, www.asu.edu/uts). The School of Architecture + Landscape Architecture does not have a minimum score for admissions; however, the average scores of admitted students are between 500 and 600 for each section.

7. In addition to the above requirements, international students are required to submit an official TOEFL score (www.TOELFL.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 website (http://www.asu.edu/graduate/international/index.htm).

8. Admission to the Master of Science in Building Design program is selective, and the Master of Science 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.

9. 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. Please submit the following items directly to the Graduate College:

2. Online application and fee.

3. Test scores (GRE and TOEFL, for international applicants).

4. Official transcripts from all post-secondary institutions.

5. Three references: The names and contact information of a minimum of three individuals to support the applicant must be included in the online application. The references should be from professionals or educators familiar with the applicant's experience and capability for graduate work.

6. The 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.

7. Writing sample: Applicants who are Engineering and Science majors must submit 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). This document is to be no larger than 15 double spaced pages, and may be an excerpt from a larger document. Applicants with professional design degrees (BSLA, MLA, BArch, MArch) will submit a portfolio. (Instructions for portfolio submission are described under the additional Master of Science in Building Design requirements section.)

Additional Master of Science in the Built Environment Requirements
Portfolio: Candidates (only those who hold a BSLA, MLA, BArch, MArch) applying for the Master of Science in the Built Environment program are required to submit a portfolio. See the portfolio requirements for more information. The portfolio is the only application item that should be sent directly to the School of Architecture + Landscape Architecture (see address below). Do not send the portfolio to the Graduate College. 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). Additionally, the ASU ID number, and the exact program to which the applicant is applying should be clearly marked on the portfolio.

The School of Architecture + Landscape Architecture does not return portfolios.

Materials that are not sent directly to the appropriate locations could experience a delay and may result in denial of admission to the applicant.

Submit the portfolio to the following address

Master of Science in the Built Environment Admissions Committee
School of Architecture + Landscape Architecture
Arizona State University
PO Box 871605
Design North, Room 162
SW corner of University and Forest
Tempe, AZ 85287-1605

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.

Contact Information:
Design and the Arts, Herberger Institute for
School of Architecture and Landscape Architecture
http://sala.asu.edu
sala.grad@asu.edu
CDN 162D
480/965-1033

Composition, MM (FAMCOMPMM)
Online Degree Search Title: Music Composition (MM)

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.

Degree Requirements: 32 credit hours, a Thesis and a Written Comprehensive Exam, or 32 credit hours, an Applied Project and a Written Comprehensive Exam

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 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 Information:
Design and the Arts, Herberger Institute for School of Music
http://music.asu.edu
SOMadmissions@asu.edu
MUSIC E167
480/965-5069

Composition (Interdisciplinary Digital Media and Performance), MM (FADIGITMM)
Online Degree Search Title: Music - Interdisciplinary Dig. Media & Perf. (MM)

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.

Degree Requirements: 32 credit hours, a Thesis, a Written Comprehensive Exam, or 32 credit hours, a Thesis and a Written Comprehensive Exam and an Oral Comprehensive Exam

Credit hours required for this concentration:

1. Arts Media and Engineering Core. (12)
2. Thesis. (6)
3. Music History/Music Theory. (9)
4. Electives. (5)
5. Total. (31-32)

Admission Requirements: In addition to the ASU Graduate College online application, you must submit to AME:

1. A portfolio demonstrating entry-level competencies. The portfolio may include previously developed media products or projects and/or publications demonstrating an understanding of and involvement with digital media and computation.
2. Letters of recommendation from two qualified persons in the field.
3. A statement of purpose that addresses the transdisciplinary nature of the Arts, Media and Engineering Program.

Contact Information:
Design and the Arts, Herberger Institute for School of Music
http://music.asu.edu
SOMadmissions@asu.edu
MUSIC E167
480/965-5069

Dance, MFA (FADANCEMFA)
Online Degree Search Title: Dance (MFA)
Program Description: The M.F.A. in dance at ASU is a highly flexible program built around nurturing, creative practice which offers a solid foundation in practical and theoretical course work. The School of Dance actively welcomes a diversity of applicants, including returning professionals, with experience and/or interest in:

- Community-based practice.
- Creative practice.
- Dance and technology.
- Dance history.
- Dance making.
- Dance science and somatics.
- Educational and professional partnerships.
- Interdisciplinary and/or cross-cultural approaches.
- Philosophy and criticism.

The ASU School 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.

Degree Requirements: 60 credit hours and a Bound Document.

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 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. applied project in dance, worth eight credits, serves as the culminating 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 program 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 School of Dance requires:

1. A current resume.
2. DVD of recent work or online examples.
Three letters of recommendation from professionals in the field.

A personal artistic statement that relates to department core values as described by the learning lens.

Contact Information:
Design and the Arts, Herberger Institute for School of Dance
http://dance.asu.edu
asudance@asu.edu
PEBE 107A
480/965-1208

Dance (Interdisciplinary Digital Media and Performance), MFA (FADANDIMFA)

Online Degree Search Title: Dance - Interdisciplinary Digital Media & Perform. (MFA)

Program Description: The concentration in interdisciplinary digital media and performance (IDMP) expands on the strength of the School of Dance in the specific area of mediated practice, 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.

Degree Requirements: 60 credit hours and a Bound Document

The degree involves three years of residency:

1. Ongoing showings of work.
2. Eighteen credit hours of required course work in the concentration taught by AME.
3. Nineteen required credit hours in the School of Dance.
4. Fifteen credits of electives.
5. A final M.F.A. project (8).
7. An oral defense.

The current M.F.A. is normally accomplished during three years of residency in the School of Dance. Ongoing showings of creative work are required. Foundational course work is offered in areas of:

- Creative Practice.
- Pedagogy.
- Professional development.
- Movement Practices.
- 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, Interdisciplinary Digital Media and Perform, a student must complete an application form and supply official copies of all transcripts from previous institutions to the Graduate College. The School of Dance requires:

1. A current resume.
2. DVD of recent work or online examples.
3. Three letters of recommendation from professionals in the field.
4. A personal artistic statement that relates to School of Dance core values as described by the learning lens.

Contact Information:
Design and the Arts, Herberger Institute for School of Dance
http://dance.asu.edu/
asudance@asu.edu
PEBE 170A
480/965-1208

Design (Arts, Media and Engineering), MSD
Online Degree Search Title: Design (Arts, Media and Engineering) (MSD)

Program Description: The M.S.D. with a concentration in arts, media and engineering is meant for individuals who wish to be at the forefront of design and development in those overlapping areas among arts, media and engineering. The concentration provides the opportunity to span the breadth of experimental media, from the more creative aspects to that part which is more quantitative, and everything in between. The concentration prepares a student for work with companies at the leading edge of media development.

Degree Requirements: 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.
- Health care and healing environments.
- Industrial design.
- Interaction design.
- Interior design.
- New product innovation.
- Visual communication design.

Further information can be found in the program description on the school admissions Web site.

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 on the institute's Web site, which will include the following points:

   A. Intended concentration.
   
   B. Proposed research topic. What will be your research focus? Why is this research important to you, the design community and the general population?
   
   C. Proposed mentor for intended research. Faculty biographies can be found on the school Web site.
   
   D. 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 referees at the time of their online application. Referees will receive an email with a link to the online letter of recommendation to complete. Students are able to see which referees have already completed their recommendation by logging into the My ASU system and viewing their "To Do" list. Once a referee has submitted the letter of recommendation, the referee'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.

4. 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.

5. A current resume.

6. 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
Herberger Institute for Design and the Arts
Design (Design of Healthcare and Healing Environments), MSD (ARHHEMSD)

Online Degree Search Title: Healthcare and Healing Environments (MSD)

Program Description: The concentration in health care and healing environments is focused on factors that impact the design and planning of health care 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 health care design consultants, teaming with nursing students, working directly with real clients and corresponding with forward-thinking health care research centers.

Degree Requirements: 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.
- Health care and healing environments.
- Industrial design.
- Interaction design.
- Interior design.
- New product innovation.
- Visual communication design.

Further information can be found in the program description on the school Web site. 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 on the school Web site, which will include the following points:
   A. Intended concentration.
   B. Proposed research topic. What will be your research focus? Why is this research important to you, the design community and the general population?
   C. Proposed mentor for intended research. Faculty biographies can be found on the school Web site.
   D. 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 referees at the time of their online application. Referees will receive an e-mail with a link to the online letter of recommendation to complete. Students are able to see which referees have already completed their recommendation by logging into the My ASU system and viewing their "To Do" list. Once a referee has submitted the letter of recommendation, the referee'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.

4. 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.

Contact Information:
Design and the Arts, Herberger Institute for
School of Architecture and Landscape Architecture
http://design.asu.edu/
design.grad@asu.edu
CDN 162
480/965-7007

Design (Industrial Design), MSD (ARINDDEMSD)
Online Degree Search Title: Industrial Design (MSD)

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.

Degree Requirements: 36 Credit hours and an Applied Project, or 36 credit hours and a Thesis
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. Health care and healing environments.
3. Industrial design.
4. Interaction design.
5. Interior design.
7. Visual communication design.

Further information can be found in the program description on the school Web site. 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 on the school Web site, which will include the following points:
   A. Intended concentration.
   B. Proposed research topic. What will be your research focus? Why is this research important to you, the design community and the general population?
   C. Proposed mentor for intended research. Faculty biographies can be found on the school Web site.
   D. 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 referees at the time of their online application. Referees will receive an e-mail with a link to the online letter of recommendation to complete. Students are able to see which referees have already completed their recommendation by logging into the My ASU system and viewing their "To Do" list. Once a referee has submitted the letter of recommendation, the referee'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.
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 on the school's Web site, which will include the following points:
   A. Intended concentration.
   B. Proposed research topic. What will be your research focus? Why is this research important to you, the design community and the general population?
   C. Proposed mentor for intended research. Faculty biographies can be found on the school Web site.
   D. 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 referees at the time of their online application. Referees will receive an email with a link to the online letter of recommendation to complete. Students are able to see which referees have already completed their recommendation by logging into the My ASU system and viewing their "To Do" list. Once a referee has submitted the letter of recommendation, the referee'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.

Contact Information:
Design and the Arts, Herberger Institute for
School of Architecture and Landscape Architecture
http://herbergerinstitute.asu.edu/
design.grad@asu.edu
CDN 162
480/965-7007

Design (Interior Design), MSD (ARINTDEMSD)
Online Degree Search Title: Interior Design (MSD)

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.

Degree Requirements: 36 Credit hours and an Applied Project, or 36 credit hours and a Thesis

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. Health care and healing environments.
3. Industrial design.
4. Interaction design.
5. Interior design.
7. Visual communication design.

Further information can be found in the program description on the school Web site. 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 on the school Web site, which will include the following points:
   A. Intended concentration.
   B. Proposed research topic. What will be your research focus? Why is this research important to you, the design community and the general population?
   C. Proposed mentor for intended research. Faculty biographies can be found on the school Web site.
   D. 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 referees at the time of their online application. Referees will receive an e-mail with a link to the online letter of recommendation to complete. Students are able to see which referees have already completed their recommendation by logging into the My ASU system and viewing their "To Do" list. Once a referee has submitted the letter of recommendation, the referee'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.

4. 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 stu

Contact Information:
Design and the Arts, Herberger Institute for
School of Architecture and Landscape Architecture
http://design.asu.edu/msd/index.shtml
design.grad@asu.edu
CDN 162
480/965-7007

Design (New Product Innovation), MSD (ARDSCNMSD)
Online Degree Search Title: Design (New Product Innovation) (MSD)

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.

Degree Requirements: 36 credit hours and an Applied Project

This project-based concentration 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:

1. Arts, media and engineering.
2. Health care and healing environments.
3. Industrial design.
4. Interaction design.
5. Interior design.
7. Visual communication design.

Further information can be found in the program description on the school's Web page. 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 on the school's Web page, 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 school Web site.

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 referees at the time of their online application. Referees will receive an e-mail with a link to the online letter of recommendation to complete. Students are able to see which referees have already completed their recommendation by logging into the My ASU system and viewing their "To Do" list. Once a referee has submitted the letter of recommendation, the referee'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.

Contact Information:
Design and the Arts, Herberger Institute for
http://herbergerinstitute.asu.edu
design.grad@asu.edu
CDN 162
480/965-7007

Design (Visual Communication Design), MSD (ARVCDMSD)
Online Degree Search Title: Design (Visual Communication Design) (MSD)

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.

Degree Requirements: 36 credit hours and a Thesis, 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.
Health care and healing environments.
Industrial design.
Interaction design.
Interior design.
New product innovation.
Visual communication design.

Further information can be found in the program description on the school's Web site. 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 the school's Web site, which will include the following points:
   A. Intended concentration.
   B. Proposed research topic. What will be your research focus? Why is this research important to you, the design community and the general population?
   C. Proposed mentor for intended research. Faculty biographies can be found on the school Web site.
   D. 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 referees at the time of their online application. Referees will receive an e-mail with a link to the online letter of recommendation to complete. Students are able to see which referees have already completed their recommendation by logging into the My ASU system and viewing their "To Do" list. Once a referee has submitted the letter of recommendation, the referee'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.
4. 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.

Contact Information:
Design and the Arts, Herberger Institute for
School of Architecture and Landscape Architecture
http://herbergerinstitute.asu.edu
design.grad@asu.edu

Academic Catalog Archive 2010-2011 209
Environmental Design/Planning, PHD (ARENVDEPHD)

Online Degree Search Title: Environmental Design/Planning (PhD)

Program Description: The Doctor of Philosophy in environmental design is an individualized institute-wide interdisciplinary degree that integrates graduate courses and faculty research expertise with concentrations in design; healthcare and healing environments; history, theory and criticism; and urban design. Broad in scope, the program is at the cutting edge of creating new knowledge in architecture, design and the arts. It complements interdisciplinary research in other disciplines within the university. The program provides research experience for students wishing to pursue careers in industry as members of interdisciplinary design teams on environmental and energy issues, as well as for those wishing to teach in the architecture, design or the arts fields.

Degree Requirements: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

Students must be thoroughly familiar with design and the arts and are expected to demonstrate a high level of academic maturity before being admitted to the program. 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 remaining after the master's degree, 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, fine arts or upon the demonstration of equivalent standing. Students must be familiar with design and the arts 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 institute 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 submitting the Graduate College online application and meeting 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, history, theory, and criticism, healthcare and healing environments or urban design).
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.

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 Information:
Design and the Arts, Herberger Institute for School of Design Innovation
http://design.asu.edu/
design.grad@asu.edu
CDN 162
480/965-7007

Environmental Design/Planning (Healthcare and Healing Environments), PHD (ARENVDEPHD)

Online Degree Search Title: Environmental Design/Planning (Healthcare and Healing Environments) (PhD)

Program Description: The health care and healing environments concentration of the Ph.D. in environmental design focuses on the integration of evidence-based design, sustainable science and best practices benchmarks when planning health care facilities. Facility-related responsibilities supported by this area cluster into eight functional work units. They are:

- Codes and strategic planning.
- Facilities analysis (physical and environmental).
- Financial analysis.
- Human factors.
- Interior planning and design. Programming (long-range planning).
- Space management/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:

1. Elite consulting firms as facility programmers.
2. Large health care systems and corporations as strategic planners.
3. Leading manufacturers and vendors as expert representatives.
4. Planning divisions in architectural and planning firms as medical planners.
5. Research centers as decision makers.

Degree Requirements: 84 credit hours, a Dissertation and an Oral Comprehensive Exam.

Students will be required to complete program requirements detailed below:

1. Required core courses. (6)
2. Required concentration courses. (18)
3. Elective courses. (18)
4. Dissertation. (12)
5. Previously completed a master's degree. (30)

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 health care research/design concentration. If students come in with no design or health care background, they may not take certain deficiency courses students. In addition to submitting the Graduate College application and 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 Herberger Institute for Design and the Arts).
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 Information:**
Design and the Arts, Herberger Institute for School of Architecture and Landscape Architecture
http://design.asu.edu/
design.grad@asu.edu
CDN 162

**Landscape Architecture, MLA (ARLDEMLA)**
Online Degree Search Title: Landscape Architecture (MLA)

**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.

**Degree Requirements:** 56 credit hours, an Applied Project, an Oral Comprehensive Exam and including a Capstone Course (LDE 622)

Master of Landscape Architecture Program Two-Year degree requirements

First Year (Fifth Year)

**Fall (14)**
LDE 521 Advanced Architectural Studio I (5)
LTC 563 Planting Design (3)
LPH 513 Research in Landscape Architecture Seminar (3)
ATE 598 Sustainability of the Built Environment (3)

Spring (14)
LDE 522 Advanced Landscape Architectural Studio (5)
LTC 546 LA Alternative technologies and Materials (3)
LPH 612 Landscape Architecture Research Methods (3)
LTC 598 ST: Urban Ecological Design (3)

Summer
ARP 584 Clinical Internship 1 (3)

Second Year (Sixth Year)

Fall (14)
LDE 621 Advanced Landscape Architectural Studio (5)
L/APH 515 Current Topics adn Issues (3)
LPH 613 Landscape Architecture Seminar (3)
Herberger Institute for Design and the Arts professional graduate design elective* (3)

Spring (11)
LDE 622 Advanced Landscape Architectural Studio (5)
L/AAD 652 Professional Practice (3)
LTC 598 ST Urban Landscape Water Systems and Management (3)
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://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
LDE 590 Foundation Architectural Studio (6)
ALA 102 Architecture, Landscape Architecture and Society (first five-week session) (3)
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.

4. Provide an official copy of GRE scores (unofficial copies will not be accepted). The school does not have a minimum score for admission, however, the average scores of admitted students are between 500-600 for each section.

5. International students are required to submit an official Test of English as a Foreign Language (TOEFL) score, minimum score for admission is 100 (Internet-based), 250 (computer-based) or 600 (paper-based).

Additional Admission Requirements

Please submit the following items directly to the Graduate College:

1. Online Application and fee.

2. Test Scores (GRE and TOEFL-for international applicants).

3. Official transcripts from all post-secondary institutions.

4. The names and contact information of a minimum of three individuals to serve as references in support of the applicant must be included in the online application. The references should be from professionals or educators familiar with the applicant's experience and capability for graduate work.

5. The 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.

Portfolio: Candidates applying for the two-year program are required to submit a portfolio. See [http://sala.asu.edu/](http://sala.asu.edu/) the portfolio requirements for more information. The portfolio is the only application item that should be sent directly to the School of Architecture and Landscape Architecture. Do not send the portfolio to the Graduate College. 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). Additionally, the ASU ID number, and the exact program to which the applicant is applying should be clearly marked on the portfolio.

The School of Architecture and Landscape Architecture does not return portfolios.

Materials that are not sent directly to the appropriate locations could experience a delay and may result in the applicant's denial.

Submit the portfolio to the following address:

Master of Landscape Architecture Admissions Committee  
School of Architecture and Landscape Architecture  
Arizona State University  
Design North, Room 162  
P.O. Box 871605  
Tempe, AZ 85287-1605

Admissions Requirements to the Three-Plus-Year Program

Applicants must:

1. Submit an online Graduate College application and all of the materials outlined above.

2. Apply and begin the program in the summer.

3. Hold an undergraduate or graduate degree from a college or university recognized by ASU.
4. Have earned a bachelor's degree in a field other than architectural studies leading to the NAAB-accredited program.

5. Meet the minimum GPA requirements as established by the Graduate College.

6. Provide an official copy of GRE scores (unofficial copies will not be accepted). The school does not have a minimum score for admission; however, the average scores of admitted students are between 500-600 for each section.

Contact Information:
Design and the Arts, Herberger Institute for School of Architecture and Landscape Architecture
http://sala.asu.edu/
sala.grad@asu.edu
CDN 162
480/965-1033

Media Arts and Sciences, PHD (FAMASPHD)
Online Degree Search Title: Media Arts and Sciences (PhD)

Program Description: Media, Arts 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 School of Arts, Media and Engineering (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, Arts and Sciences Ph.D. students to gain and contribute expertise in knowledge fusion for digital media.

Degree Requirements: 84 credit hours, a Dissertation and a Written Comprehensive Exam

Thirty of the 39 required course credits will be from the transdisciplinary media courses offered by the School of Arts, Media and Engineering (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 as well as elaborating 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 Information:
Design and the Arts, Herberger Institute for Arts, Media and Engineering Sch
http://ame.asu.edu
ameed@asu.edu
BYENG 395
480/965-9168

Music (Conducting), DMA (FACONDDMA)
Online Degree Search Title: Conducting (DMA)

Program Description: The School of Music D.M.A. conducting program trains highly-qualified musicians to become conductors and scholars, emphasizing a thorough knowledge of repertory, knowledge of historical and analytical issues, an understanding of efficient, effective rehearsal technique and a clear, expressive conducting technique. Doctoral conducting students receive considerable individual attention and have regular opportunities to rehearse and conduct ensembles.

Degree Requirements: 90 credit hours, a Research Paper, a Written Comprehensive Exam and an Oral Comprehensive Exam

Only 30 hours from a master's degree may be counted toward the requirements for this program. 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 Information:
Design and the Arts, Herberger Institute for School of Music
Music (Ethnomusicology), MA (FAETHNMA)

Online Degree Search Title: Ethnomusicology (MA)

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.

Degree Requirements: 30 credit hours, a Thesis, a Written Comprehensive Exam, an Oral Comprehensive Exam and a Foreign Language Exam

At least 20 credit hours of this program 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 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 Information:
Design and the Arts, Herberger Institute for School of Music
http://music.asu.edu
SOMadmissions@asu.edu
MUSIC E167
480/965-5069

Music (Interdisciplinary Digital Media and Performance) DMA

Online Degree Search Title: Music – Interdisciplinary Dig. Media & Perf. (DMA)

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.

Degree Requirements: 90 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam.

The program requires 36 hours in arts, media and engineering, 30 hours in music studies and 24 hours in research and dissertation.

Admission Requirements: In addition to the ASU Graduate College online application, you must submit to AME:

1. Submission of three original works showing technical facility in composition. Letters of recommendation from two qualified persons in the field.
2. A one-page personal statement of purpose outlining your educational and career goals. 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.

3. Additional application materials that address the hybrid nature of the Arts, Media & Engineering Program should also be submitted.

**Contact Information:**
Design and the Arts, Herberger Institute for School of Music
http://music.asu.edu
SOMadmissions@asu.edu
MUSIC E167
480/965-5069

**Music (Music Composition), DMA (FACOMPDMA)**

**Online Degree Search Title:** Music Composition (DMA)

**Program Description:** The D.M.A. is a professional program designed for outstanding composition students preparing for professional careers, including teaching positions at the university level. The concentration in composition provides extensive faculty and guest artist interaction as well as opportunities to develop advanced skills in traditional and contemporary compositional techniques. Opportunities to collaborate with music scholars, theorists, performers, educators and other composers provides students with a broad and well-rounded foundation for advanced careers in music.

**Degree Requirements:** 90 credit hours, a Dissertation, a Written Comprehensive Exam, an Oral Comprehensive Exam and a Foreign Language Exam

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 a 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.
5. A complete resume.

The deadline is Feb. 15 for teaching assistantship applications.

**Contact Information:**
Design and the Arts, Herberger Institute for School of Music
http://music.asu.edu
SOMadmissions@asu.edu
MUSIC E167
480/965-5069
Music (Music Education), PhD (FAMUSEDPHD)

Online Degree Search Title: Music (Music Education) PhD

Program Description: The Ph.D. in music is a scholarly research degree. Graduates of the Ph.D. in music typically serve as faculty members at colleges or universities; as scholars or researchers with music publishers and similar enterprises; as music and arts administrators for education, arts and civic and government organizations; and as public policy advisors to education organizations, arts providers, and/or civic and government agencies. The concentration in music education includes highly specialized study in music education, support studies with scholars and artists in the School of Music and other schools in the Herberger Institute for Design and the Arts, and opportunities for cross-disciplinary elective study with faculty in schools and colleges across the ASU campuses. A plan of study is designed by the student in consultation with the faculty to support a research trajectory identified by the student. Research conducted by students in the music education concentration aims to reexamine, interrogate and broaden the canon of music education, and to expand the traditional boundaries of music scholarship by challenging methodological and disciplinary boundaries. The degree concludes with dissertation research.

Degree Requirements: 90 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

The degree requirements are distributed as follows:

1. Core requirements (10)
   - MSI 601
   - MSI 602
   - MSI 755
   - MTC 520

2. Elective credits (music, music education and related studies). (29)

3. Concentration (music education courses, including research). (30)

4. Internship. (3)

5. Research. (6)

6. Dissertation. (12)

Admission Requirements:

1. Applicants must submit the Graduate College online application.

2. All applicants must have completed a bachelor's degree (or equivalent) or a graduate degree from a regionally accredited college or university in music education prior to beginning this doctoral program.

3. The music education concentration requires the following as part of the application package:
   
   A. A curriculum vitae.
   
   B. A personal statement describing goals for graduate study and intended career trajectory.
   
   C. Three letters of recommendation from individuals familiar with the applicant's musicianship, scholarly and/or teaching abilities.
   
   D. Evidence of successful teaching experience in the form of a digital recording of one or more rehearsals or music classes led/taught by the applicant.
   
   E. A writing sample, preferably a paper from an upper-level undergraduate course or a graduate course or an article or document written by the applicant.
   
   F. An interview, via telephone or in person, with at least three members of the music education doctoral faculty.

4. Applicants must have a minimum of a 3.00 cumulative GPA (4.00 scale) in the last 60 hours of a student's first bachelor's degree program, and a minimum 3.00 cumulative GPA (4.00 scale) in graduate work or degrees.

5. Applicants whose native language is not English must meet the university's English proficiency requirements.
6. Either the GRE or the MAT is required of all applicants.

Contact Information:
Design and the Arts, Herberger Institute for
School of Music
http://music.asu.edu
SOMadmissions@asu.edu
MUSIC E167
480/965-5069

Music (Music History and Literature), MA (FAMHISTMA)
Online Degree Search Title: Music History and Literature (MA)

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.

Degree Requirements: 30 credit hours, a Thesis, a Written Comprehensive Exam, an Oral Comprehensive Exam and a Foreign Language Exam

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 (6)
- Five to six hours of music theory
- Two credit hours of course work approved by student's supervisory committee

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 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 Information:
Design and the Arts, Herberger Institute for
School of Music
http://music.asu.edu
SOMadmissions@asu.edu
MUSIC E167
480/965-5069

Music (Performance), DMA (FAPERFDMA)
Online Degree Search Title: Music Performance (DMA)

Program Description: The D.M.A. is a professional program designed for students desiring high-levels of performance as well as preparation for teaching positions at the university level. The concentration in performance provides extensive faculty and guest artist interaction as well as opportunities to develop advanced skills in traditional and contemporary pedagogy. Opportunities to collaborate with music scholars, theorists, composers, educators and other performers provides students with a broad and well-rounded foundation for advanced careers in music.

Degree Requirements: 90 credit hours, a Research Paper, a Written Comprehensive Exam, an Oral Comprehensive Exam and a Foreign Language Exam (Enter "Waived Requirement" in the second Foreign Language box), or 90 credit
hours, a Research Paper, a Written Comprehensive Exam, an Oral Comprehensive Exam and two Foreign Language Exams

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. 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. This must include materials from a variety of stylistic periods; a repertoire list must also be included.
5. A completed resume.

The 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 Information:**
Design and the Arts, Herberger Institute for School of Music
http://music.asu.edu
SOMadmissions@asu.edu
MUSIC E167
480/965-5069

**Music Education, MM (FAMUSEDMM)**
Online Degree Search Title: Music Education (MM)

**Program Description:** The M.M. in music education is designed for individuals interested in music teaching and learning in public and private schools, community education settings, early childhood programs, and adult education. Practicing teachers as well as community musicians and music educators interested in advanced studies in music teaching and learning may enroll. Students may elect courses in each part of the degree program and can design a course of study that meets specific music education interests and needs. The degree provides opportunities to study full-time, part-time (through evening courses), in the summers only, or by combining full-time, part-time, and summer study. Full-time students may complete the degree in as little as one year.

**Degree Requirements:** 32 credit hours and a Written Comprehensive Exam

Six credits may be transferred from another regionally accredited graduate institution. Up to nine credits may be taken prior to admission.
Music Education Core (10)

Required Courses
- MUE 548 Introduction to Research in Music Education (3)
- MUE 590 Reading and Conference (M.M. Portfolio) (1)

Elective Courses (choose any two)
- MUE 549 Foundations of Music Education (3)
- MUE 550 Studies in Music Curriculum (3)
- MUE 579 Psychology of Music: Learning Theory (3)
- MUE 581 Social and Cultural Studies in Music Ed. (3)

Musicianship Core (10)

Required Courses
- MHL one course in music history/ethnomusicology (3)
- MTC one course in music theory (3)

Elective courses, to include courses in history, ethnomusicology, theory, composition, improvisation, or arranging.

Specialization (12); studies elected, in consultation with the faculty advisor, that support the student’s pedagogical and musical expertise and professional goals

Required Courses
- MUE one course in music education pedagogy, such as an advanced rehearsal techniques course, an advanced pedagogy course, a Kodály or Orff course
- MUE one course in music literature, repertoire, or curricular content

Elective Courses

May include additional courses elected from the music education core, the musicianship core, additional pedagogy or repertoire courses, ensembles, lessons, other music studies, or cross-campus electives

Portfolio

The capstone project of the degree is a portfolio comprised of four elements:

1. Two recent video/digital recordings of the candidate’s teaching, accompanied by a written self-tribute;
2. A paper representing scholarly work in music education;
3. A paper or project demonstrating knowledge of music / musicianship (e.g., a history, theory, or ethnomusicology paper; a composition or arrangement or set of compositions or arrangements with notes for rehearsal and performance);
4. A paper or project demonstrating expertise in pedagogy or teaching specialization, such as a curriculum project, a specialized unit, a research or policy paper, or an article suitable for publishing in a music teaching periodical.

Students submit the portfolio to the faculty committee three weeks prior to an oral examination, which is typically conducted during finals week of the semester of graduation.

Admission Requirements: A bachelor’s degree in music or its equivalent from a regionally accredited institution is required for admission to the M.M. in music education. All applicants must:

1. Submit the Graduate College online application.
2. Have obtained teacher certification, or demonstrate evidence of music teaching/leadership experience.
3. Submit a resume.
4. Submit three letters of recommendation from individuals familiar with the candidate’s teaching, musical leadership, and/or musicianship.
**Music Therapy, MM (FAMTHERMM)**
Online Degree Search Title: Music Therapy (MM)

**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 culminating in a graduate clinical project. Candidates for the MM in Music Therapy must hold the credential Music Therapist Board Certified or similar international music therapy credential.

**Degree Requirements:** 33 credit hours and a Thesis, or 33 credit hours and an Applied Project

At least 11 of the required credit hours must be in the student's 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 may also be required, 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 complete the following:

1. 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.
2. An in-depth interview emphasizing the applicant's music therapy philosophy, research activities and clinical interests. A phone interview can be arranged.

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.

**Contact Information:**
Design and the Arts, Herberger Institute for School of Music
http://music.asu.edu
SOMadmissions@asu.edu
MUSIC E167
480/965-5069

**Music Therapy (Clinical Music Therapy), MM (HICMTMM)**
Online Degree Search Title: Music Therapy (Clinical Music Therapy) (MM)

**Program Description:** The Master of Music in music therapy with a concentration in clinical music therapy is to provide interested students with the academic coursework to become board-certified music therapists through the American Music Therapy Association in the U.S. This is a practical degree designed for students with a bachelor’s degree in any music discipline (performance, education, theory, arts in music, etc.), but without certification. This concentration will function as an entry level certification program for those with a bachelor’s degree in music already wishing to enter the music therapy field.

**Degree Requirements:** 33 credit hours including a Capstone (MUE 584)

The requirements for this concentration are:

Core courses (12)

- MUE 501 Introduction to Professional Music Therapy
- MUE 548 Introduction to Research in Music Education
MUE 581 Music Therapy Theory and Practice in Psychopathology
MUE 589 Repertoire for Music Therapy Required

Concentration courses (15)

Culminating experience (4)

MUE 584 Clinical Internship in Music Therapy

Admission Requirements: All applicants must submit the Graduate College online application and meet the following requirements:

1. Earned a bachelor’s degree in music or fine arts with a music emphasis.
2. Demonstrated skills in the areas of acoustic guitar accompaniment, piano accompaniment, accapella singing (determined through audition/entrance interview).
3. Three letters of recommendation.
4. Personal interview with music therapy faculty.
5. GPA of 3.00 or higher.

Contact Information:
Design and the Arts, Herberger Institute for School of Music
http://music.asu.edu/
SOMadmissions@asu.edu
Music Building, E167
480/965-5069

Performance (Collaborative Piano), MM (FACPIANOMM)
Online Degree Search Title: Piano, Collaborative (MM)

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.

Degree Requirements: 32 credit hours and a Written Comprehensive Exam

Degree requirements include:

1. Eighteen credit hours in collaborative piano and performance.
2. Fourteen credit hours of music history, theory and electives.
3. At least one year of college-level instruction in either French, German, or Italian and at least one of the following are required:
   A. One semester of diction in each of the two other languages.
   B. One semester of language instruction in each of the two other languages.

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 or taped audition in collaborative piano.

Contact Information:
Design and the Arts, Herberger Institute for School of Music
http://music.asu.edu
SOMadmissions@asu.edu
Performance (Music Theatre/Opera Performance), MM (FAMUTPOMM)

Online Degree Search Title: Music Theatre/Opera Performance (MM)

Program Description: The M.M. with a concentration in music theatre and opera performance 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.

Degree Requirements: 32 credit hours and a Written Comprehensive Exam

Degree requirements for the music theatre and opera emphases include 12 hours of study in the concentration area, eight hours of private voice instruction and 12 hours in music history, music theory and electives. Sixteen hours of college-level credit in more than one foreign language, chosen from French, German and Italian, are also required for graduation. Degree Requirements for the music direction emphasis include 15 hours of study in the concentration area, four hours of private keyboard instruction and 13 hours of music history, music theory and electives. Written and oral examinations are required.

Admission Requirements: A B.Mus. degree 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 Information:
Design and the Arts, Herberger Institute for School of Music
http://music.asu.edu
SOMadmissions@asu.edu
MUSIC E167
480/965-5069

Performance (Performance Pedagogy), MM (FAPPEDEMM)

Online Degree Search Title: Performance Pedagogy (MM)

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.

Degree Requirements: 32 credit hours and a Written Comprehensive Exam

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. (Note: A B.Mus. or its equivalent from an accredited institution is required for entrance.)
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 video.

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.

Contact Information:
Design and the Arts, Herberger Institute for
School of Music
http://music.asu.edu
SOMAdmissions@asu.edu
MUSIC E167
480/965-5069

Performance (Performance), MM (FAPERF3MM)
Online Degree Search Title: Music Performance (MM)

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.

Degree Requirements: 32 credit hours and a Written Comprehensive Exam

This program requires six hours of study in the concentration area, eight hours of studio instruction and 18 hours in music history, music theory and electives.

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 application form, admission to all concentrations in performance are dependent on a successful audition, either in person or by taped performance. Applicants must also submit a repertoire list as evidence of previous study.

Contact Information:
Design and the Arts, Herberger Institute for
School of Music
http://music.asu.edu
SOMAdmissions@asu.edu
MUSIC E167
480/965-5069

Theatre, MA (FATHEAMA)
Online Degree Search Title: Theatre (MA)

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.

Degree Requirements: 30 credit hours, a Thesis and a Written Comprehensive Exam

This program consists of:

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 thesis or final project chosen by the student and approved by the student’s faculty committee.

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:
1. A statement of purpose that 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.
2. A current curriculum vitae.
3. A sample of scholarly writing.
4. Three letters of recommendation from professionals familiar with their work.

Contact Information:
Design and the Arts, Herberger Institute for School of Theatre and Film http://theatrefilm.asu.edu/ theatre@asu.edu GHALL 232 480/965-5337

Theatre (Directing), MFA (FADIRMFA)
Online Degree Search Title: Theatre (Directing) - MFA

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, artistry and attitude, including interpersonal communication skills, required to be an excellent professional director.

Degree Requirements: 60 credit hours and an Applied Project

The M.F.A. in theatre with a concentration in directing is a three-year program culminating in an applied project. Practical directing and directing classes are approximately 50 percent of the course work. Classes also include:

- Acting.
- Adaptation.
- Assistant directing for professional directors working on the main stage and a Theatre for Young Audiences tour practicum.
- Community-based ensemble.
- Design collaboration.
- Dramatic theory and criticism.
- Dramaturgy.
- Movement.
- Performance technology.
- Research Methods.
- Theatre for social change.
- Theatre history and literature.
- Theatre organization and management.

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; 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. A professional internship is required for each M.F.A. director.
**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 reference from professionals familiar with the student's work.
5. A written directorial approach to a play selected by the reviewing committee.

**Contact Information:**
Design and the Arts, Herberger Institute for
School of Theatre and Film
http://theatrefilm.asu.edu
theatrefilm@asu.edu
GHALL 232
480/965-5337

**Theatre (Dramatic Writing), MFA (FADRWRTMFA)**
Online Degree Search Title: Theatre (Dramatic Writing) MFA

**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, 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. Student-written work is highlighted in the annual new works series.

**Degree Requirements:** 60 credit hours, an Applied Project and including a Capstone Course (THP 693)

The M.F.A. in theatre with a concentration in dramatic writing is composed of the following:

1. Required core courses. (27)
2. Required concentration courses. (9)
3. Elective courses. (18)
4. Applied project. (6)

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 theatre or an English emphasis in creative writing, with a GPA of 3.00 or above (4.00 scale). If an applicant does not have an undergraduate major in theatre or English, 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 dramatic writing (for stage, TV or film).

**Contact Information:**
Design and the Arts, Herberger Institute for
School of Theatre and Film
http://theatrefilm.asu.edu
theatrefilm@asu.edu
GHALL 232
480/965-5337

**Theatre (Interdisciplinary Digital Media), MFA (FATHEADMFA)**
Online Degree Search Title: Theatre - Interdisciplinary Digital Media (MFA)

**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.

**Degree Requirements:** 60 credit hours, an Applied Project, a Written Comprehensive Exam and an Oral Comprehensive Exam

The degree requirements are:

1. Twenty-seven 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 Information:**
Design and the Arts, Herberger Institute for
School of Theatre and Film
http://theatrefilm.asu.edu/
theatrefilm@asu.edu
GHALL 232
480/965-5337

**Theatre (Performance Design), MFA (FAPERDMFA)**
Online Degree Search Title: Theatre (Performance Design) - MFA

**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 works 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.

**Degree Requirements**: 60 credit hours and an Applied Project

The M.F.A. in design is a three-year program culminating in an applied project.

- 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 March 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.
6. Academic writing sample.

**Contact Information**:
Design and the Arts, Herberger Institute for School of Theatre and Film
http://theatrefilm.asu.edu
theatrefilm@asu.edu
GHALL 232
480/965-5337

**Theatre (Performance), MFA (FAPERFMFA)**
Online Degree Search Title: Theatre Performance (MFA)
**Program Description:** The M.F.A. in theatre with a concentration in performance 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.

**Degree Requirements:** 60 credit hours and an Applied Project

The M.F.A. in theatre with a concentration in performance is a three-year program culminating in an applied project.

- 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.
- 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. A professional internship is required.

**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 March 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.
6. An academic writing sample.

**Contact Information:**
Design and the Arts, Herberger Institute for
School of Theatre and Film
http://theatrefilm.asu.edu
theatrefilm@asu.edu
GHALL 232
480/965-5337

**Theatre (Theatre For Youth), MFA (FAYOUTHMFA)**

Online Degree Search Title: Theatre for Youth (MFA)

**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.

**Degree Requirements:** 60 credit hours, an Applied Project, a Written Comprehensive Exam and an Oral Comprehensive Exam

The M.F.A. in theatre (theatre for youth) is a three-year 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 Information:
Design and the Arts, Herberger Institute for
School of Theatre and Film
http://theatrefilm.asu.edu
theatrefilm@asu.edu
GHALL 232
480/965-5337

Theatre (Theatre For Youth), PHD (FAYOUTHPHD)
Online Degree Search Title: Theatre for Youth (PhD)

Program Description: This Ph.D. degree program is designed to give students a broad knowledge of theatre, specialized 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.

Degree Requirements: 90 credit hours, a Dissertation, a Written Comprehensive Exam, an Oral Comprehensive Exam and a Foreign Language Exam

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. Where appropriate, the supervisory committee may approve certification of literacy in a foreign language as meeting this research methodology requirement. This approval is granted only in those circumstances wherein fluency in that language is necessary for the dissertation research.

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 with a concentration in 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 Information:
Design and the Arts, Herberger Institute for School of Theatre and Film
http://theatrefilm.asu.edu/
theatrefilm@asu.edu
GHALL 232
480/965-5337

Theatre (Theatre/Performance Americas), PHD (FAPERAMPHD)

Online Degree Search Title: Theatre (Performance America) - PhD

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.

**Degree Requirements:** 90 credit hours, a Dissertation, a Written Comprehensive Exam, an Oral Comprehensive Exam and a Foreign Language Exam

A total of 60 credit hours are required after completion of a master's degree in a relevant discipline. 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.
- Topics seminars.

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 with a concentration in 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 Information:**
Design and the Arts, Herberger Institute for School of Theatre and Film
http://theatrefilm.asu.edu
theatre@asu.edu
GHALL 232
480/965-5337

**Urban Design, MUD (ARMUDMUD)**
Online Degree Search Title: Urban Design (MUD)

**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 concurrent degree with the school's Master of Science in Built Environment. 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.

**Degree Requirements:** 45 credit hours, an Applied Project, an Oral Comprehensive Exam and including a Capstone Course (MUD 622)

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: 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). The school does not have a minimum score for admissions, however, the average scores of admitted students are between 500-600 for each section.
5. International students are required to submit an official TOEFL score, minimum score for admission to the program is 100 (Internet), 250 (computer-based), or 600 (paper-based).

Admission Documents

Please submit the following items directly to the Graduate College:

1. Online application and fee.
2. Test scores (GRE and TOEFL-for international applicants).
3. Official transcripts from all post-secondary institutions
4. Three references: The names and contact information of a minimum of three individuals to serve as references in support of the applicant must be included in the online application. The references should be from professionals or educators familiar with the applicant's experience and capability for graduate work.
5. The 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.

Portfolio: Candidates applying for the two-year Master of Urban Design program are required to submit a portfolio. See the portfolio requirements on the school Web site for more information.

The portfolio is the only application item that should be sent directly to the School of Architecture and Landscape Architecture (see address below). Do not send the portfolio to the Graduate College. 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). Additionally, the AUS ID number, and the exact program to which the applicant is applying should be clearly marked on the portfolio.

The School of Architecture and Landscape Architecture does not return portfolios. Materials that are not sent directly to the appropriate locations could experience a delay and may result in the applicant’s denial. Submit the portfolio to the following address:

Master of Landscape Architecture Admissions Committee  
School of Architecture and Landscape Architecture  
Arizona State University  
Design North, room 162  
SW corner of University and Forest  
P.O. Box 871605  
Tempe, AZ 85287-1605

Three-Plus-Year Program admission requirements

Applicants must:

1. Submit an online Graduate College application and all of the materials outlined above.
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 Information:
Design and the Arts, Herberger Institute for  
School of Architecture and Landscape Architecture  
http://sala.asu.edu/  
sala.grad@asu.edu  
CDN 162  
480/965-3536

Engineering, Ira A. Fulton Schools of

Aerospace Engineering, MS (ESAEROSPMS)
Online Degree Search Title: Aerospace Engineering (MS)

Program Description: The faculty in 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 Graduate Guidelines on the school Web site.

Degree Requirements: 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 the approval of the Graduate Program Chair. 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, aerospace, chemical and materials 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 plan of study (iPOS) with the university. The MSPC and the graduate program chair must approve changes to the iPOS. The iPOS 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 graduate credit hours may be counted toward a 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. Students interested in applying to this program must submit the Graduate College online application (http://graduate.asu.edu/admissions). 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 general 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 online recommendation system.
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 aerospace engineering.

**Contact Information:**

Engineering, Ira A. Fulton Schools of
Mechanical and Aerospace Engineering Program
http://engineering.asu.edu/macme
macme@asu.edu
ECG 202
480/965-2335

**Aerospace Engineering, MSE (ESAERSPMSE)**

Online Degree Search Title: Aerospace Engineering (MSE)

**Program Description:** The 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 the graduate programs stress a sound foundation leading to a specialized area of study. Additional information can be found in the Graduate Guidelines on the school web site.

**Degree Requirements:** 30 credit hours and a Written Comprehensive Exam (MIP), 30 credit hours and an Applied Project, 30 credit hours and an Oral Comprehensive Exam

The M.S.E. is the professional master's degree. Only the non-thesis option is available for aerospace engineering. 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 Graduate Program Chair. 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, aerospace, chemical and materials 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 plan of study (iPOS) with the university. The committee and the Graduate Program Chair must approve changes to the iPOS. The iPOS 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 graduate
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 and the Graduate Program Chair.

A final comprehensive examination or applied project will be administered by the committee. 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. Students interested in applying to this program must submit the Graduate College online application (http://graduate.asu.edu/admissions). 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 general 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 online recommendation system.
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 aerospace engineering.

Contact Information:
Engineering, Ira A. Fulton Schools of
Mechanical and Aerospace Engineering Program
http://engineering.asu.edu/macme
macme@asu.edu
ECG 202
480/965-2335

Aerospace Engineering, PHD (ESAERSPPHD)
Online Degree Search Title: Aerospace Engineering (PhD)

Program Description: The graduate programs 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 Aerospace Engineering Graduate Guidelines on the school Web site.

Degree Requirements: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

The Ph.D. is directed toward original research. 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 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 Graduate Program Chair. A graduate student pursuing a Ph.D. plan of study in aerospace engineering must complete within the first year of his/her graduate studies at ASU: three 500-level (preferably core) courses in the major research area and one 500-level mathematics course with an average GPA of 3.25 or above. Specific qualifying course requirements for each major research area are identified in the Aerospace Engineering Graduate Guidelines. University regulations note the possibility of having two separate supervisory committees, a program committee and a dissertation committee. In 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 plan of study (iPOS).
2. Provide guidance for the student's research.
3. Administer the comprehensive examinations.
4. Administer the dissertation defense.

The program committee shall consist of at least five ASU faculty with the majority being from mechanical, aerospace, chemical and materials engineering, but at least one being from outside mechanical, aerospace, chemical and materials 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 the mechanical, aerospace, chemical and materials faculty and approved to chair dissertation committees.
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 Chair.

The student, in consultation with his/her program committee chair and the program committee, must file an iPOS prior to completing 42 credit hours. The iPOS 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 after admission to the Ph.D. program. 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.
- Twelve credit 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 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 aerospace engineering Ph.D. program and must pass the examination by the end of the sixth semester. Part-time students should apprise the graduate 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. Students interested in applying to this program must submit the Graduate College online application (http://graduate.asu.edu/admissions). 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 general 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 online recommendation system.

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 aerospace engineering.

**Contact Information:**

Engineering, Ira A. Fulton Schools of Mechanical and Aerospace Engineering Program http://engineering.asu.edu/macme macme@asu.edu ECG 202 480/965-2335

**Aerospace Engineering (Engineering Education), PHD (ESAEEEDPHD)**

Online Degree Search Title: Aerospace Engineering (Engineering Education) PhD

**Program Description:** Students pursuing the Ph.D. in aerospace engineering are eligible to apply for the engineering education concentration. The engineering education concentration is interdisciplinary and will combine research in engineering with research in education. The doctoral engineering education concentration will prepare students to become scholars, researchers or practitioners in academia. The concentration provides students with an opportunity to explore pedagogy, methodology, curriculum and instruction and apply it to engineering. Students enrolled in the engineering education concentration under the Ph.D. in aerospace engineering will complete 18 credit hours of graduate-level engineering course work with a specific research focus and 15 hours of graduate-level education course work. The program is directed toward original research. The students will be required to write and defend a dissertation that describes an original contribution within the chosen engineering discipline that integrates an education component (i.e., research on engineering pre-university programs, undergraduate engineering curriculum and instruction, etc.). The research results should be suitable for publication in a reputable journal. Students will be required to satisfy all mechanical and aerospace engineering qualifying and comprehensive requirements and to abide by all policies set forth by the Ira A. Fulton Schools of Engineering.

**Degree Requirements:** 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

This concentration entails the following:

1. Eighteen credit hours will be taken in the major engineering research area.
2. Nine credit hours of appropriate mathematics courses.
3. Twelve credit hours of dissertation.
4. Fifteen credit hours of appropriate education courses in methodology, curriculum and instruction; research hours will be taken as required.
5. Thirty credit hours of appropriate course work may be accepted from a previously earned engineering master's degree. Students without a previously earned master's degree will be required to take 30 credit hours of course work and research related to the student's dissertation.

**Admission Requirements:** All applicants are required to submit the Graduate College online application, meet all Graduate College admission criteria, and take the general GRE; a subject-specific GRE is not required. Other requirements are as follows:

1. A minimum GPA of 3.00 (on a 4.00 scale) for graduates of accredited U.S. institutions. ASU’s Graduate College is responsible for international GPA interpretation.
2. Students whose native language is not English are required to achieve minimum English proficiency requirements as specified by the Graduate College.
3. Three letters of recommendation, using the format specified by the unit.
4. A statement of academic and career objectives and address the desire to pursue an engineering education concentration in Ph.D. in aerospace engineering (statement of purpose).

**Contact Information:**
Engineering, Ira A. Fulton Schools of
Mechanical and Aerospace Engineering Program
http://engineering.asu.edu/macme
macme@asu.edu
ECG 202
480/965-2335

**Applied Ethics and the Professions (Ethics and Emerging Technologies), MA (LAAEPEETMA)**

**Online Degree Search Title:** Applied Ethics (Ethics and Emerging Technologies) MA

**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.

**Degree Requirements:** 30 credit hours, an Applied Project and including a Capstone Course (AEP 593)

Graduate course work is distributed as follows:

- Required core courses. (6)
- Required concentration course. (3)
- Elective concentration courses. (15)
- Required culminating experience as capstone courses. (6)

**Admission Requirements:** All applicants must submit the Graduate College online application and meet both the Graduate College and program admission criteria. The following documents are required for the application process, and submit the following:

1. Official GRE scores are to be sent directly to the Graduate College. More information regarding how to send official GRE scores to the Graduate College can be found at http://graduate.asu.edu/admissions/support/sub/13/questions.
2. Official transcripts from all postsecondary institutions attended are to be sent directly to the Graduate College.
3. Statement of interest in applied ethics and career goals.
4. Three letters of recommendation.
5. 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) or a score of 24 on the speaking portion of the TOEFL is required.

Contact Information:
Engineering, Ira A. Fulton Schools of
Civil, Environmental and Sustainable Eng Program
http://engineering.asu.edu/sebe
sebe.advising@asu.edu
ECG 251
480/965-0595

Bioengineering, MS (ESBIOENMS)
Online Degree Search Title: Bioengineering (MS)

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.

Degree Requirements: 30 credit hours and a Thesis, or 30 credit hours and a Written Exam (MIP), or 30 credit hours and an Applied Project.

All candidates pursuing an M.S. in bioengineering are required to complete an approved plan of study. 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 30 credits:
- Bioengineering course work. (9)
- Mathematical electives. (6)
- General electives. (6)
- Bioengineering seminar. (3)
- Thesis. (6)

The following are program requirements for the nonthesis M.S., for a total of 30 credits:
- Bioengineering course work. (13)
- Mathematical electives. (6)
- General electives. (6)
- Bioengineering seminar. (2)
• 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.

Contact Information:
Engineering, Ira A. Fulton Schools of Harrington Bioengineering Program
http://engineering.asu.edu/bhse
bmerec@asu.edu
ECG 334
480/965-3028

Bioengineering, PHD (ESBIOENPHD)
Online Degree Search Title: Bioengineering (PhD)

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.

Degree Requirements: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

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
- BME 598 Application of MRI Imaging (4)
- BME 598 Introduction to Biomedical Imaging (4)

Technical Electives
No fewer than 12 credit hours of course work (as determined by the student's committee)

Research/Dissertation
Admission 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 2011 will need to apply by Dec. 31, 2010). The application deadline for spring admission is Aug. 31 of the previous year (i.e., a student wishing to enroll for spring 2011 will need to apply by Aug. 31, 2010.)

Contact Information:
Engineering, Ira A. Fulton Schools of Harrington Bioengineering Program
http://engineering.asu.edu/bhse
bmerec@asu.edu
ECG 334
480/965-3028

Chemical Engineering, MS (ESCHEMEMS)

Online Degree Search Title: Chemical Engineering (MS)

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 on the school Web site. Students should contact the graduate programs office for additional details.

Degree Requirements: 33 credit hours and a Thesis

All candidates for the M.S. in chemical engineering are required to complete an approved plan of study. 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. Any questions on course validity for the technical elective requirement should be addressed to the student's committee chair and/or the Graduate Program Chair. 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 (http://graduate.asu.edu/admissions).
2. Application fee.
3. Three letters of recommendation from faculty or professionals who can comment on your research and scholarly capabilities. Letters of recommendation are submitted via the online recommendation system.
4. GRE scores.
5. Official Test of English as a Foreign Language (TOEFL) scores, for international students only.

Contact Information:
Engineering, Ira A. Fulton Schools of
Chemical Engineering Program
http://engineering.asu.edu/macme
macme@asu.edu
ECG 202
480/965-2335

Chemical Engineering, MSE (ESCHEMEMSE)
Online Degree Search Title: Chemical Engineering (MSE)

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.

Degree Requirements: 33 credit hours and an Applied Project, or 33 credit hours, a Written Comprehensive Exam and an Oral Comprehensive Exam (MIP)

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 (http://graduate.asu.edu/admissions).
2. Application fee.
3. Three letters of recommendation from faculty or professionals who can comment on your research and scholarly capabilities. Letters of recommendation are submitted via the on-line recommendation system.
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 school Web site for specific admissions procedures. 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 Information:
Engineering, Ira A. Fulton Schools of Chemical Engineering Program
http://engineering.asu.edu/macme
macme@asu.edu
ECG 202
480/965-2335

Chemical Engineering, PHD (ESCHEMEPHD)
Online Degree Search Title: Chemical Engineering (PhD)
**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 on the school Web site. Students should contact the graduate programs office for additional details.

**Degree Requirements:** 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

Chemical Engineering Core: The Ph.D. program requires 15 credit hours of graduate-level chemical engineering courses. The following five courses (comprising these 15 credit 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 credit 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 plan 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 plan 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. 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 (http://graduate.asu.edu/admissions).
2. Application fee.
3. Three letters of recommendation from faculty or professionals who can comment on your research and scholarly capabilities. Letters of recommendation are submitted via the online recommendation system.
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 on the school Web site. 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, U.S. citizens normally will have a minimum GPA of 3.20 (4.00 scale), 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 (4.00 scale).

Contact Information:
Engineering, Ira A. Fulton Schools of Chemical Engineering
http://engineering.asu.edu/macme
macme@asu.edu
ECG 202
480/965-2335

Civil and Environmental Engineering, MS (ESCIVILMS)
Online Degree Search Title: Civil/Environmental Engineering (MS)

Program Description: The faculty in civil, environmental and sustainable engineering offer a graduate program leading to a Master of Science (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:

- Environmental engineering.
- Geotechnical engineering.
- Hydrology and Water Resources engineering.
- Structural engineering.
- Transportation engineering.

Degree Requirements: 30 credit hours and a Thesis, or 30 credit hours and a Thesis (MIP)

This program requires 30 credit hours and a written thesis, which must be original research in nature. All candidates for the M.S. are required to complete 24 credit hours of approved graduate coursework and a minimum of six credit hours of thesis. Additional courses may be assigned by the graduate supervisory committee, depending on the background of the candidate. A final oral examination in defense of the thesis written work is required for all students.

Admission Requirements: Applicants are expected to satisfy all requirements for both admission to the Graduate College and to the program. Entry into this program 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 graduate program chair and a committee chaired by the specialty area coordinator. The minimum GPA 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 website. Applicants must take the GRE and have their official scores sent directly to the Graduate College. More information regarding how to send official GRE scores to the Graduate College can be found at http://graduate.asu.edu/admissions/support/sub/13/questions. Applicants are required to submit three letters of recommendation. 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) or a score of 24 on the speaking portion of the TOEFL is required.
Civil and Environmental Engineering, MSE (ESCIVILMSE)

Online Degree Search Title: Civil/Environmental Engineering (MSE)

Program Description: The faculty in civil, environmental and sustainable engineering offer a professional program leading to an Master of Science in Engineering (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.
- Environmental engineering.
- Geotechnical engineering.
- Hydrology and Water Resources engineering.
- Structural engineering.
- Transportation engineering.

Degree Requirements: 30 credit hours and a Written Comprehensive Exam, or 30 credit hours and a Written Comprehensive Exam (MIP)

All candidates for the M.S.E. are required to complete approved graduate course work. Additional courses may be assigned by the graduate supervisory committee depending on the background of the candidate. Details of the comprehensive written examinations 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 Information:
Engineering, Ira A. Fulton Schools of Civil, Environmental and Sustainable Eng Program
http://engineering.asu.edu/sebe
sebe.advising@asu.edu
ECG 251
480/965-0595
Civil and Environmental Engineering, PHD (ESCIVILPHD)

Program Description: The faculty in civil, environmental and sustainable 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:

- Environmental engineering.
- Geotechnical engineering.
- Hydrology and Water Resources engineering.
- Structural engineering.
- Transportation engineering.

Degree Requirements: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

All candidates for the Ph.D. are required to complete 84 approved graduate credit hours (of these, 30 hours can be from the previously awarded 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 a maximum of 12 credit hours of dissertation work. This degree also requires written and oral comprehensive examinations and approval of the dissertation prospectus, for the student to be eligible for doctoral candidacy. After entering candidacy, students complete their research, write and successfully defend their written 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 both the Graduate College and the program. Entry into this program 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 graduate program chair and a committee chaired by the specialty area coordinator. A minimum requirement is an overall GPA of 3.20 in all post-baccalaureate graduate coursework. 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 website. Applicants must take the GRE and have their official scores sent directly to the Graduate College. More information regarding how to send official GRE scores to the Graduate College can be found at http://graduate.asu.edu/admissions/support/sub/13/questions. Applicants are required to submit three letters of recommendation. 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, 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) or a score of 24 or higher on the speaking portion of the TOEFL is required.

Contact Information:
Engineering, Ira A. Fulton Schools of Civil, Environmental and Sustainable Eng Program
http://engineering.asu.edu/sebe
sebe.advising@asu.edu
480/965-0595

Computer Science, MCS (ESCOMSCMCS)

Online Degree Search Title: Computer Science (MCS)
**Program Description:** The Master of Computer Science (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 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.

**Degree Requirements:** 30 credit hours and a Portfolio.

Each student defines a potentially unique program of study subject to approval by the graduate programs office and the Graduate College. The student must complete a minimum of 30 credit hours of approved graduate-level work. At least 24 of the 30 credit hours must be computer science and engineering (CSE) 500-level credits at ASU. At least 30 hours must be for formal course work (including CSE 591 but excluding credits for CSE 590 Reading and Conference).

M.C.S. students must complete a project portfolio from three courses in which the student received a "B" (3.00) grade or higher.

Students will also complete one course in three areas to cover a wide range of knowledge. The three areas are:

1. Foundations: courses focus on algorithms, mathematical logic, programming languages and theory.
2. Systems: courses cover topics in architecture, networks, operating systems and software engineering.
3. Applications: courses are in the areas of artificial intelligence, databases, graphics and multimedia.

**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 have a bachelor's degree in computer science, computer engineering or a closely related area. Every applicant must submit:

1. Scores for the GRE, unless the student has graduated with an undergraduate degree in computer science or computer systems engineering at ASU.
2. Verbal, quantitative and analytical GRE scores are required while the subject test in computer science is optional.
3. Three letters of recommendation.
5. Official transcripts from every university attended.
6. International students must submit Test of English as a Foreign Language (TOEFL) scores.

If the student is assigned any deficiency course work upon admission, those classes must be completed with a grade of “B” (3.00) or higher within two semesters of admission to the program. Deficiency courses include:

- CSE 230 Computer Organization and Assembly Language Programming
- CSE 310 Data Structures and Algorithms
- CSE 340 Principles of Programming Languages
- CSE 355 Introduction to Theoretical Computer Science
- CSE 360 Introduction to Software Engineering
- CSE 430 Operating Systems

The applicant's undergraduate GPA and depth of preparation in computer science and engineering are the primary factors affecting admission. The application deadline for admission and financial aid is December 1 for the fall semester and August 1 for the spring semester.
Computer Science, MS (ESCOMSCMS)

Online Degree Search Title: Computer Science (MS)

Program Description: The Master of Science (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. Students can conduct cutting-edge research in a wide variety of research areas including 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.

Degree Requirements: 30 credit hours and a Thesis

Students complete 30 credit hours of course work, including six credit hours of thesis to graduate with the M.S. degree. Students must successfully pass a thesis defense to graduate. Students will complete one course in three areas to cover a wide range of knowledge. The three areas are:

1. Foundations: courses focus on algorithms, mathematical logic, programming languages and theory.
2. Systems: courses cover topics in architecture, networks, operating systems and software engineering.
3. 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 must complete nine credit hours of course work in their research area.

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 have a bachelor's degree in computer science, computer engineering or a closely related area. Every applicant must submit:

1. Scores for the GRE, unless the student has graduated with an undergraduate degree in computer science or computer systems engineering at ASU.
2. Verbal, quantitative and analytical GRE scores are required while the subject test in computer science is optional.
3. Three letters of recommendation.
5. Official transcripts from every university attended.
6. International students must submit Test of English as a Foreign Language (TOEFL) scores.

If the student is assigned any deficiency course work upon admission, those classes must be completed with a grade of “B” or higher within two semesters of admission to the program. Deficiency courses include:

- CSE 230 Computer Organization and Assembly Language Programming
- CSE 310 Data Structures and Algorithms
- CSE 340 Principles of Programming Languages
- CSE 355 Introduction to Theoretical Computer Science
- CSE 360 Introduction to Software Engineering
- CSE 430 Operating Systems

The applicant’s undergraduate GPA and depth of preparation in computer science and engineering are the primary factors affecting admission. The application deadline for admission and financial aid is December 1 for the fall semester and August 1 for the spring semester.
Computer Science, PHD (ESCOMSCPHD)
Online Degree Search Title: Computer Science (PhD)

Program Description: The Ph.D. in computer science program prepares students to undertake fundamental and applied research in computer science to prepare students for careers in academia, government and industry. Students can conduct cutting-edge research in a wide variety of research areas, including 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.

Degree Requirements: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

The Ph.D. includes 12-18 credit hours of CSE 792 Research and 12 credit hours of CSE 799 Dissertation. Students will complete one course in three areas to cover a wide range of knowledge. The three areas are:

1. Foundations: courses focus on algorithms, mathematical logic, programming languages and theory.
2. Systems: courses cover topics in architecture, networks, operating systems and software engineering.
3. Applications: courses are in the areas of artificial intelligence, databases, graphics and multimedia.

Area courses cannot include CSE 598 courses.

Admission Requirements: Students interested in applying to this program must submit an online application to the Graduate College. 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 exceptional undergraduate applicants may be admitted directly to the Ph.D. program. Every applicant must submit:

1. Scores for the GRE, unless the student has graduated with an undergraduate degree in computer science or computer systems engineering at ASU.
2. Verbal, quantitative and analytical GRE scores are required while the subject test in computer science is optional.
3. Three letters of recommendation.
5. Official transcripts from every university attended.
6. International students must submit Test of English as a Foreign Language (TOEFL) scores.

If the student is assigned any deficiency course work upon admission, those classes must be completed with a grade of "B" (3.00) or higher within two semesters of admission to the program. Deficiency courses include: CSE 230 Computer Organization and Assembly Language Programming, CSE 310 Data Structures and Algorithms, CSE 340 Principles of Programming Languages, CSE 355 Introduction to Theoretical Computer Science, CSE 360 Introduction to Software Engineering, CSE 430 Operating Systems. The applicant's undergraduate GPA and depth of preparation in computer science and engineering are the primary factors affecting admission. The application deadline for admission and financial aid is December 1 for the fall semester and August 1 for the spring semester.

Contact Information:
Engineering, Ira A. Fulton Schools of Computer Science and Engineering Program

Academic Catalog Archive 2010-2011  254
Computer Science (Arts, Media and Engineering), MS (ESAMECSMS)

Online Degree Search Title: Computer Science - Art, Media and Eng (MS)

Program Description: The Master of Science (M.S.) in computer science program with a concentration in Arts, Media and Engineering (AME) 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. More information about AME can be found at: http://ame.asu.edu/.

Degree Requirements: 30 credit hours and a Thesis

Students complete 30 credit hours of coursework, including nine credit hours of AME-approved coursework and six credit hours of thesis, to graduate with the degree. Students must successfully pass a thesis defense to graduate. Students will complete nine credit hours of AME courses selected in consultation with the student's AME graduate advisor.

Students will also complete one course in three areas to cover a wide range of knowledge. The three areas are:

1. Foundations: courses focus on algorithms, mathematical logic, programming languages and theory.
2. Systems: courses cover topics in architecture, networks, operating systems and software engineering.
3. 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 have a bachelor's degree in computer science, computer engineering or a closely related area.

Every applicant must submit:

1. Scores for the GRE, unless the student has graduated with an undergraduate degree in computer science or computer systems engineering at ASU.
2. Verbal, quantitative and analytical GRE scores are required while the subject test in computer science is optional.
3. Three letters of recommendation.
5. Official transcripts from every university attended.
6. International students must submit Test of English as a Foreign Language (TOEFL) scores.

The statement of purpose must 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 http://ame.asu.edu/education/prospective/funding.php. Please submit a curriculum vitae with your statement of purpose.

If the student is assigned any deficiency course work upon admission, those classes must be completed with a grade of "B" (3.00) or higher within two semesters of admission to the program. Deficiency courses include:
CSE 230 Computer Organization and Assembly Language Programming
CSE 310 Data Structures and Algorithms
CSE 340 Principles of Programming Languages
CSE 355 Introduction to Theoretical Computer Science
CSE 360 Introduction to Software Engineering
CSE 430 Operating Systems

The applicant’s undergraduate GPA and depth of preparation in computer science and engineering are the primary factors affecting admission.

The application deadline for admission and financial aid is December 1 for the fall semester and August 1 for the spring semester.

Contact Information:
Engineering, Ira A. Fulton Schools of
Computer Science and Engineering Program
cidse.advising@asu.edu
BYENG 208
480/965-3199

Computer Science (Arts, Media and Engineering), PHD (ESAMECSPHD)
Online Degree Search Title: Computer Science - Art, Media and Eng (PhD)

Program Description: The Ph.D. in computer science program with a concentration in arts, media and engineering 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. More information about arts, media and engineering can be found at http://ame.asu.edu/.

Degree Requirements: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

Students in the Ph.D. in computer science program with an Arts, Media and Engineering concentration must complete a minimum of 84 credit hours of approved graduate-level work, of which 36 credit hours focus on arts, media, and engineering, chosen in consultation with the student’s AME graduate advisor. Students must complete 12-18 credit hours of CSE 792 Research and 12 credit hours of CSE 799 Dissertation. Students will also complete one course in three areas to cover a wide range of knowledge. The three areas are:

1. Foundations: courses focus on algorithms, mathematical logic, programming languages and theory.
2. Systems: courses cover topics in architecture, networks, operating systems and software engineering.
3. 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 have a bachelor's degree in computer science, computer engineering or a closely related area. Most applicants should have earned a master's degree, but exceptional undergraduate applicants may be admitted directly into the Ph.D. program. Every applicant must submit:

1. Scores for the GRE, unless the student has graduated with an undergraduate degree in computer science or computer systems engineering at ASU.
2. Verbal, quantitative and analytical GRE scores are required while the subject test in computer science is optional.
3. Three letters of recommendation.
5. Official transcripts from every university attended.
6. International students must submit Test of English as a Foreign Language (TOEFL) scores.

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 http://ame.asu.edu/education/prospective/funding.php. Please submit a current curriculum vitae with your statement of purpose. If the student is assigned any deficiency coursework upon admission, those classes must be completed with a grade of "B" (3.00) or higher within two semesters of admission to the program. Deficiency courses include:

- CSE 230 Computer Organization and Assembly Language Programming
- CSE 310 Data Structures and Algorithms
- CSE 340 Principles of Programming Languages
- CSE 355 Introduction to Theoretical Computer Science
- CSE 360 Introduction to Software Engineering
- CSE 430 Operating Systems

The applicant’s undergraduate GPA and depth of preparation in computer science and engineering are the primary factors affecting admission. The application deadline for admission and financial aid is December 1 for the fall semester and August 1 for the spring semester.

**Contact Information:**
Engineering, Ira A. Fulton Schools of
Computer Science and Engineering Program
http://engineering.asu.edu/cidse
cidse.advising@asu.edu
BYENG 208
480/965-3199

**Computer Science (Biomedical Informatics), MS (ESCSBIOIMS)**

**Online Degree Search Title:** Computer Science (Biomedical Informatics) (MS)

**Program Description:** The Master of Science (M.S.) program in computer science with a concentration in biomedical informatics 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.

**Degree Requirements:** 30 credit hours and a Thesis.

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 must successfully pass a thesis defense to graduate. Students will complete the following nine credit hours in biomedical informatics:

- BMI 501 Introduction to Biomedical Informatics (3)
- BMI 540 Problem Solving in Biomedical Informatics (3)
- BMI 5XX Approved Elective in Biomedical Informatics (3)

Students will also complete one course in three areas to cover a wide range of knowledge. The three areas are 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 will be in computer science and students will focus their research in one of the following areas in biomedical informatics, public health informatics, clinical informatics, imaging informatics or bioinformatics.

**Admission Requirements:** Students interested in applying to this program must submit an online application to the Graduate College. An applicant to the M.S. program should have a bachelor's degree in computer science, computer engineering or a closely related area. Every applicant must submit:

1. Scores for the GRE, unless the student has graduated with an undergraduate degree in computer science or computer systems engineering at ASU.
2. Verbal, quantitative and analytical GRE scores are required while the subject test in computer science is optional.
3. Three letters of recommendation.
5. Official transcripts from every university attended.
6. International students must submit Test of English as a Foreign Language (TOEFL) scores.

If the student is assigned any deficiency course work upon admission, those classes must be completed with a grade of "B" (3.00) or higher within two semesters of admission to the program. Deficiency courses include:

- CSE 230 Computer Organization and Assembly Language Programming
- CSE 310 Data Structures and Algorithms
- CSE 340 Principles of Programming Languages
- CSE 355 Introduction to Theoretical Computer Science
- CSE 360 Introduction to Software Engineering
- CSE 430 Operating Systems

The applicant's undergraduate GPA and depth of preparation in computer science and engineering are the primary factors affecting admission.

The application deadline for admission and financial aid is December 1 for the fall semester and August 1 for the spring semester.

**Contact Information:**
Engineering, Ira A. Fulton Schools of
Computer Science and Engineering Program
cidse.advising@asu.edu
BYENG 208
480/965-3199

**Computer Science (Information Assurance), MCS (ESCOMSCMCS)**

Online Degree Search Title: Computer Science - Information Assurance (MCS)

Program Description: The Master of Computer Science (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 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.

**Degree Requirements:** 30 credit hours and a Portfolio
Each student defines a potentially unique program of study subject to approval by the graduate programs office and the Graduate College. The student must complete a minimum of 30 credit hours of approved graduate-level work. At least 24 of the 30 credit hours must be computer science and engineering (CSE) 500-level credits at ASU. At least 30 hours must be for formal course work (including CSE 591 but excluding credits for CSE 590 Reading and Conference).

M.C.S. students must complete a project portfolio from three courses in which the student received a "B" (3.00) grade or higher.

Students will also complete one course in three areas to cover a wide range of knowledge. The three areas are:

1. Foundations: courses focus on algorithms, mathematical logic, programming languages and theory.
2. Systems: courses cover topics in architecture, networks, operating systems and software engineering.
3. Applications: courses are in the areas of artificial intelligence, databases, graphics and multimedia.

**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 have a bachelor's degree in computer science, computer engineering or a closely related area. Every applicant must submit:

1. Scores for the GRE, unless the student has graduated with an undergraduate degree in computer science or computer systems engineering at ASU.
2. Verbal, quantitative and analytical GRE scores are required while the subject test in computer science is optional.
3. Three letters of recommendation.
5. Official transcripts from every university attended.
6. International students must submit Test of English as a Foreign Language (TOEFL) scores.

If the student is assigned any deficiency course work upon admission, those classes must be completed with a grade of "B" (3.00) or higher within two semesters of admission to the program. Deficiency courses include:

- CSE 230 Computer Organization and Assembly Language Programming
- CSE 310 Data Structures and Algorithms
- CSE 340 Principles of Programming Languages
- CSE 355 Introduction to Theoretical Computer Science
- CSE 360 Introduction to Software Engineering
- CSE 430 Operating Systems

The applicant's undergraduate GPA and depth of preparation in computer science and engineering are the primary factors affecting admission. The application deadline for admission and financial aid is December 1 for the fall semester and August 1 for the spring semester.

**Contact Information:**
Engineering, Ira A. Fulton Schools of Computer Science and Engineering Program cidse.advising@asu.edu
BYENG 208
480/965-3199

**Computer Science (Information Assurance), MS (ESCOMSCMS)**

Online Degree Search Title: Computer Science - Information Assurance (MS)

Program Description: The Master of Science (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.
Students can conduct cutting-edge research in a wide variety of research areas including 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.

**Degree Requirements:** 30 credit hours and a Thesis

Students complete 30 credit hours of course work, including six credit hours of thesis to graduate with the M.S. degree. Students must successfully pass a thesis defense to graduate.

Students will complete one course in three areas to cover a wide range of knowledge. The three areas are:

1. **Foundations:** courses focus on algorithms, mathematical logic, programming languages and theory.
2. **Systems:** courses cover topics in architecture, networks, operating systems and software engineering.
3. **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 must complete nine credit hours of course work in their research area.

**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 have a bachelor’s degree in computer science, computer engineering or a closely related area. Every applicant must submit:

1. Scores for the GRE, unless the student has graduated with an undergraduate degree in computer science or computer systems engineering at ASU.
2. Verbal, quantitative and analytical GRE scores are required while the subject test in computer science is optional.
3. Three letters of recommendation.
5. Official transcripts from every university attended.
6. International students must submit Test of English as a Foreign Language (TOEFL) scores.

If the student is assigned any deficiency course work upon admission, those classes must be completed with a grade of “B” (3.00) or higher within two semesters of admission to the program. Deficiency courses include:

- CSE 230 Computer Organization and Assembly Language Programming
- CSE 310 Data Structures and Algorithms
- CSE 340 Principles of Programming Languages
- CSE 355 Introduction to Theoretical Computer Science
- CSE 360 Introduction to Software Engineering
- CSE 430 Operating Systems

The applicant’s undergraduate GPA and depth of preparation in computer science and engineering are the primary factors affecting admission. The application deadline for admission and financial aid is December 1 for the fall semester and August 1 for the spring semester.

**Contact Information:**
Engineering, Ira A. Fulton Schools of Computer Science and Engineering Program
cidse.advising@asu.edu
BYENG 208
480/965-3199

**Computer Science (Information Assurance), PHD (ESCSEIAPHD)**
Online Degree Search Title: Computer Science - Information Assurance (PHD)
Program Description: The Ph.D. in computer science program 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 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.

Degree Requirements: 84 credit hours, a Dissertation and a Written Comprehensive Exam

The Ph.D. program must contain a minimum of 84 credit hours of approved graduate-level work which includes 18 credit hours of information assurance courses. Students must also complete 12-18 credit hours of CSE 792 Research and 12 credit hours of CSE 799 Dissertation. See http://engineering.asu.edu/graduate/cs/concentrations#ia for more information on Information Assurance course options. Students will also complete one course in three areas to cover a wide range of knowledge. The three areas are 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. Area courses cannot include CSE 598 courses.

Admission Requirements: Students interested in applying to this program must submit an online application to the Graduate College. 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 exceptional undergraduate applicants may be admitted directly into the Ph.D. program. Every applicant must submit:

1. Scores for the GRE, unless the student has graduated with an undergraduate degree in computer science or computer systems engineering at ASU.
2. Verbal, quantitative and analytical GRE scores are required while the subject test in computer science is optional.
3. Three letters of recommendation.
5. Official transcripts from every university attended.
6. International students must submit Test of English as a Foreign Language (TOEFL) scores.

If the student is assigned any deficiency course work upon admission, those classes must be completed with a grade of “B” or higher within two semesters of admission to the program. Deficiency courses include:

- CSE 230 Computer Organization and Assembly Language Programming
- CSE 310 Data Structures and Algorithms
- CSE 340 Principles of Programming Languages
- CSE 355 Introduction to Theoretical Computer Science
- CSE 360 Introduction to Software Engineering
- CSE 430 Operating Systems

The applicant's undergraduate GPA and depth of preparation in computer science and engineering are the primary factors affecting admission. The application deadline for admission and financial aid is December 1 for the fall semester and August 1 for the spring semester.

Contact Information:
Engineering, Ira A. Fulton Schools of Computer Science and Engineering Program
http://engineering.asu.edu/cidse
cidse.advising@asu.edu
Construction, MS (ESCONSTMS)

Online Degree Search Title: Construction (MS)

Program Description: The faculty in the Del E. Webb School of Construction offer a graduate program leading to the Master of Science (M.S.) in construction. Specialty areas 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 specialty area supports the needs of the student desiring a career in the maintenance, operation, renovation or decommissioning of existing facilities. The construction management specialty area 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.

Degree Requirements: 30 credit hours and a Thesis, or 30 credit hours and a Written Comprehensive Exam

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 six credit hours of 400-level course work to be part of the approved plan 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 both the Graduate College and the program. 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. Applicants must have their official GRE scores sent directly to the Graduate College. More information regarding how to send official GRE scores to the Graduate College can be found at: http://graduate.asu.edu/admissions/support/sub/13/questions.
3. Three Letters of recommendation.
4. A personal statement.
5. A current resume.
6. 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) or a score of 24 on the speaking portion of the TOEFL is required.

Contact Information:
Engineering, Ira A. Fulton Schools of
Del E. Webb Construction
http://engineering.asu.edu/sebe
sebe.advising@asu.edu
ECG 251
480/965-0595

Construction, PHD (ESCONPHD)

Online Degree Search Title: Construction (PHD)

Program Description: The purpose of the 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.

**Degree Requirements:** 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

The Ph.D. in construction will typically 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 degree. 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. Core construction courses.
3. A qualifying examination.
4. Elective courses.
5. A written and oral comprehensive 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 both the Graduate College and the program. 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. Applicants must take the GRE and have their official scores sent directly to the Graduate College. More information regarding how to send official GRE scores to the Graduate College can be found at: http://graduate.asu.edu/admissions/support/sub/13/questions.
4. Three letters of recommendation.
5. A personal statement from each applicant describing their career goals and research objectives.
7. A current résumé.
8. 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) or a score of 24 on the speaking portion of the TOEFL is required.

**Contact Information:**
Engineering, Ira A. Fulton Schools of
Del E. Webb Construction
http://engineering.asu.edu/sebe
sebe.advising@asu.edu
Electrical Engineering, MS (ESEEMS)
Online Degree Search Title: Electrical Engineering (MS)

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=SESEEMSE&sp=Sgraduate, 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 Schools 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.

Degree Requirements: 30 credit hours and a Thesis, 30 credit hours, a Written Comprehensive Exam and an Oral Comprehensive Exam (MIP)

The credits earned towards this research degree 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 by taking classes entirely on campus or entirely online.

Admission Requirements: Students desiring the 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.

Contact Information:
Engineering, Ira A. Fulton Schools of Department of Electrical Engineering
http://engineering.asu.edu/ecee
askee@asu.edu
GWC 212
480/965-3424

Electrical Engineering, MSE (ESEEMSE)
Online Degree Search Title: Electrical Engineering (MSE)

Program Description: The electrical engineering faculty in the Ira A. Fulton Schools 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 all classes on-campus or all classes online. 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/academics/mba-mse-ee.cfm.

**Degree Requirements:** 30 credit hours and a Written Comprehensive Exam

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. Students interested in applying to this program must submit an online application to the Graduate College. 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 Information:**
Engineering, Ira A. Fulton Schools of
Department of Electrical Engineering
http://engineering.asu.edu/ecee
askee@asu.edu
GWC 212
480/965-3424

**Electrical Engineering, PHD (ESEEPHD)**
Online Degree Search Title: Electrical Engineering (PhD)

**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.

**Degree Requirements:** 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

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 hours of EEE courses.
3. Research or omnibus course hours: 12 hours, can be 400-level and above.
4. Research: 12 hours (EEE 792).
5. Dissertation: 12 hours (EEE 799).

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 (item #3 above) 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 EEE 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 electrical engineering 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. Students interested in applying to this program must submit an online application to the Graduate College. 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](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 Information:**
Engineering, Ira A. Fulton Schools of
Department of Electrical Engineering
http://engineering.asu.edu/ecee
askee@asu.edu
Electrical Engineering (Arts, Media and Engineering), MS (ESAMEEMS)
Online Degree Search Title: Electrical Engineering - Art, Media and Eng (MS)

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.

Degree Requirements: 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 Web site, 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 Information:
Engineering, Ira A. Fulton Schools of
Department of Electrical Engineering
http://engineering.asu.edu/ecee
askee@asu.edu
GWC 212
480/965-3424

Electrical Engineering (Arts, Media and Engineering), PHD (ESAMEPHD)
Online Degree Search Title: Electrical Engineering - Art, Media and Eng (PhD)

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
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.

**Degree Requirements:** 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

Program details are as follows:

1. Ten courses are required, typically seven from EEE and three from AME.
2. Twelve hours of research are required, typically eight credits from EEE and four from AME.
3. Twelve hours of thesis are required, typically eight credits from EEE and four from AME.
4. A qualifying examination.
5. A comprehensive examination.
6. 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. Students interested in applying to this program must submit an online application to the Graduate College. 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 Web site, 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 Information:**
Engineering, Ira A. Fulton Schools of
Department of Electrical Engineering
http://engineering.asu.edu/ec ee
askee@asu.edu
GWC 212
480/965-3424

**Engineering, MEng (ESENGRMENG)**
Online Degree Search Title: Master of Engineering (MEng)

**Program Description:** When pursuing a Master of Engineering (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 one of several areas of study available, 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 entirely 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 Schools of Engineering.

**Degree Requirements:** 30 credit hours and a Written Comprehensive Exam, or 30 credit hours and an Applied Project, or 30 credit hours and an Oral Comprehensive Exam

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 Information:**

Engineering, Ira A. Fulton Schools of
Dean, Ira A. Fulton Schools of Engineering
http://www.asuengineeringonline.com
asu.cpd@asu.edu
BYENG 691AA
480/965-1740

**Engineering Science (Enterprise Systems Innovation and Management), MSE (ESIEEMSE)**

Online Degree Search Title: Engineering Science (Enterprise Sys Innov and Mgmt) (MSE)

**Program Description:** The Ira A. Fulton Schools of Engineering offer a Masters of Science in Engineering (M.S.E.) in engineering science with an 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 and strategy innovation within the enterprise, in addition to enterprise management, asset, design and business model innovation. The enterprise systems innovation and management concentration 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 Schools of Engineering.
**Degree Requirements**: 30 credit hours and an Applied Project

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 (IEE 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 Information**:
Engineering, Ira A. Fulton Schools of
Dean, Ira A. Fulton Schools of Engineering
http://www.asuengineeringonline.com
asu.cpd@asu.edu
BYENG 691AA
480/965-1740

**Engineering Science (Software Engineering), MSE (ESSFEMSE)**

Online Degree Search Title: Engineering Science (Software Engineering) (MSE)

**Program Description**: The Master of Science in Engineering (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 Schools of Engineering.

**Degree Requirements**: 30 credit hours and an Applied Project

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.
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 Information:
Engineering, Ira A. Fulton Schools of
Dean, Ira A. Fulton Schools of Engineering
http://www.asuengineeringonline.com
asu.cpdp@asu.edu
BYENG 691AA
480/965-1740

Industrial Engineering, MS (ESINDENMS)
Online Degree Search Title: Industrial Engineering (MS)

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=SESINDENMSE&sp=Graduate, and, once admitted, students can consult with the graduate advisor 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 faculty in industrial engineering are internationally recognized for their innovative research projects, funded through both the government and industry. The industrial engineering program at ASU is ranked among the top 20 in the nation for graduate programs.

Degree Requirements: 30 credit hours and a Thesis, or 30 credit hours and a Thesis (MIP)

The M.S. in Industrial Engineering is a 30 credit hour program which requires 24 credit hours of coursework and six credit hours of thesis. Students are required to take the following coursework:

IEE 505 Information Systems Engineering (3)
IEE 545 Simulating Stochastic Systems (3) or IEE 567 Simulation Systems Analysis (3)
IEE 572 Design of Engineering Experiments (3) or IEE 578 Regression Analysis (3)
IEE 574 Applied Deterministic Operations Research Models (3) or IEE 575 Applied Stochastic Operations Research Models (3)
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. Students must successfully pass the thesis defense to graduate.

Admission Requirements: Students interested in applying to an M.S. in industrial engineering must initially apply to the M.S.E. in industrial engineering program. Students admitted to the M.S.E. program who later obtain a faculty advisor
may transfer to the M.S. program. Students who want to change from the M.S.E. program to the M.S. thesis program must also have a cumulative GPA of 3.20 in their course work.

Contact Information:
Engineering, Ira A. Fulton Schools of Industrial, Systems & Operations Engineering Prgm
http://engineering.asu.edu/cidse
cidse.advising@asu.edu
BYENG 208
480/965-3199

Industrial Engineering, MSE (ESINDENMSE)
Online Degree Search Title: Industrial Engineering (MSE)

Program Description: 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 M.S.E. in industrial engineering 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.

Degree Requirements: 30 credit hours and a Written Comprehensive Exam, or 30 credit hours and a Written Comprehensive Exam (MIP)

The M.S.E. in industrial engineering requires:

1. Four core courses.
2. Four area courses.
3. Two electives.
4. A written comprehensive examination.

Students are required to complete the following course work:

IEE 505 Information Systems Engineering (3)
IEE 545 Simulating Stochastic Systems (3) or IEE 567 Simulation Systems Analysis (3)
IEE 572 Design of Engineering Experiments (3 credits) or IEE 578 Regression Analysis (3)
IEE 574 Applied Deterministic Operations Research Models (3) or IEE 575 Applied Stochastic Operations Research Models (3)
Four area courses
Two elective courses

Students must complete a final written comprehensive examination in three of the four core courses. A student who maintains a 3.75 GPA in the four core courses is exempt from the written comprehensive examination.

Admission Requirements: Students will submit the online application to the Graduate College. Required supplementary application materials include:

1. A statement of purpose.
2. GRE scores.
3. Three letters of recommendations.
International students must also submit Test of English as a Foreign Language (TOEFL) scores. At the time of the application, all applicants must have completed a minimum of 9 credit hours of calculus (Calculus I, II, III) with a grade of "C" (2.00) or higher.

If the student is assigned any deficiency coursework upon admission the those classes must be completed with a grade of "B" or higher within two semester of admission to the program. Deficiency courses include:

- CSE 110 Principles of Programming with Java
- CSE 205 Concepts of Computer Science and Date Structures
- IEE 376 Operations Research Deterministic Techniques/Applications
- IEE 380 Probability and Statistics of Engineering Problem Solving
- IEE 385 Engineering Statistics with Probability
- IEE 470 Stochastic Operations Research
- MAT 242 Linear Algebra

For full consideration, the application deadline is January 15 for fall semester and September for 15 for spring semester.

**Contact Information:**
Engineering, Ira A. Fulton Schools of Industrial, Systems & Operations Engineering Prgm
cidse.advising@asu.edu
BYENG 208
480/965-3199

**Industrial Engineering, PHD (ESINDENPHD)**
Online Degree Search Title: Industrial Engineering (PhD)

**Program Description:** The Ph.D. in industrial engineering program engages students in the fundamental and applied research in industrial engineering to prepare for careers in academia, government, and industry. 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 sustainable organizations and systems. The faculty in industrial engineering are internationally recognized for their innovative research projects, funded through both the government and industry. The industrial engineering program at ASU is ranked among the top 20 in the nation for graduate programs.

**Degree Requirements:** 85 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

The Ph.D. in industrial engineering requires a minimum of 85 credit hours after the bachelor's degree. Students are required to complete five core courses within the first year:

- IEE 620 Optimization I (3)
- IEE 591 Optimization II (3)
- IEE 591 Stochastic Processes (3)
- IEE 670 Mathematical Statistics (3)
- IEE 505 Information Systems Engineering (3)

After completion of the core courses, each student must take the qualifying exam in 4 of the 5 core courses prior to progressing in their academic degree. Students will also complete the following required courses:

- IEE 594 Conference and Workshop (1)
- IEE 700 Research Methods (1)
- IEE 784 Teaching Internship (1)
- IEE 790 Reading and Conference (1) or IEE 584 Internship (1), or an additional IEE 594 Conference and Workshop (1)
- IEE 792 Research (12)
- IEE 799 Thesis (12)

Students must also complete 42 credit hours of approved course work beyond the core and required courses. A written and an oral comprehensive examination is required no later than the semester following completion of 57 credit hours.
of course work in the plan of study. The candidate must also successfully pass the dissertation prospectus and the dissertation oral defense.

**Admission Requirements:** Students will submit an online application to the Graduate College. Required supplementary application materials include:

1. A statement of purpose.
2. Three letters of recommendation.
3. GRE scores.

International students must also submit Test of English as a a Foreign Language (TOEFL) scores. At the time of application, all applicants must have successfully completed a minimum of 9 credit hours of calculus (Calculus I, II, III) with a grade of "C" (2.00) or higher. If the student is assigned any deficiency coursework upon admission, then those classes must be completed with a grade of "B" (3.00) or higher within two semesters of admission to the program. Deficiency courses include:

- CSE 110 Principles of Programming with Java
- CSE 205 Concepts of Computer Science and Date Structures
- IEE 376 Operations Research Deterministic Techniques/Applications
- IEE 380 Probability and Statistics for Engineering Problem Solving
- IEE 470 Stochastic Operations Research
- MAT 242 Linear Algebra

For full consideration, the application deadline is December 15 for fall semester and September 15 for spring semester.

**Contact Information:**
Engineering, Ira A. Fulton Schools of Industrial, Systems & Operations Engineering Prgm
http://engineering.asu.edu/cidse
cidse.advising@asu.edu
Brickyard 208
480/965-3199

**Materials Science and Engineering, MS (ESMATEMS)**
Online Degree Search Title: Materials Science and Engineering (MSE)

**Program Description:** The faculty in the materials science and engineering program offer a Master of Science (M.S.) in materials science and engineering. This degree requires a thesis. This graduate program prepares students for professional careers in materials science and engineering and related fields in industry, government and educational institutions.

**Degree Requirements:** 32 credit hours and a Thesis, or 32 credit hours and a Thesis (MIP)

Students must take six credit hours of core courses selected from the list below. Note that the last choice requires both MSE 526 and 527 but only the MSE 526 may be counted as a technical elective. This selection is most appropriate for students who have some background in modern physics.

- MSE 523 Structural and Mechanical Properties of Materials (3)
- MSE 524 Advanced Thermodynamics (3)
- MSE 561 Phase Transformations, Kinetics, and Diffusion in Solids (3)
- MSE 525 Physics of Materials (3)
- MSE 526, 527 Materials Physics I and II (6)

**Technical Electives (18)**

Students must take 18 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 three credit hours of MSE 590 Reading and Conference may be taken in place of the three credit hour electives.

Seminar
Students must take two credit hours (two semesters) of MSE 591 Seminar. The seminar is a one credit hour course.

Thesis
Students must take six credit hours MSE 599 Thesis, complete a thesis and pass the thesis defense examination.

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.

Faculty Supervisory Committee
Students select a faculty supervisory committee consisting of three members from the graduate faculty in the Materials Science and Engineering program, which includes both core and affiliate faculty. The chair and the majority of members should be full-time faculty in the program. The committee may include research scientists, academic and industrial professionals and other non-ASU-affiliated individuals, subject to approval by the graduate program chair 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. The form lists the coursework taken and the coursework to be taken to complete the credit and course requirements for the degree. The iPOS must be approved by a student's faculty committee, the academic unit and the Graduate College. The iPOS becomes a contract between the university and the student that guides the student in completing the degree requirements.

Thesis
The master’s thesis must be based on original and independent research conducted by the student, under the guidance of the faculty supervisory committee. The thesis should demonstrate the candidate's ability to address a major intellectual problem and to propose meaningful questions and hypotheses. The oral defense engages the supervisory committee and the candidate in a critical, analytical discussion of the research and findings of the study as well as a review of the relation of the thesis to the materials field. M.S. thesis 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 university newspapers.

Graduation
The student is eligible for graduation when all course work is finished, the thesis has been approved and the defense has been passed and the Graduate College requirements for graduation have been met and the thesis is submitted to the ASU Bookstore for binding.

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 iPOS must have been completed within three years of the semester and year of admission to the program and must be graduate level courses.

Admission Requirements: Application requirements, procedures and deadlines are outlined at http://engineering.asu.edu/graduate/mse. Applicants must submit the Graduate College online application. Official transcripts, official GRE score, a resume or curriculum vitae, personal statement and the three letters of recommendation are also required. International students must also submit a TOEFL score. Admission to Materials Science and Engineering 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; for spring semester, Sept. 30.

In summary, applicants must submit the following application materials:

1. Online application.
2. Applicable application fees.
4. GRE score.
5. Test of English as a Foreign Language (TOEFL) score for international students.
6. Resume or curriculum vitae.
7. Personal statement.
8. Three letters of recommendation.

Financial aid is available to highly qualified applicants. 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 Ira A. Fulton Schools of Engineering fellowships and Science Foundation Arizona fellowships.


Contact Information:
Ira A. Fulton Schools of Engineering
Materials Program
mse@asu.edu
ECG 202
480/727-9314

Materials Science and Engineering, MSE (ESMATEMSE)
Online Degree Search Title: Materials Science and Engineering (MSE)

Program Description: The materials science and engineering program faculty offer a Master's of Science in Engineering (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:

1. General.
2. Semiconductor processing and packaging (SPP) processing track.
3. Semiconductor processing and packaging (SPP) packaging track.

Degree Requirements: 32 credit hours and a Research Paper (MIP), or 32 credit hours and an Applied Project

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 (two semesters) of seminar (MSE 591). The seminar is a one credit hour course.

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 pursuing the M.S.E. degree.

Faculty Supervisory Committee

Students select a faculty supervisory committee consisting of three members from the graduate faculty in the Materials Science and Engineering program, which includes both core and affiliate faculty. The majority of members should be full-time Materials Science and Engineering faculty. The committee may include research scientists, academic and industrial professionals and other non-ASU-affiliated individuals, subject to approval by the Graduate Program Chair 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 16 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 Graduate Program Chair 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 25 pages (1.5 spacing) 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 on the school Web site. Applicants must submit the Graduate College online application. Official transcripts, a resume or curriculum vitae, personal statement and three letters of recommendation are also required. A GRE score is not required. International students must also submit a TOEFL score. Admission to the Materials Science and Engineering 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 to: Graduate College Admissions, Arizona State University, P.O. Box 871003, Tempe, AZ 85287-1003, Tel: 480/965-6113; http://graduate.asu.edu.

1. Online application.
2. Applicable application fees.
4. Test of English as a Foreign Language (TOEFL) score for international students.
5. Resume or curriculum vitae.
6. Personal statement.
7. Three letters of recommendation.

GRE scores are not required for admission to the M.S.E. program.
Materials Science and Engineering, PHD (ESENMATPHD)

Online Degree Search Title: Materials Science and Engineering (PHD)

Program Description: The faculty in the materials science and engineering program offer 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.

Degree Requirements

Program requires the following: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam.

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 graduate program chair, 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 graduate program chair 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 Materials Science and Engineering Program (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.

4. Interactive Plan of Study (iPOS)

The interactive plan of study (iPOS) 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.
5. Faculty Supervisory Committee

Students select a faculty supervisory committee consisting of three to five members from the roster of graduate faculty in the Materials Science and Engineering Program, which includes both core and affiliate faculty. The committee chair and the majority of members should be full time faculty or affiliated faculty in Materials Science and Engineering Program. The committee may include research scientists, academic and industrial professionals and other non-ASU-affiliated individuals, subject to approval by the graduate program chair 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 Examinations and Dissertation Prospectus

All doctoral students are required to take comprehensive examinations. The comprehensive examination has written and oral components. These exams are to be taken no later than one year prior to the final defense. In brief, the student is expected to write a 25-page dissertation prospectus on the dissertation project and make an oral presentation to his/her faculty committee. The purpose of the dissertation prospectus is for students to discuss their research designs/methodologies (including methods of data collection, research questions, etc.) and anticipated results to their faculty committees. The policy and procedures for the comprehensive exams and dissertation prospectus can be obtained from the graduate academic advisor.

8. Research and Dissertation Credits

Ph.D. students must take 12 credits of Dissertation (MSE 799) as part of the Ph.D. plan of study. Dissertation credits are normally taken after the student passes the comprehensive examinations and is advanced to candidacy. Research (MSE 792) credits can be taken any time during a student’s program of study when a student is performing research under the guidance of a research advisor. There is no minimum or maximum number of research credits required.

9. The Dissertation

The dissertation, the final product of the Ph.D. degree, is based on original and independent research conducted by the student, under the guidance of the graduate supervisory 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. An oral defense of the dissertation is required. A copy of the dissertation is given to the department and a copy is placed in the ASU library.

Admission Requirements: Specific requirements and procedures for application to the materials science and engineering graduate programs can be found on the school Web site.

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 or curriculum vitae.
8. Personal statement.
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 Ira A. Fulton Schools of Engineering fellowships and Science Foundation Arizona fellowships.

Contact Information:
Engineering, Ira A. Fulton Schools of Materials Program
macme@asu.edu
ECG 202
480/965-2335

**Mechanical Engineering, MS (ESMEMS)**

Online Degree Search Title: Mechanical Engineering (MS)

**Program Description:** The mechanical 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 Graduate Guidelines on the school Web site.

**Degree Requirements:** 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 Graduate Program Chair. 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 mechanical, aerospace, chemical and materials 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 plan of study (iPOS) with the university. The MSPC and the Graduate Program Chair must approve changes to the iPOS. The iPOS 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 graduate 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. Students interested in applying to this program must submit the Graduate College online application (http://graduate.asu.edu/admissions). 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 general 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 on-line recommendation system.
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 Information:
Engineering, Ira A. Fulton Schools of
Mechanical and Aerospace Engineering Program
http://engineering.asu.edu/macme
macme@asu.edu
ECG 202
480/965-2335

Mechanical Engineering, MSE (ESMEMSE)
Online Degree Search Title: Mechanical Engineering (MSE)

Program Description: The mechanical 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 Program Guidelines on the school Web site.

Degree Requirements: 30 credit hours and a Written Comprehensive Exam (MIP), 30 credit hours and an Applied Project, 30 credit hours and an Oral Comprehensive Exam

The M.S.E. is the professional master's degree. Only the non-thesis option is available in mechanical engineering. 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 Graduate Program Chair. 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, aerospace, chemical and materials 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 plan of study (iPOS) with the University. The MSEPC and the Graduate Program Chair must approve changes to the iPOS. The iPOS 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 graduate 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 Program Chair.

A final comprehensive examination or applied project will be administered by the committee. 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. Students interested in applying to this program must submit the Graduate College online application (http://graduate.asu.edu/admissions). 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 general 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 on-line recommendation system.
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 Information:
Engineering, Ira A. Fulton Schools of
Mechanical and Aerospace Engineering Program
http://engineering.asu.edu/macme
macme@asu.edu
ECG 202
480/965-2335

Mechanical Engineering, PHD (ESMEPHD)
Online Degree Search Title: Mechanical Engineering (PhD)

Program Description: The graduate programs in Mechanical 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 Mechanical Engineering. All graduate programs stress a sound foundation in technical fundamentals, communication and professionalism. Additional information can be found in the Graduate Guidelines on the school Web site.

Degree Requirements: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

The Ph.D. is directed toward original research. 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 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 Graduate Program Chair. A graduate student pursuing a Ph.D. program of study in mechanical engineering, must complete within the first year of his/her graduate studies at ASU, three 500-level (preferably core) courses in the major research area and one 500-level mathematics course with an average GPA of 3.25 or higher. Specific qualifying course requirements for each major research area are identified in the Mechanical Engineering Graduate Guidelines. University regulations note the possibility of having two separate supervisory committees, a program committee and a dissertation committee. In mechanical 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 plan of study (iPOS).
2. Provide guidance for the student's research.
3. Administer the comprehensive examinations.
4. Administer the dissertation defense.

The program coordinator shall consist of at least five ASU faculty with the majority being from mechanical, aerospace, chemical and materials faculty, but at least one being from outside mechanical, aerospace, chemical and materials engineering faculty. 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, aerospace, chemical and materials engineering faculty and approved to chair dissertation committees.
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 Program Chair. The student, in consultation with his/her program committee chair and the program committee, must file an iPOS prior to completing 42 credit hours. The iPOS 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 after admission to the Ph.D. program. 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.
- Twelve credit 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 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 engineering Ph.D. program and must pass the examination by the end of the sixth semester. Part-time students should apprise the graduate 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 (http://graduate.asu.edu/admissions). 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 general 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 on-line recommendation system.

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 Information:**

Engineering, Ira A. Fulton Schools of Mechanical and Aerospace Engineering Program
http://engineering.asu.edu/macme
mae@asu.edu
ECG 202
480/965-2335

Mechanical Engineering (Engineering Education), PHD (ESMEEEDPHD)

Online Degree Search Title: Mechanical Engineering (Engineering Education) PhD

Program Description: Students pursuing the Ph.D. in mechanical engineering are eligible to apply for the engineering education concentration. The engineering education concentration is interdisciplinary and will combine research in engineering with research in education. The doctoral engineering education concentration will prepare students to become scholars, researchers or practitioners in academia. The proposed concentration provides students with an opportunity to explore pedagogy, methodology, curriculum and instruction and apply it to engineering. Students enrolled in the engineering education concentration under the Ph.D. in mechanical engineering will complete 18 credit hours of graduate-level engineering course work with a specific research focus and 15 hours of graduate-level education course work. The program is directed toward original research. Students will be required to write and defend a dissertation that describes an original contribution within the chosen engineering discipline that integrates an education component (i.e., research on engineering pre-university programs, undergraduate engineering curriculum and instruction, etc.). The research results should be suitable for publication in a reputable journal. Students will be required to satisfy all mechanical and aerospace engineering qualifying and comprehensive requirements and to abide by all policies set forth by the Ira A. Fulton Schools of Engineering.

Degree Requirements: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

The Ph.D. in aerospace engineering with an engineering education concentration requires the following:

1. Eighteen credit hours will be taken in the major engineering research area.
2. Nine credit hours of appropriate mathematics courses.
3. Twelve credit hours of dissertation.
4. Fifteen credit hours of appropriate education courses in methodology, curriculum and instruction; research hours will be taken as required.
5. Thirty credit hours of appropriate course work may be accepted from a previously earned engineering master's degree.

Students admitted without a previously earned master's degree (i.e., directly from a bachelor's degree), will be required to take 30 credit hours of a combination of course work and research related to the student's dissertation research as deemed necessary by the student's dissertation supervisory committee.

Admission Requirements: All applicants are required to submit the Graduate College online application, meet all Graduate College admission criteria, and take the general GRE; a subject-specific GRE is not required. Other requirements are as follows:

1. A minimum GPA of 3.00 (4.00 scale) for graduates of accredited U.S. institutions. ASU's Graduate College is responsible for international GPA interpretation.
2. Students whose native language is not English are required to achieve minimum English proficiency requirements as specified by the Graduate College.
3. Three letters of recommendation, using the format specified by the unit.
4. A statement of academic and career objectives and address the desire to pursue an engineering education concentration in Ph.D. in mechanical engineering (statement of purpose).

Contact Information:
Engineering, Ira A. Fulton Schools of Mechanical and Aerospace Engineering Program
http://engineering.asu.edu/macme
macme@asu.edu
Nuclear Power Generation (certificate), CERT (ESNPGRCT)

Online Degree Search Title: Nuclear Power Generation (Grad Certificate)

Program Description: The nuclear power generation (NPG) graduate certificate is a multidisciplinary professional option within the Ira A. Fulton Schools 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).

Degree Requirements: 18 credit hours

- Core courses*
  - 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 Information:
Engineering, Ira A. Fulton Schools of
Department of Electrical Engineering
http://engineering.asu.edu/ecce
askee@asu.edu
GWC 212
480/965-3590

Sustainable Technology and Management (certificate), CERT (SUSUTECHCE)

Online Degree Search Title: Sustainable Tech & Management (Grad Certificate)

Program Description: The Certificate in Sustainable Technology and Management (CSTM) is an interdisciplinary program that helps managers, engineers, and organizations meet the business and engineering imperatives of sustainable development in a globalizing and increasingly competitive economy. Students will be presented with metrics and skill sets that will enhance the development of sustainable technologies, entrepreneurship and organizational strategy. The
net benefit will be reduced risks and costs, and increased competitive advantages through strategic alliances, scenario planning and resource management.

**Degree Requirements**: 15 credit hours

Students will work with a faculty advisor to select their course work. Students will complete a capstone project supervised by a faculty advisor, which will demonstrate complex engineering-management problem solving for sustainability and technologies. This will include detailed business plans, technical evaluations and recommendations, comparative analysis of options, and a presentation to the faculty, advisory committee, and invited members of the community. Students are expected earn a "B" (3.00) or better in each course. It is also expected that they complete the program in three years, but can finish the program in one or two years depending on how many courses they take each semester.

**Admission Requirements**: Students must have a bachelor's or master's degree from a regionally accredited institution with a cumulative grade point average of 3.00 or higher on a 4.0 scale, or be currently admitted to a graduate degree program at ASU. Students are required to apply for this certificate program through the Graduate college. Students are required to submit official copies of all undergraduate and graduate transcripts to the Graduate College. ASU transcripts do not need to be sent. If a student has already submitted these to ASU, they do not need to resend them. A personal statement and resume must be submitted along with the CSTM application. Preference will be given to students with degrees in business, engineering, the sciences or public policy. 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). Students are strongly encouraged to apply to the certificate program before completing more than six credit hours of the required courses for the certificate.

**Contact Information**:

Engineering, Ira A. Fulton Schools of Civil, Environmental and Sustainable Eng Program
http://engineering.asu.edu/sebe
sebe.advising@asu.edu
ECG 251
480/965-0595

**Graduate College**

**Biological Design, PHD (GCBDSPHD)**

Online Degree Search Title: Biological Design (PhD)

**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.

**Degree Requirements**: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

Required course work includes 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 Information:
Graduate College
http://biologicaldesign.asu.edu/
biologicaldesign@asu.edu
BD A320CB
480/727-9298

Biomedical Informatics, MS (ESBIOINFMS)
Online Degree Search Title: Biomedical Informatics (MS)

Program Requirements: 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.

**Degree Requirements:** 32 credit hours, a Written Comprehensive Exam and an Oral Comprehensive Exam (MIP), or 32 credit hours, a Written Comprehensive Exam, an Oral Comprehensive Exam and including a Capstone Course (BMI 592)

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 an 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 270), 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 Information:**
Biomedical Informatics Program
Kaitlin.Yacob@asu.edu
ABC 1
602/827-2547

**Biomedical Informatics, PHD (ESBMIPHD)**
Online Degree Search Title: Biomedical Informatics (PhD)

**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.

**Degree Requirements:** 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam.

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 (2)

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 or 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, or
2. Any other graduate-level entry examination.
3. An international student must also submit Test of English as a Foreign Language (TOEFL) scores.

Contact Information:
Biomedical Informatics Program
Kaitlin.Yacob@asu.edu
ABC 1
602/827-2547

Natural Science (Middle School Science, Technology, Engineering and Mathematics), MNS (GCSTMMNS)

Online Degree Search Title: Middle School Sci, Tech, Engr, and Math (MNS)

Program Description: The middle school science, technology, engineering, and mathematics concentration under the Master of Natural Science degree program is a focused course of study for K-8 certified teachers, providing them with integrated content in STEM subject matter that enables them to be considered highly qualified by the No Child Left Behind Act. In addition, the concentration utilizes sustainability research and integrates STEM content around sustainability. Its target audience is middle school teachers as opposed to secondary certified teachers or secondary mathematics teachers and applied mathematicians. Although most program applicants will hold a valid teaching certificate, it is not required that they do so for admission. The program would also be appropriate for informal mathematics and science educators such as education outreach coordinators for industry and museums.

Degree Requirements: 30 credit hours and an Applied Project including a Capstone (PHS 593 or STM 593)

The distribution of courses for this concentration are:

Required core course (3):

STM 501 Introduction to Modeling in STEM

Required concentration courses (21):

STM 502 Cognition and Instruction in STEM
STM 503 Mathematical Modeling
STM 504 Modeling Integrated Science
STM 505 Engineering Design
STM 511 Classroom Applications in
STEM STM 512 Quantitative Modeling
STM 513 Sustainability Science

Elective course (3).
Culminating experience (#):

STM 593/PHS 593 Applied Project

Total credit hours: 30

**Admission Requirements:** Bachelor’s degree from a regionally accredited university with a Junior-Senior GPA of 3.00 (no particular major is required but the applicant must be a K-8 educator).

Satisfactory score on ASU Mathematics Department’s online mathematics placement examination or completion of STM 494, Foundations in Mathematics for Middle School Teaching.

Students must meet all admissions criteria of the Graduate College and must submit an online application for admission.

**Contact Information:**

Graduate College
megowan@asu.edu
EDB 203
480/727-5217

**Neuroscience, PHD (GCBMENPHD)**

Online Degree Search Title: Neuroscience (PHD)

**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.

**Degree Requirements:** 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

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 Information:**

Graduate College
http://neuroscience.asu.edu/index.html
Wendi.Simonson@asu.edu
INTDSB 288
480/965-7490

**Statistics, MS (GCSTATMS)**

Online Degree Search Title: Statistics (MS)

**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 Schools 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.
**Degree Requirements:** 30 credit hours, an Applied Project and an Oral Comprehensive Exam, or 30 credit hours, a Thesis and an Oral Comprehensive Exam

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:

- STP 501 Probability
- STP 502 Mathematical statistics
- STP 526 Theory of statistical linear models

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 submit the Graduate College online application and 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 Information:
Graduate College
http://graduate.asu.edu/statistics
statistics@asu.edu
PSA 743
480/965-2671

Statistics (certificate), CERT (GCSTATCE)
Online Degree Search Title: Statistics (Grad 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 Schools 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.

Degree Requirements: 15 credit hours

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:

- Applied regression analysis (IEE 578, ECN 525, or STP 530).
- IEE 572 Design of Experiments.
- IEE 570 Advanced Quality Control.
- IEE 581 Six Sigma Methodology.
- 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 Information:
Graduate College
http://graduate.asu.edu/statistics/Certificate.html
statistics@asu.edu
BYENG 348
480/965-2671

Journalism, Walter Cronkite School of

Journalism and Mass Communication, PHD (CSJMCPhD)
Online Degree Search Title: Journalism and Mass Communication PHD

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 Journalism 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.

Degree Requirements: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

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. (18)
2. Elective courses. (18)
3. Research. (12)
4. Dissertation. (12)
5. Previous master's degree or additional hours approved by the supervisory committee. (24)
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 Information:
Journalism and Mass Comm, Walter Cronkite School of
http://cronkite.asu.edu/grad/index.php
masscomm@asu.edu
Mass Communication, MMC (CSMCOMMMC)

Online Degree Search Title: Master of Mass Communication (MMC)

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 Journalism 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.

Degree Requirements: 30 credit hours and an Applied Project (MCO 593), or 30 credit hours including a Capstone (MCO 570), or 36 credit hours and an Applied Project (MCO 570)

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 1213, with the verbal score being particularly important to the Journalism 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 Information:
Journalism and Mass Comm, Walter Cronkite School of
http://cronkite.asu.edu/grad/index.php
masscomm@asu.edu
CRONK 302
602/496-5555

Law, Sandra Day O'Connor College of

Biotechnology and Genomics, LL.M. (LWGENOMLLM)

Online Degree Search Title: Law - Biotechnology & Genomics (LLM)

Program Description: The LL.M. in biotechnology and genomics program is offered through the Sandra Day O'Connor College of Law's Center for Law, Science, and Innovation, 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 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. Candidates for an LL.M. degree must have received their Juris Doctorate (JD) or comparable terminal law degree from another country.

**Degree Requirements:** 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:

1. Genetics and the law.
2. Biotechnology: science, law and policy.

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:** The Sandra Day O'Connor College of Law offers several LL.M. programs for students who have already completed a law degree within the United States or abroad. Applications are accepted on a rolling basis for fall or spring entry.

Priority deadlines

- Spring entry: Nov. 15
- Fall entry: July 1

Admission to the LL.M. program is competitive. In order to be admitted to the LL.M. program, an applicant must have completed a JD degree or a law degree at a foreign institution that would qualify the applicant to practice law or pursue license to practice in that country and have submitted a complete application to the program. Selection will be based on academic background and potential, diversity of experience and background, career experience and ambitions, strength of experience related to the program sought, space and resource limitations in the law school and other factors. For an application to be considered complete, it must include the following:

1. The completed LL.M. application form.
2. A $50 application fee (credit card/check/money order).
3. Transcripts from all institutions attended, including the transcript showing that the bachelor's degree was conferred.
4. A personal statement that does not exceed three double-spaced, typed pages.
5. A résumé that does not exceed three typed pages.
6. Explanations to affirmative answers to any conduct questions.
7. Two letters of recommendation.
8. A writing sample.

**Contact Information:**
Law, Sandra Day O'Connor College of Law
http://www.law.asu.edu
llm-mls.admissionsl@asu.edu
LAW 480/965-1474
Indian Law (certificate), CERT (LWLAWGRCI)

Online Degree Search Title: Indian Law Certificate

Program Description: The Indian Law Certificate Program is designed for students who plan to practice Indian law, particularly students who may be representing tribal communities directly after graduation. To be eligible to pursue the Indian law certificate a student must be enrolled in the College of Law and be in good standing. The certificate requires substantive course work, a minimum grade requirement, practice experience in Indian law and a substantial paper written on an Indian law topic. Transfer applicants may be admitted to the certificate program if they otherwise meet the admissions standards of the Sandra Day O'Connor College of Law.

Degree Requirements:
The certificate requires a minimum of 21 hours of substantive work in Indian law and related fields. The following courses are required:

- Federal Indian Law I.
- Federal Indian Law II.
- Advanced legal research and writing.
- Indian law seminar.
- At least one other course approved by the executive director, that primarily addresses core Indian law issues.

Other credits must come from a list of approved law electives or non-law electives approved by the executive director. Students pursuing the certificate must also complete a practice experience in Indian law (the Indian Law Clinic or other executive director approved experience) and the senior thesis requirement. Students must receive a grade of "75" or above, or a "pass," in each course used to fulfill the Indian Law Certificate requirements. More specific requirements for completion of the Indian Law Certificate can be found on the College of Law Web site at http://www.law.asu.edu.

Admission Requirements: Students wishing to pursue the Indian law certificate must be enrolled in the JD program at the Sandra Day O'Connor College of Law and must be in good standing. Specific requirements for the Indian Law Certificate Program can be found on the college Web site.

Contact Information:
Law, Sandra Day O'Connor College of
http://www.law.asu.edu/
kathlene.rosier@asu.edu
LAW
480/965-6204

Juris Doctor of Law, JD (LWJDJD)

Online Degree Search Title: Juris Doctor (JD)

Program Description: The Sandra Day O'Connor College of Law at Arizona State University enrolls only one first-year, JD class per year, and it enters in the fall semester. The Juris Doctor degree is a three year program, and almost all students study on a full-time basis. The college does offer a flexible scheduling option for students with circumstances that make full-time enrollment impossible. The college enrolls a new entering class of approximately 180-200 students each fall semester. The program offers a particularly large selection of courses with many options for interdisciplinary study with other departments on campus. Students will find the opportunity to take classes with a more traditional, theoretical focus and to take advantage of many options that focus on the development of practice skills. The college hosts the Center for Law, Science, and Innovation; the Center for Law and Global Affairs; and the Indian Legal Program.

Degree Requirements:
Satisfactory completion of the course of study offered by the College of Law leads to the Juris Doctor degree. To be eligible for the JD degree, a student must satisfy all the following:

1. Admission to the college as a candidate for the degree and satisfaction of any conditions imposed at the time of admission or prior to graduation during the course of law study.
2. Successful completion of a minimum of 88 hours of academic credit of which 76 must be graded with a cumulative weighted average of "C" (2.00 on a 4.00 scale) or better.

3. No more than four credit hours of “D” (1.00 on a 4.00 scale) gradework after the first year can be applied toward the 88 hours.

4. Completion of all required first-year courses, professional responsibility, and either constitutional law II or criminal procedure.

5. Satisfaction of the graduation writing requirement (per college policies).

6. A maximum of 12 credits of externship work and a maximum of seven credits of independent study can be counted towards the 88 credits required for graduation.

7. All 88 credits required for graduation must be earned at the ASU Sandra Day O'Connor College of Law unless prior approval by the dean's designee is granted (per college policies).

8. Completion of the Degree Requirements no earlier than 24 months and no later than 84 months after commencing study at the law school or a law school from which the school has accepted transfer credit. A transfer student must complete the work of at least three semesters in the ASU Sandra Day O'Connor College of Law immediately preceding the granting of a degree.

9. Satisfaction of the seminar writing requirement (per college policies).

10. Satisfaction of the professional skills requirement (per college policies).

Admission Requirements: The Sandra Day O'Connor College of Law at Arizona State University enrolls only one first-year, JD class per year, and it enters in the fall semester. The program is a three-year program, and almost all students study on a full-time basis. The college does offer a flexible scheduling option for students with circumstances that make full-time enrollment impossible. Each year, far more applications are submitted to the Sandra Day O'Connor College of Law than the college's facilities and programs can accommodate. Thus, admission is competitive. The Sandra Day O'Connor College of Law makes its admissions decisions based upon all information contained in the applicant's file. To be considered for admission to the JD 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 Admissions Council’s Credential Assembly Service (CAS) and will be provided to the College of Law by LSAC with the applicant's LSAT record. Applicants are encouraged to apply electronically through http://www.lsac.org. The Sandra Day O'Connor College of Law will provide full file review to 100 percent of the completed applications to the JD 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.

Application deadlines are as follows:
• Early admission (non-binding): Nov. 1.
• Regular admission: Feb. 1.

For an application to be considered complete, it must include the following:
The completed application form.

• A $50 application fee (credit card/check/money order).
• A personal statement that does not exceed three double-spaced, typed pages.
• A resume that does not exceed three typed pages.
• Explanations to affirmative answers to any conduct questions.
• Law School Admissions Test (LSAT) score(s) from LSAC.

A complete Credential Assembly Service (CAS) report with all transcripts and letters of recommendation. The CAS report must be from the current application year.

Contact Information:
Law, Sandra Day O'Connor College of
http://www.law.asu.edu
law.admissions@asu.edu
LAW
480/965-1474

Law, Science, & Technology (certificate), CERT (LWLAWSTCE)
Online Degree Search Title: Law, Science, and 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 JD at the Sandra Day O'Connor College of Law. The program allows for specializations in the areas of:

• Intellectual property.
• Health law.
• Environmental law.
• Genomics and biotechnology law.
• Law and psychology.

Degree Requirements: Program requirements for the law, science & technology certificate include the following.

1. Substantive course work in law, science and technology subjects for a minimum of seven courses, earning at least 16 credit hours, at the Sandra Day O' Connor College of Law. Two courses are chosen from the designated core courses and five courses are chosen from a list of elective courses.
2. Students have the option of pursuing a specialization within the certificate. The specialization areas are intellectual property, health law, environmental law, genomics and biotechnology law, and law and psychology. For students pursuing the specialization option, four courses within the area of specialization are required and the core course requirement is reduced from two to one.

3. A minimum cumulative grade average of at least 83 is required for those courses that satisfy the substantive course work requirements of the certificate. Courses used to satisfy the core or specialization requirements may not be taken for pass/fail credit. A student may take one elective course on a pass/fail basis.

4. Each student must satisfy their graduation writing requirement on a topic related to law, science & technology. The paper must meet all of Sandra Day O’Connor College of Law's requirements for a graduation writing requirement and must be supervised by a center fellow.

5. Each student is encouraged to actively participate in the events (speaker, conferences, symposia) sponsored by the Center for Law, Science & Innovation and to participate in at least one approved activity for two semesters.

Additional details of the program requirements for the law, science & technology certificate can be found in the Sandra Day O’Connor College Statement of Student Policies.

Admission Requirements: Students wishing to pursue the Law, Science and Technology certificate must be enrolled in the JD 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 Web site.

Contact Information:
Law, Sandra Day O’Connor College of
http://www.law.asu.edu/
andrew.askland@asu.edu
LAW
480/965-2465

Legal Studies, MLS (LWLGSMLEGS)
Online Degree Search Title: Law - Legal Studies (MLS)

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. (Note: Pursuant to American Bar Association (ABA) standards, no law credits completed prior to admission to a Juris Doctor (JD) program, including credits earned in the M.L.S. program, may be transferred to a future JD program under any circumstances.)

Degree Requirements: 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:

- Contracts.
- Constitutional Law.
- Criminal Law.
- Property.
- Torts.

An additional required course is determined and approved by the Director of the Program. 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:** The Sandra Day O'Connor College of Law offers the M.L.S. program for students who do not wish to practice law but believe that some education in the law would be beneficial to their advancement in their careers in other fields. Applications are accepted on a rolling basis for fall or spring entry.

Priority deadlines

- Spring entry: Nov. 15
- Fall entry: July 1

Admission to the M.L.S. program is competitive. In order to be admitted to the M.L.S. program, an applicant must have completed a bachelor's degree from an accredited four-year college or university in the United States or attained a comparable degree from a foreign institution and have submitted a complete application to the program. Selection will be based on a variety of factors including academic background and potential, diversity of experience and background, career experience and ambitions, space and resource limitations in the law school, and other factors. For an application to be considered complete, it must include the following:

1. The completed M.L.S. application form.
2. A $50 application fee (credit card/check/money order).
3. Transcripts from all institutions attended, including the transcript showing that the bachelor’s degree was conferred.
4. A personal statement that does not exceed three double-spaced, typed pages.
5. A résumé that does not exceed three typed pages.
6. Explanations to affirmative answers to any conduct questions.
7. Two letters of recommendation.
8. A writing sample.

**Contact Information:**
Law, Sandra Day O'Connor College of
http://www.law.asu.edu/
llm-mls.admissionsl@asu.edu
LAW
480/965-1474

**Tribal Policy, Law and Government, LL.M. (LWTBLMLAWS)**
Online Degree Search Title: Law - Tribal Policy, Law, and Government (LLM)

**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 U.S., home to roughly one-third of the native population in the U.S. 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.

Degree Requirements:
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: The Sandra Day O'Connor College of Law offers several LL.M. programs for students who have already completed a law degree within the United States or abroad. Applications are accepted on a rolling basis for fall or spring entry.

Priority Deadlines
- Spring entry: Nov. 15.
- Fall entry: July 1.

Admission to the LL.M. program is competitive. In order to be admitted to the LL.M. program, an applicant must have completed a JD degree or a law degree at a foreign institution that would qualify the applicant to practice law or pursue license to practice in that country and have submitted a complete application to the program. Selection will be based on academic background and potential, diversity of experience and background, career experience and ambitions, strength of experience related to the program sought, space and resource limitations in the law school, and other factors. For an application to be considered complete, it must include the following:

1. The completed LL.M. application form.
2. A $50 application fee (credit card/check/money order).
3. Transcripts from all institutions attended, including the transcript showing that the bachelor's degree and law degree were conferred.

4. A personal statement that does not exceed three double-spaced, typed pages.

5. A resume that does not exceed three typed pages.

6. Explanations to affirmative answers to any conduct questions.

7. Two letters of recommendation.

8. A writing sample.

Contact Information:
Law, Sandra Day O'Connor College of
http://www.law.asu.edu/
llm-mls.admissions@asu.edu
LAW
480/965-1474

Letters and Sciences, School of

Applied Ethics and the Professions (Science, Technology and Ethics), MA (LAAEPSEEMA)
Online Degree Search Title: Applied Ethics (Science, Tech, and Ethics) MA

Program Description: The science, technology, and 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 science and technology. It provides the student with a general background in ethics and ethical systems with an emphasis on ethical issues in science and technology, as well as exposing students to new challenges posed by rapidly evolving sociotechnical systems in such areas as:

- Energy, environment and development.
- Genetic engineering and biotechnology.
- Information and communication technology.
- Nanotechnology.
- Risk assessment.
- Technology and security.

Degree Requirements: 30 credit hours, an Applied Project and including a Capstone Course (AEP 593)

Course work is distributed as follows:

- Required core courses. (6)
- Required concentration course. (3)
- Elective concentration courses. (15)
- Required capstone course (AEP 593). (6)

Admission Requirements: All applicants must submit the Graduate College online application and meet all Graduate College admission criteria, and submit the following:

1. Official transcripts from all postsecondary institutions attended.
2. Statement of interest in applied ethics and career goals.
3. Three letters of recommendation.
Contact Information:
Letters and Sciences, School of
http://www.lincolncenter.asu.edu/students_MADegree
joseph.herkert@asu.edu
SANCA 250D
480/727-1548

Behavioral Health, DBH (LSBEVHEDBH)
Online Degree Search Title: Behavioral Health DBH

Program Description: The D.B.H. is a new degree to prepare behavioral clinicians to provide integrated behavioral care in primary care and other medical settings. 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. Business entrepreneurship skills such as writing a business plan, marketing and return on investment specific to health care.
2. Evidence-based behavioral interventions for primary care that are efficient and contribute to cost savings by reducing unnecessary medical care services and costs.
3. Health-care systems, policy, economics and finance in order to respond to emerging opportunities in health-care reform.
4. Medical literacy in order to understand common medical conditions seen in primary care and consult effectively with the medical team.

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. Is available via a traditional residential program or via a distance-learning program.
3. Replaces the dissertation with a culminating clinically focused project.
4. Incorporates practicum experience in primary care settings.
5. Integrates clinical and professional affiliated faculty as well as faculty associates who are experts and are directly employed in health-care environments in the area that they are teaching.

Focused clinical practicum experiences are arranged with preceptors and administrators in the student's local health care 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.

Degree Requirements: 84 credit hours, a Practicum and an Applied Project, or 84 credit hours, a Practicum and including a Capstone Course (IBC 740)

- Core course requirements. (33)
- Elective courses. (9)
- Practicum and culminating experience. (12)
- Previously awarded master’s degree or other courses approved by the supervisory committee. (30)
Admission Requirements: All applicants must submit a Graduate College application and possess a bachelor's degree from a regionally accredited postsecondary institution in the U.S. 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 Information:
Letters and Sciences, School of
http://sls.asu.edu/
dbh@asu.edu
NHI 1
602/496-1354

Counseling, MC (EDCOUNMC)
Online Degree Search Title: Counseling MC

Program Description: The mission of the M.C. program is to prepare students to become professional mental health counselors or school counselors, culturally competent to work with diverse clientele in a variety of mental health settings in Arizona and other states. Clinical mental health 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 clinical mental health and school counseling set 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.

Degree Requirements: 60 credit hours and a Thesis, or 60 credit hours and a Written Comprehensive Exam

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 submit the Graduate College application and 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/prospective_students/counselor_ed_mc.dot.

Contact Information:
Letters and Sciences, School of
http://education.asu.edu/prospective_students/counselor_ed_mc.dot
dpe@asu.edu
EDB301
480/965-3384
Counseling Psychology, PhD (EDCPSYPHD)
Online Degree Search Title: Counseling Psychology PhD

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.

Degree Requirements: 113 credit hours, a Dissertation and a Written Comprehensive Exam

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.

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 Information:
Letters and Sciences, School of
http://education.asu.edu/prospective_students/counseling_psychology/
dpe@asu.edu
EDB301
480/965-3384

Liberal Arts and Sciences, College of

African Studies (certificate), CERT (LAAFRICACE)
Online Degree Search Title: African Studies (Grad 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 disjunction of history and experiences throughout Africa and the diaspora.

**Degree Requirements:** 18 credit hours

The certificate program requires:

- 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.

**Contact Information:**

Liberal Arts and Sciences, College of
School of Social Transformation
http://aaas.clas.asu.edu/
aframstu@asu.edu
WILSN 140
480/965-4399

**American Media and Popular Culture, MAS (LAAMPCMAS)**

**Online Degree Search Title:** American Media and Popular Culture (MAS)

**Program Description:** The M.A.S. in American media and popular culture will offer working professionals and international students in the U.S., 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.

**Degree Requirements:** 30 Credit Hours and an Applied Project (FMS 593)

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 Information:**
Liberal Arts and Sciences, College of
Dean, College of Liberal Arts and Sciences
http://www.film.asu.edu/gradpopculture
filminfo@asu.edu
LL 641
480/965-6747

**Animal Behavior, PHD (LAANBPHD)**
Online Degree Search Title: Animal Behavior (PhD)

**Program Description:** Animal behavior is a graduate degree program that will provide Ph.D.-level training in mechanistic and functional approaches to understanding behavior in a variety of animal taxa. The study of behavior is at the interface of several scientific disciplines (i.e., physiology, ecology, evolution) and good research in this area requires diverse but specialized training and skills. This program will unify and coordinate graduate training in an area of real strength in research and education at ASU in the behavioral sciences. This program will complement the transdisciplinary Ph.D. in neuroscience program that is currently in place at ASU and will have applied scientific value, in areas such as mental and behavioral health in humans and veterinary science. The ecological focus in the program (i.e., behavioral ecology, conservation biology) will feed into valley, state and global issues in ecosystem and resource sustainability.

**Degree Requirements:** 84 credit hours and a Dissertation

Core Requirements (8)
- ANB 635 (4)
- ANB 636 (4)

Elective Courses (21), the department and the student's advisor will determine these courses in conjunction with the student.

Research (43)

Dissertation (12)

**Admission Requirements:** All applicants will submit the Graduate College online application. The applicant must have a baccalaureate degree from a regionally accredited institution in the U.S. or an international equivalent degree. A minimum GPA of 3.00, on a 4.00 scale, must have been earned in the student's last 60 hours of their bachelor's program. The GRE is required. All applicants from countries whose native language is other than English must meet English proficiency requirements.

**Contact Information:**
Liberal Arts and Sciences, College of
School of Life Sciences
http://animalbehavior.asu.edu/
SOLS.grad@asu.edu
LSC 226
480/965-1768

**Anthropology, PHD (LAANTHRPHD)**
Online Degree Search Title: Anthropology (PhD)

**Program Description:** The School of Human Evolution and Social Change is an excellent choice for students wanting to pursue a Ph.D. in the classic fields of anthropology:
• Archaeology.
• Bioarchaeology.
• 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 within a transdisciplinary context. Our flexible graduate curricula are designed to encourage students to design innovative plans of study to pursue their interests, while receiving broad training in key areas. The anthropology faculty actively engage with faculty in other disciplines, including:

• Applied mathematics.
• Chemistry.
• Environmental economics.
• Epidemiology.
• Formal modeling.
• Genetics.
• Sociology.
• Sustainability.
• Technology and society.
• Urban planning.

The school offers many exciting hands-on learning opportunities through laboratories and field-based research that focus on addressing real-world challenges related to the following research themes:

• Biological, social, and cultural dimensions of human health.
• Culture, heritage and identity.
• Global dynamics and regional interactions.
• Human origins, evolution and diversity.
• Societies and their natural environments.
• Urban societies.

The training students receive in this program prepare them to become expert scholars able to contribute not only to their chosen field, but to finding solutions to humankind’s greatest challenges.

**Degree Requirements:** 84 credit hours, a Dissertation and a Written Comprehensive Exam

The Ph.D. program consists of:

• Eighty-four hours of course work post-bachelor's.
• Fifty-four hours (30 course work, 12 research, and 12 dissertation hours) post-master's.
• A written comprehensive examination and the oral defense of a doctoral proposal/prospectus.
• A dissertation.

Students entering with an M.A. in a related field may 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, produce a research portfolio which is formally evaluated by a faculty committee, and present that research in a public forum before continuing on in the later stage of the Ph.D. All students must maintain a "B-" (3.20) average GPA in their courses and complete degree requirements per the program’s satisfactory progress policy.
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. Official GRE scores.
2. Transcripts of all undergraduate and graduate course work.
3. A statement of purpose outlining career and educational goals.
4. Three letters of recommendation.
5. An optional sample of their written work.

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 Information:
Liberal Arts and Sciences, College of
School of Human Evolution and Social Change
http://shesc.asu.edu/graduate_studies
shescgrad@asu.edu
SHESC 233
480/965-6215

Anthropology (Museum Studies), MA (LAMUSEUMMA)
Online Degree Search Title: Anthropology (Museum Studies) (MA)

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.

Degree Requirements: 30 credit hours and a Thesis, or 30 credit hours and an Applied Project

A minimum of 30 credit hours of graduate work approved by a student's supervisory committee and the Graduate College is required. As a culminating experience, students produce a research portfolio which is formally evaluated by a faculty committee, and present their research in a public forum.

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:

- Official GRE scores.
- Transcripts of all undergraduate and graduate course work.
- A statement of purpose outlining career and educational goals.
- Three letters of recommendation.
- An optional sample of their written work.
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 Information:
Liberal Arts and Sciences, College of
School of Human Evolution and Social Change
http://shesc.asu.edu/graduate_studies
shescgrad@asu.edu
SHESC 233
480/965-6215

Anthropology (Urbanism), PHD (LAURBPHD)
Online Degree Search Title: Anthropology (Urbanism) Phd

Program Description: Understanding the nature, function and shaping of the human habitat is essential to addressing humankind's greatest challenges. The concentration in urbanism will provide an environment for students to organize varied disciplinary perspectives on urbanism into a collective body of scholarship. The study of classic fields within anthropology will be enriched by grounding them in a comprehensive understanding of the characteristics of urban contexts and the dynamic forces that shape them. 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.

The school offers many exciting hands-on learning opportunities through laboratories and field-based research that focus on addressing real-world challenges related to the following research themes:

- Biological, social, and cultural dimensions of human health
- Culture, heritage and identity
- Global dynamics and regional interactions
- Human origins, evolution and diversity
- Societies and their natural environments
- Urban societies

The training students receive in this program prepares them to become expert scholars able to contribute not only to their chosen field, but to finding solutions to humankind's greatest challenges.

Degree Requirements: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

The Ph.D. program consists of:

1. Eighty-four hours of course work post-bachelor's.
2. Fifty-four hours (30 course work, 12 research, and 12 dissertation hours) post-master's.
3. A written comprehensive examination and the oral defense of a doctoral proposal/prospectus.


Students entering with an M.A. in a related field may 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, produce a research portfolio which is formally evaluated by a faculty committee, and present that research in a public forum before continuing on in the later stage of the Ph.D. All students must maintain a "B-" (3.20) average GPA in their courses and complete **Degree Requirements** per the program's satisfactory progress policy. 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. Built form.
2. Culture and society.
3. Institutions and governance.
4. Natural environment.

**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. Official GRE scores.
2. Transcripts of all undergraduate and graduate course work.
3. A statement of purpose outlining career and educational goals.
4. Three letters of recommendation.
5. An optional sample of their written work.

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 Information:**
Liberal Arts and Sciences, College of
School of Human Evolution and Social Change
http://shesc.asu.edu/PhD_anthropology
shescgrad@asu.edu
SHESC 233
480/965-6215

**Applied Ethics and the Professions (Biomedical and Health Ethics), MA (LAAEPMEMA)**
Online Degree Search Title: Applied Ethics (Biomedical and Health Ethics) MA

**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 and health 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, health care and biotechnology, and gain substantive understanding of ethical, cultural and societal issues in a variety of domains. Through course work and other experiences, 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.

**Degree Requirements**: 30 credit hours, an Applied Project and including a Capstone Course (AEP 593)
All students are required to complete graduate course work distributed as follows:

- Required core courses. (6)
- Required concentration course. (3)
- Elective concentration courses. (15)
- Required capstone courses. (6)

The two required courses in Foundations of Ethics I and II (AEP 501 and AEP 502) provide the students with the theoretical and historical basis to pursue specialized applied ethics expertise. The concentration course for each concentration introduces the students into basic concepts and practices of their field.

Required for this concentration

**BIO 516/AEP 520 Foundations of Bioethics**

Electives for this Concentration (15)

- AEP 551 Ethical and Spiritual Approaches to Death and Dying
- ASB/SSH 501 Ethics, Social Justice, and Health Social Science
- ASB 502 Health of Ethnic Minorities
- ASB 509 Health: Social and Biocultural Theory
- ASB 511 Ethics in Health Social Science Research
- BIO 598 Health Systems and Policy
- CSS/FMS 494 Race, Medicine and the Body
- HSD 591 Ethics and Emerging Technologies
- JHR 501 Proseminar in Social Justice and Human Rights
- LAW 652 Bioethics and the Law
- LAW 617 Genetics and the Law
- LAW 791 Neuroscience and the Law
- MHI 550 Healthcare Policy and Innovation
- NTR 598 Topic: Politics, Ethics, and the American Diet
- PHI 591/LAW 791/BIO 591 Research Ethics and Law
- REL 598 Medical Ethics: Religious and Secular
- WST 598 Gender and Global Health Disparities
- WST 691 Women and Health

Other Electives

Graduate seminars in other disciplines may be on topics that are relevant to one or more of the concentrations and may be used as electives for the M.A. in applied ethics and the professions with the approval of the program of one of the concentrations and the approval of the instructor of the seminar.

**Admission Requirements:** General admission requirements are as follows:

1. All documentation must be submitted via the ASU Graduate College online application.
2. A "B" (3.00) undergraduate GPA.
3. Resume.
4. Personal statement of interest and qualification.
5. Two letters of recommendation.
6. International students: Toefl score or comparable proof of English proficiency.

Note: No GRE is required, except for Eng/Emerging Technology (required unless requirement has been waived by director). For more information on the specifics, please see the ASU Graduate College. Please also refer to the college of the concentration/track you are interested in for additional details.
Contact Information:
Liberal Arts and Sciences, College of
School of Life Sciences
sols.grad@asu.edu
DISCVRY 213
480/727-8857

Applied Linguistics, PhD (EDAPLPHD)
Online Degree Search Title: Applied Linguistics, PHD

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.

Degree Requirements: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

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)

Overview of the field: a three-credit course providing a survey of the field of applied linguistics.

Linguistics: 15 credits of required course work in theoretical linguistics and one approved linguistics elective.

B. Teaching Internship (2)

C. Colloquia (4)

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)

Six credits of approved research methods courses selected in consultation with the advisor.

E. Concentration/Research (33)

Students select three to nine credits of required course work, 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)

Six credits of course work in a secondary concentration area.
G. Dissertation (12)

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:

1. An official ASU graduate application.
2. Official GRE scores and transcripts of all undergraduate and graduate course work.
3. A statement of interest outlining career and research goals.
4. Three letters of recommendation addressing their academic promise for the program.
5. 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 Information:
Liberal Arts and Sciences, College of
Department of English
cnigrad@asu.edu
EDB 434
480/965-4602

Applied Mathematics, PHD (LAAPMPHD)

Online Degree Search Title: Applied Mathematics PHD

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.

Degree Requirements: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

Ph.D. students must complete:

1. Five core courses.
2. Three credit hours of seminar (591).
3. Twelve credit hours of dissertation (799).

Students must pass a written comprehensive examination and an oral dissertation prospectus. 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:

1. The Graduate College online application.
2. Official transcripts.
3. Three letters of recommendation.
4. A statement of education and career goals.
5. The general GRE scores.

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 a 3.00 GPA (on a 4.00 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. Scientific programming skills are also desirable.

Contact Information:
Liberal Arts and Sciences, College of
School of Mathematical and Statistical Sciences
cnigrad@asu.edu
PSA 216
480/965-3951

Applied Mathematics for the Life & Social Sciences, PHD (LAAMLPHD)
Online Degree Search Title: Applied Mathematics for the Life & Social Sciences (PhD)

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 first-rate scientists, researchers, and faculty 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. There are three tracks a student can concentrate in:

1. Life sciences: focus on understanding the tools for representing the structure and operation of complex biological and ecological processes.
2. Social sciences: focus on understanding the tools for representing the structure and operation of complex social systems and processes.
3. 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 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 enhance interdisciplinary exchanges and collaboration among the faculty and students interested in addressing questions of social relevance.

Degree Requirements: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

The Ph.D. program consists of:

- Eighty-four hours of course work post-bachelor’s.
- Fifty-four hours (30 course work, 12 research, and 12 dissertation hours) post-master's.
- A written comprehensive examination and the oral defense of a doctoral proposal/prospectus
- A dissertation.

Students entering with an M.A. in a related field may 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. Students must maintain a 3.20 average GPA in their courses and complete degree requirements per the program's satisfactory progress policy, and no more than six hours of 400-level courses may be counted toward the degree. All students are required to complete a sequence of core courses. The core competences consist of math biology, stochastic modeling, deterministic modeling or computational methods, statistics and probability and core math skills. 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. 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.

**Admission Requirements:** 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.

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. Given the interdisciplinary goals of the program, a diverse pool of students is desirable.

**Contact Information:**
Liberal Arts and Sciences, College of
School of Human Evolution and Social Change
http://shesc.asu.edu/graduate_studies
shescgrad@asu.edu
SHESC 233
480/965-6215

**Asian Languages and Civilizations (Chinese), MA (LACHINAMA)**
Online Degree Search Title: Asian Languages/Civilizations (Chinese) - MA

**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.

**Degree Requirements:** 30 credit hours and a Thesis, or 30 credit hours and a Thesis (MIP)

The plan 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 plan 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 plan. Students who are primarily interested in teaching at the secondary or community college levels may select a plan of study with a concentration in language pedagogy.
**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 Information:**
Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.asu.edu/graduate
silc@asu.edu
LL 440
480/965-6281

**Asian Languages and Civilizations (Japanese), MA (LAJAPANMA)**
Online Degree Search Title: Asian Languages/Civilizations (Japanese) - MA

**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.

**Degree Requirements:** 30 credit hours and a Thesis, or 30 credit hours and an Applied Project

The plan 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 plan 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 plan. Students who are primarily interested in teaching at the secondary or community college levels may select a plan 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 entering 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 conditional basis, pending removal of specified deficiencies. These deficiencies must be completed in addition to the regular plan of study for the master’s degree.

**Contact Information:**
Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.asu.edu/graduate
silc@asu.edu
LL 440
480/965-6281

**Asian Studies (certificate), CERT (LAASIANCE)**
Online Degree Search Title: Asian Studies (Grad 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).

**Degree Requirements:** 18 credit hours
The certificate requires:

1. The completion of 18 credit hours, distributed among a language requirement.
2. Core course requirements and electives.
3. 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.

**Contact Information:**
Liberal Arts and Sciences, College of
School of Social Transformation
http://www.asu.edu/asian
car@asu.edu
COOR
480/965-7184

**Astrophysics, MS (LAASTPHMS)**

**Online Degree Search Title:** Astrophysics (MS)

**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.

**Degree Requirements:** 30 credit hours, or 30 credit hours and a Thesis, a Research Paper and a Written Comprehensive Exam (MIP)

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. plans of study also include a minimum of six credit hours of thesis credit (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:

1. Scores on the general GRE (verbal, quantitative and analytical) and physics GRE.
2. Official transcripts.
3. Three letters of recommendation.

The deadline for applications for the fall term is January 15. Students must apply using the Graduate College online application.

**Contact Information:**
Liberal Arts and Sciences, College of
School of Earth and Space Exploration
Astrophysics, PHD (LAASTPHPHD)

Online Degree Search Title: Astrophysics (PhD)

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.

Degree Requirements: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

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 plan 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 plan of study must include 12 credit hours of dissertation (AST 799) and 25 credits of coursework. ASU, Graduate College policies and procedures must also be met for fulfilling the requirements of the degree. 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: Students applying to the Ph.D. in astrophysics program must submit:

1. A Graduate College online application.
2. Scores on the general GRE (verbal, quantitative and analytical) and GRE physics subject test.
4. Three letters of recommendation.
5. A statement of purpose.

The application deadline for fall semester is January 15.

Contact Information:
Liberal Arts and Sciences, College of
School of Earth and Space Exploration
http://sese.asu.edu
seseinfo@asu.edu
PSF 686
480/965-5081

Atmospheric Science, CERT (LAATMOSCE)

Online Degree Search Title: Atmospheric Science (certificate)

Program Description: The interdisciplinary certificate in atmospheric science program is administered by an executive committee composed of faculty from the Ira A. Fulton School of Engineering and the College of Liberal Arts and Sciences.
The objective of this program is to recognize ASU graduate students who specialize in a thesis or dissertation topic related to the atmospheric or oceanic sciences.

Students must complete a dissertation on a topic related to the atmospheric or oceanic sciences under the supervision of a faculty member from one of the cooperating departments. For more information, please visit the school's Web site.

**Degree Requirements:** 16 credit hours.

A minimum of 16 credit hours consisting of three (three-credit) courses from a list of courses in the core disciplines, and two from a list of electives (400-level or above), plus a capstone seminar (one credit hour) will be required in order to qualify for the atmospheric science certificate. Considering the diversity of courses and in order to ensure an interdisciplinary flavor, each prospective recipient will have his/her certificate program approved by the certificate executive committee. Certificates will only be awarded to students that are enrolled in an M.A., M.S., M.N.S. or Ph.D. program at ASU. The student's thesis or dissertation must also be related to some aspect of atmospheric science.

The core courses are offered at least once every other year, so the certificate may be completed within two years.

Specific requirements are:

1. Approval by the certificate committee of your proposed course selection.
2. Completion of one course from each of the core discipline with a grade of "B" (3.00) or better.
3. Completion of two courses from the list of electives with a grade of "B" (3.00) or better.
4. Completion of the capstone seminar, which is one credit hour.
5. Completion of a dissertation on a topic related to the atmospheric or oceanic sciences.

**Admission Requirements:** Certificates will only be awarded to students that are enrolled in an M.A., M.S., M.N.S. or Ph.D. program at ASU. In order to apply to a graduate program, the applicant must complete the Graduate College online application and meet all other requirements to be admitted to graduate study at ASU.

**Contact Information:**
Liberal Arts and Sciences, College of
School of Geographical Sciences and Urban Planning
http://sse.asu.edu
geoplan@asu.edu
COOR 5673
480/965-7533

**Audiology, AudD (LAAUDAUDD)**

Online Degree Search Title: Audiology (AuD)

**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.

**Degree Requirements:** 95 credit hours and a Written Comprehensive Exam

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 95 credit hours, of which 63 are required academic credits provided through the Department of Speech and Hearing Science, and 32 are required clinical credits. Eligibility for graduation is based upon the following:

1. Successful completion of 63 credit hours of required academic course work.
2. Successful completion of 32 credit hours of clinical experiences.
3. Achieving a passing score on the ASHA Praxis national certification examination in audiology.
**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. 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 Information**:

Liberal Arts and Sciences, College of
Department of Speech and Hearing Science
http://shs.asu.edu
shsgrad@asu.edu
COOR 2211
480/965-2374

**Biochemistry, PHD (LABIOCHPHD)**

**Online Degree Search Title**: Biochemistry (PhD)

**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:

- Biogeochemistry.
- Biogeochemistry.
- Drug design.
- Medicinal chemistry.
- Nanobiotechnology.
- Protein 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.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.

**Degree Requirements**: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

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 submit the Graduate College online application and 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 the electronic supplemental application to include 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 Information:**
Liberal Arts and Sciences, College of
Department of Chemistry and Biochemistry
http://chemistry.asu.edu/graduate/
chmgrad@asu.edu
PS D103
480/965-4664

**Biology, MS (LABIOMS)**
Online Degree Search Title: Biology (MS)

**Program Description:** This program is designed to prepare students for careers in teaching and research in educational, medical, industrial and governmental institutions.

**Degree Requirements:** 30 credit hours and a Thesis, or 30 credit hours and an Oral Comprehensive Exam (MIP)

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 600 paper-based or 100 Internet-based.
Contact Information:
Liberal Arts and Sciences, College of
School of Life Sciences
http://sols.asu.edu/grad/
sols.grad@asu.edu
LSC 226
480/965-1768

Biology, PHD (LABIOPHD)
Online Degree Search Title: Biology (PhD)

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.

Degree Requirements: 84 credit hours, a Dissertation and an Oral Comprehensive Exam

1. The plan 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 600 paper-based or 100 Internet-based.

Contact Information:
Liberal Arts and Sciences, College of
School of Life Sciences
http://sols.asu.edu/grad
sols.grad@asu.edu
LSC 226
480/965-1768

Biology (Biology and Society), MS (LABIOSMS)
Online Degree Search Title: Biology (Biology and Society) (MS)

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:

1. Bioethics, policy and law.
2. 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.

**Degree Requirements**: 30 credit hours and a Thesis

This degree is appropriate for students wanting advanced education in the areas of biology and society, with a research thesis requirement at the master's level.

Degree requirements: 30 credit hours, following the general requirements for the M.S. in biology, with additional requirement that the plan of study, the committee, and the research prospectus and thesis focus on the area of concentration.

**BPL Bioethics, Policy, and Law Track**

- BIO 591 PHI 591 Bioethics (3)
- BIO 591 GEO 591 PAF 547 Policy (3)
- Law (from a list of options related to science, technology, and law) (3)
- Two seminars, approved by the committee (6)
- Readings and Conference (3)
- Research (6)
- Thesis (6)
- Total: 30 credit hours

**HPS History and Philosophy of Science Track**

- HPS 591 History of Science (3)
- HPS 591 Philosophy of Science (3)
- HPS 591 PHI 591 Logic, Decision Theory, or Epistemology (3)
- Two seminars, approved by the committee (6)
- Reading and Conference (6)
- Research (6)
- Thesis (6)
- Total: 30 credit hours

**Admission Requirements**: Individuals interested in applying to the M.S. in biology and society must:

1. Complete the Graduate College online application.
2. Send the general GRE scores (the subject examination in not required).
3. Submit a writing sample.
4. Submit a statement of educational background and interest relevant to this degree concentration.

**Contact Information:**
Liberal Arts and Sciences, College of
School of Life Sciences
http://sols.asu.edu/grad
sols.grad@asu.edu
LSC 226
480/965-2349

**Biology (Biology and Society), PHD (LABIOSPHD)**
Online Degree Search Title: Biology (Biology and Society) (PhD)

**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:

1. Bioethics, policy and law.
2. 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.

**Degree Requirements:** 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

1. The plan 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:** The biology and society concentration within the biology doctoral program admits one cohort annually for plans 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.
6. Complete and sign the top portion of each form.
7. Give one form to each of the three persons who will be writing your letters of recommendation.
8. 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


**International Students:** Students applying from outside of the U.S. will need to submit additional documents at (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 at http://graduate.asu.edu/f1j1applicants.html.

**Contact Information:**
Liberal Arts and Sciences, College of  
School of Life Sciences  
http://sols.asu.edu/grad  
sols.grad@asu.edu  
LSC 226  
480/965-1768  

**Chemistry, PHD (LACHEMPHD)**
Online Degree Search Title: Chemistry (PhD)

**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.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.

**Degree Requirements**: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

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 submit the Graduate College online application and official 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 Information:
Liberal Arts and Sciences, College of
Department of Chemistry and Biochemistry
http://chemistry.asu.edu/graduate
chmgrad@asu.edu
PS D103
480/965-4664

Communication, MA (LACOMMOMA)
Online Degree Search Title: Communication (MA)

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.

Degree Requirements: 30 credit hours and a Thesis, or 30 credit hours and a Written Comprehensive Exam, or 30 credit hours and an Applied Project, or 30 credit hours, a Written Comprehensive Exam and an Oral Comprehensive Exam (MIP)

The program consists of a minimum of 30 credit hours of graduate course work, which includes six hours of thesis credit for students who select the thesis option. 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 tracks.
   a. Thesis track: students must complete a thesis of original research, and an oral examination in defense of the thesis.
   b. Nonthesis Track Option 1 - Applied Project: students must complete an applied project (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) in a three 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.
   c. 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 paper version 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 Information:**
Liberal Arts and Sciences, College of
Hugh Downs School of Human Communication
http://humancommunication.clas.asu.edu/
communication@asu.edu
STA 412
480/965-5095

**Communication, PHD (LACOMMOPHD)**
Online Degree Search Title: Communication (PhD)

**Program Description:** The graduate faculty of communication offers an interdisciplinary graduate program leading to the Ph.D. in communication. Concentrations are available in interpersonal, intercultural, 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.

**Degree Requirements:** 96 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

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:

- COM 799 Dissertation (12)
- COM 792 Research (12)
- Area of concentration (36)
- Required core courses (6)

Up to 12 credit hours of research (COM 792) may be taken before admission to candidacy. Two 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, interviewing, 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.

- A general overview of research in communication (COM 501).
• An overview of theories and models of communication (COM 504).
• 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. Resume
5. GRE scores.
6. Test of English as a Foreign Language (TOEFL) scores, if applicable.
7. Three letters of recommendation.
8. Writing sample.

Please visit the Hugh Downs School of Human Communication Web site for details.

**Contact Information**:
Liberal Arts and Sciences, College of
Hugh Downs School of Human Communication
http://humancommunication.clas.asu.edu/
communication@asu.edu
STA 412
480/965-5095

**Communication Disorders, MS (LACOMDISMS)**

Online Degree Search Title: Communication Disorders (MS)

**Program Description**: The faculty in the Department of Speech and Hearing Science offer a program leading to the M.S. in communication disorders. Thesis and nonthesis degree options are available. The speech-language pathology program is accredited by the Council on Academic Accreditation of the American Speech-Language-Hearing Association.

**Degree Requirements**: 33 credit hours and a Written Comprehensive Exam (MIP), or 53 credit hours and a Written Comprehensive Exam, or 53 credit hours, a Thesis and a Written Comprehensive Exam

The M.S. in communication disorders requires one of the following:

1. Fifty-three credit hours and written comprehensive examination and a national certification examination, or
2. Fifty-three credit hours and a thesis and a national certification examination, which includes 14 credits of practicum and internship.

**Thesis Option**

Students wishing to pursue the thesis option must complete 53 credit hours of course work, six hours of which must be thesis credit, and 14 credits of which must be practicum and internship. The thesis must meet requirements established by the Graduate College.

**Nonthesis Option**

Students choosing the nonthesis option must complete 53 credit hours of course work, 14 of which must be practicum and internship.

**Final Examinations**

For the M.S. thesis option, two final examinations are required:
1. The ASHA Praxis national certification examination in speech-language pathology.

For the M.S. nonthesis option, two final examinations are required.
   1. A department-administered comprehensive examination in speech-language pathology.
   2. The ASHA Praxis national certification examination in speech-language pathology.

Admission Requirements: Applicants must submit a Graduate College online application. Students applying for admission to this program should submit to the graduate admissions office:
   1. Undergraduate transcripts.
   2. GRE scores.
   3. A statement of professional and academic goals not to exceed 300 words.
   4. E-mail addresses of three recommenders.

All materials must be received by January 15 for fall admission, which is the only term in which students may begin their program of study. Candidates who have undergraduate deficiencies may need to take required prerequisite courses.

Contact Information:
Liberal Arts and Sciences, College of
Department of Speech and Hearing Science
http://shs.asu.edu/
shsgrad@asu.edu
COOR 2211
480/965-2374

Creative Writing, MFA (LACWRITMFA)
Online Degree Search Title: Creative Writing (MFA)

Program Description: The ASU Master of Fine Arts in creative writing has always been an unswervingly student-first program. Through small classes, intimate workshops, and practicum, or one-to-one mentoring, the centuries-old apprenticeship model thrives within the New American University. Poets and fiction writers work with an outstanding faculty that has published more than 80 books and has garnered national and international attention through awards including Guggenheim and NEA fellowships, the Western States Book Award, the Walt Whitman Award from the Academy of American Poets, a Pulitzer Prize, and two Medals of Achievement form the National Society of Arts and Letters.

M.F.A. students at ASU are among the best-funded in the nation: every poet and fiction writer is offered a teaching assistantship and a Piper Fellowship, both renewable for each of the program's three years. A limited number of research assistantships are available to continuing students.

Degree Requirements: 48 credit hours, a Practicum and a Written Comprehensive Exam.

The M.F.A. creative writing program requires 48 credit hours of study evenly divided between writing courses and literature courses designed to inform that writing. While students are expected to satisfy these requirements in the genre in which they were accepted, the program encourages cross-genre study, and electives can include courses taken outside of the creative writing program, even outside the English department. A practicum project and a written comprehensive exam are required.

Admission Requirements: Applicants should have an undergraduate major in English or creative writing, with a GPA of 3.00 or above (4.00 scale); however, exceptional students who do not have either of these undergraduate majors may be admitted on the basis of writing excellence. Applicants must submit three copies of the creative manuscript (20 pages of poetry, 30 pages of prose, or both) and three letters of recommendation directly to:

Creative Writing Program
Department of English, ASU
Mail transcripts to:

ASU Graduate College
P.O. Box 871003
Tempe, AZ 85287-1003

Submit the remaining parts of the application online to the Graduate College:

1. Application fee.
2. Resume or curriculum vitae.
3. A personal statement including your writing background, intended area of specialization, a brief self-evaluation of recent work, and goals.
4. A teaching assistant application.

The application deadline is January 15.

Contact Information:
Liberal Arts and Sciences, College of
Department of English
http://english.clas.asu.edu/
karla.elling@asu.edu
LL C315
480/965-3528

East Asian Languages and Civilizations (Chinese), PHD (LAEALCPHD)

Online Degree Search Title: East Asian Languages and Civilization (PhD)

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.

Degree Requirements: 84 credit hours, a Dissertation, a Written Comprehensive Exam, an Oral Comprehensive Exam and two Language Exams

The program requires a minimum of 84 credit hours of which 30 hours from an earned master’s degree program that is directly relevant to the Ph.D. program may be counted toward that requirement. 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. A 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. 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.

All applicants are 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 Information:**
Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.asu.edu/graduate
silc@asu.edu
LL 440
480/965-2715

**English, MA (LAENGLMA)**
Online Degree Search Title: English (MA)

**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.

**Degree Requirements:** 30 credit hours, a Foreign Language Exam, and an Applied Project (LIN 593 or ENG 593), or 33 credit hours and a Written Comprehensive Exam (MIP), or 30 credit hours, a Thesis and a Foreign Language Exam

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
For the concentration in English linguistics, two tracks are available. A candidate must complete a minimum of 30 credit hours of graduate-level courses:

1. The general linguistics track must include: LIN 500, 511, 514 and 515 and one advanced linguistics course.
2. 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.
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. A nine-credit-hour distribution requirement.
4. Two courses selected must be graduate seminars at the 600 level.
5. 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. Electives are chosen in consultation with the advisor.
6. ENG 599 Thesis or ENG 597 Capstone Course.

Admission Requirements: Applicants must submit a Graduate College online application at http://www.asu.edu/graduate/admissions. The application deadline is January 15. 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 non-degree 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 relevant to the field.
5. A resume.

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, a resume, 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 relevant to the field.

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.
4. Submit an academic writing sample relevant to the field.

Contact Information:
Liberal Arts and Sciences, College of
Department of English
http://english.clas.asu.edu/graduate
enggrad@asu.edu
LL 543B
480/965-3194

English (Literature), PHD (LAENLITPHD)
Online Degree Search Title: English Literature (PhD)

Program Description: This Ph.D. program in literature 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.

Degree Requirements: 84 credit hours, a Dissertation, a Written Comprehensive Exam and a Foreign Language Exam, or 84 credit hours, a Dissertation, an Oral Comprehensive Exam and a Foreign Language Exam
The Ph.D. program requires:
1. Eighty-four credit hours.
3. A written or oral examination. See Web site for details: http://english.clas.asu.edu/gradstudies-exam
4. A foreign language requirement.

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, provided the student's master's degree is accepted by the supervisory committee and the academic unit. Research hours may be used towards coursework 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 coursework 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 at http://www.asu.edu/graduate/admissions. Applicants for the Ph.D. degree in English (literature) must also submit:
1. Three letters of recommendation.
2. A statement of purpose.
3. An academic writing sample.
4. GRE general scores (subject scores are optional).
5. Curriculum vitae.

Deadline for admission applications and requests for financial aid, including teaching assistantships, is January 15. Incomplete files are not considered.

**Contact Information:**
Liberal Arts and Sciences, College of Department of English
http://english.clas.asu.edu/graduate
enggrad@asu.edu
LL 543B
480/965-3194
**English (Rhetoric, Composition and Linguistics), PHD (LAENRHTPHD)**

**Online Degree Search Title: Rhetoric/Composition/Linguistics (PhD)**

**Program Description:** The Ph.D. in English with a concentration 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.

**Degree Requirements:** 84 credit hours, a Dissertation, an Oral Comprehensive Exam and a Foreign Language Exam, or 84 credit hours, a Dissertation, a Written Comprehensive Exam and a Foreign Language Exam

The Ph.D. program requires:

1. Eighty-four credit hours.
3. A written or oral examination, see http://english.clas.asu.edu/gradstudies-exam for details.
4. A foreign language requirement.

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.

**Course Work Requirements**

Research Methods (3): Students must take ENG/LIN 500 or its equivalent.

Foundational Distribution (12): Foundational courses are offered at the 500 level, but also may include courses completed as masters’ level work at other universities. Students must complete at the 500 level (or equivalent):

1. One course in rhetoric.
2. One course in composition studies.
3. Two courses in linguistics.

Advanced Studies Distribution (12): Advanced studies courses are offered at the 600 level or above. Students may choose to take 600-level courses required by the distribution from one area of study (rhetoric, composition or linguistics) or a combination of areas in which they would like to concentrate. It is assumed that a student will have taken a foundational level course, prior to taking an advanced studies course, especially when the area of study is new for the student.

Continuing Concentration: Students may choose to take other foundational (500 or equivalent) and advanced (600 and above or equivalent) courses in any one of the areas of concentration or a combination of areas in which they would like to concentrate. Students should consult with an advisor when selecting additional courses for concentration. It is expected that some of these continuing courses will include ENG or LIN 790 and 792’s used in preparation for the doctoral examination. Note: Special topic courses (ENG 598, LIN 548, LIN 598) and seminars (ENG 591, LIN 591) may fulfill some of the distribution requirements at the foundational (500-level) and advanced studies (600-level) levels. Students should consult with an advisor when choosing these courses.

Interdisciplinary Option (up to 12): Students are encouraged to take up to 12 hours of courses outside the department to count toward the degree. Those courses may fulfill some of the foregoing requirements at the foundational and advanced studies distribution, or be taken in addition to those required by the distribution. Students should consult with an advisor when choosing these courses.
Dissertation: Students must include 12 (and only 12) credit hours of 799 on the doctoral program of study.

**Admission Requirements:** Applicants must submit a Graduate College online application at http://www.asu.edu/graduate/admissions.

Supporting documents include:

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 teaching assistantships, is January 15. Incomplete files are not considered.

**Contact Information:**
Liberal Arts and Sciences, College of
Department of English
http://english.clas.asu.edu/
enggrad@asu.edu
LL 543B
480/965-3194

**Environmental Life Sciences, PHD (LAELSPHD)**

Online Degree Search Title: Environmental Life Sciences (PHD)

**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.

**Degree Requirements:** 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

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 with a bachelor's).
**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 Information:**
Liberal Arts and Sciences, College of
School of Life Sciences
http://els.asu.edu/
sols.grad@asu.edu
LSE 421
480/727-7254

**Environmental Social Science, PHD (LAESSPHD)**
Online Degree Search Title: Environmental Social Science (PhD)

**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, 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.

**Degree Requirements:** 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

The Ph.D. program consists of:

- Eighty-four hours of course work post-bachelor's.
- Fifty-four hours (30 course work, 12 research, and 12 dissertation hours) post-master's.
- A written comprehensive examination and the oral defense of a doctoral proposal/prospectus.
- A dissertation.
Students entering with an M.A. in a related field may be granted up to 30 credit hours toward the 84 hour total required for the Ph.D. Students must maintain a 3.20 average GPA in their courses and complete degree requirements per the program’s satisfactory progress policy. 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 entering the program complete 18 hours of core classes in conceptual domains and topical foci. Additional hours come from courses in research design, technical expertise and electives. Students may select from a substantial range of courses to satisfy noncore requirements.

**Admission Requirements:** All applicants must submit a Graduate College online application. In addition to general requirements for admission to the Graduate College, the environmental social science Ph.D. program requires students to provide:

1. Official GRE scores.
2. Transcripts of all undergraduate and graduate coursework.
3. A statement of purpose outlining career and educational goals.
4. Three letters of recommendation.
5. A sample of their written work.

While undergraduate work in one of the social sciences (e.g. geography, political science, sociology, anthropology, planning or history) is not required, some coursework 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 Information:**
Liberal Arts and Sciences, College of
School of Human Evolution and Social Change
http://shesc.asu.edu/graduate_studies
shescgrad@asu.edu
SHESC 233
480/965-6215

**Environmental Social Science (Urbanism), PHD (LAESSURPHD)**

**Online Degree Search Title:** Environmental Social Science (Urbanism) PHD

**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.

**Degree Requirements**: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

The Ph.D. program consists of:

- Eighty-four hours of coursework post-B.A.
- Fifty-four hours (30 course work, 12 research, and 12 dissertation hours) post-master's.
- A written comprehensive examination and the oral defense of a doctoral proposal/prospectus
- A dissertation.

Students entering with an M.A. in a related field may be granted up to 30 credit hours toward the 84 hour total required for the Ph.D. Students must maintain a 3.20 average GPA in their courses and complete degree requirements per the program’s satisfactory progress policy. 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 entering the program complete 18 hours of core classes in conceptual domains and topical foci. For the concentration in urbanism, 15 credit hours will be selected from an approved list of applicable courses related to urbanism. Some of the environmental social science core courses also count toward the concentration in urbanism. These courses will include the core urbanism course, GCU 516, as well as one course from each of the four urbanism clusters:

1. Built form.
2. Culture and society.
3. Institutions and governance.
4. Natural environment.

Additional hours come from courses in research design, technical expertise, and electives. Students may select from a substantial range of courses to satisfy noncore requirements.

**Admission Requirements**: All applicants must submit a Graduate College online application. In addition to general requirements for admission to the Graduate College, the environmental social science doctoral program requires students to provide:

1. Official GRE scores.
2. Transcripts of all undergraduate and graduate coursework.
3. A statement of purpose outlining career and educational goals.
4. Three letters of recommendation.
5. A sample of their written work.
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 Information:**
Liberal Arts and Sciences, College of
School of Human Evolution and Social Change
http://shesc.asu.edu/PhD_anthropology
shescgrad@asu.edu
SHESC 233
480/965-6215

**Evolutionary Biology, PHD (LAEVOPHD)**
Online Degree Search Title: Evolutionary Biology, PhD

**Program Description:** Evolutionary biology is an interdisciplinary graduate degree program that will provide Ph.D.-level training in the historical, conceptual, empirical and quantitative aspects of biological evolution. Evolution cuts across the biological sciences in ways that few other foci do: it provides bridges between temporal and spatial scales, allows integration of information and patterns across levels of organization, and informs the theoretical foundations of subfields ranging from population genetics to systematics to ecosystem ecology. Forgoing emphases on particular taxa or methods, the program focuses on understanding the patterns and processes that have and continue to shape life on Earth, training the next generation of scientists to use this knowledge to meet present and future challenges to the biosphere and human health in the face of increasing environmental perturbation.

**Degree Requirements:** 84 credit hours, a Dissertation, a Written Comprehensive Exam, and an Oral Comprehensive Exam

Core Requirements (9)

- EVO 601 Principles of Evolution (3)
- EVO 610 Research Areas of Evolution (2)
- BIO 614 Biometry (4)

Elective Courses (9), the department and the student's advisor will determine these courses in conjunction with the student.

Research, coursework, and/or 30 credit hours from a previously awarded master's degree (54)

Dissertation (12)

**Admission Requirements:** All applicants will submit the Graduate College online application. The applicant must have a baccalaureate degree from a regionally accredited institution in the U.S. or an international equivalent degree. A minimum GPA of 3.00, on a 4.00 scale, must have been earned in the student's last 60 hours of their bachelor's program. The GRE is required. All applicants from countries whose native language is other than English must meet English proficiency requirements.

**Contact Information:**
Liberal Arts and Sciences, College of
School of Life Sciences
http://sols.asu.edu/grad/evo_bio.php
msr@asu.edu
LSA 260
480/965-1578

**Family and Human Development, MS (LAFAMHDMS)**
Online Degree Search Title: Family and Human Development (MS)
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.

Degree Requirements: 31 credit hours and a Thesis, or 34 credit hours and a Thesis (MIP)

Courses are selected by the student along guidelines of the specific areas, after consultation with the supervisory committee. The plan of study should be completed and approved by the supervisory committee once completing 50 percent of the minimum required credit hours for the degree. A minimum of 31 credit hours is required. Acceptance of the proposed plan of study must be verified by signature of the chair and supervisory 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 (or equivalent with the approval of the graduate committee):

CDE 531 Theoretical Issues in Child Development  
CDE 534 Seminar  
FAS 500 Research Methods  
FAS 531 Family Theory Development  
PSY 530 Intermediate Statistics

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. A resume or CV.
6. Application to the Graduate College.
7. 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 completed online by submitting the Graduate College's online application.

Letters of recommendation should be sent to:

Graduate Secretary  
Family and Human Development  
P.O. Box 873701  
Arizona State University  
Tempe, AZ 85287-3701

Contact Information:  
Liberal Arts and Sciences, College of  
School of Social and Family Dynamics
http://ssfd.clas.asu.edu/
ssfd@asu.edu
SS 144
480/965-6978

Family and Human Development, PhD (LAFAMSCPHD)
Online Degree Search Title: Family and Human Development (PhD)

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.

Degree Requirements: 85 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

Each student must prepare and submit a plan of study in conjunction with the chair and members of his or her supervisory committee once completing 50 percent of the minimum required credit hours for the degree. The plan of study consists of a minimum of:

1. Eighty-five credit hours for students entering after the bachelor's degree.
   a. Of the 85 credit hours for a postbaccalaureate program, six hours are thesis and 12 hours are dissertation credit.
   b. Postbaccalaureate students complete a master's-in-passing before advancing to their doctoral studies.

2. Fifty-five credit hours for students entering after the master's degree.
   a. Of the 55 credit hours of the post-master's program, there are 12 credit hours of dissertation.

3. The additional hours in both the postbaccalaureate and post-master's tracks involve courses in:
   a. Family and human development.
   b. Statistics and research methods.
   c. Electives 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 course work.
2. Verbal, quantitative, and analytical GRE scores.
3. Statement of goals relevant to the Ph.D. program.
4. Three letters of recommendation.
5. A resume or curriculum vitae.
6. 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 completed online via the Graduate College.

Letters of recommendation should be sent to:

Graduate Secretary
Family and Human Development
P.O. Box 873701
Arizona State University
Tempe, AZ 85287-3701
**Contact Information:**
Liberal Arts and Sciences, College of
School of Social and Family Dynamics
http://ssfd.clas.asu.edu/
ssfd@asu.edu
SS 144
480/965-6978

**French (Comparative Literature), MA (LAFRECLMA)**

**Online Degree Search Title:** French Comparative Literature (MA)

**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.

**Degree Requirements:** 30 credit hours, a Thesis and a Written Comprehensive Exam, or 30 credit hours, an Applied Project and a Written Comprehensive Exam

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 plan 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 teach 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 Information:**
Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.asu.edu/graduate
silc@asu.edu
LL 440
480/965-6281

**French (Linguistics), MA (LAFRELINMA)**

**Online Degree Search Title:** French Linguistics (MA)

**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.
Degree Requirements: 30 credit hours, a Thesis and a Written Comprehensive Exam, or 30 credit hours, an Applied Project and a Written Comprehensive Exam

The plan 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: Applicants must submit the 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 Information:
Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.asu.edu/graduate
silc@asu.edu
LL 440
480/965-6281

French (Literature), MA (LAFRELITMA)
Online Degree Search Title: French Literature (MA)

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.

Degree Requirements: 30 credit hours, an Applied Project and a Written Comprehensive Exam, or 30 credit hours, a Thesis and a Written Comprehensive Exam

The plan 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: All applicants must submit the 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.
**Gender Studies (certificate), CERT (LAWSTGRCT)**
Online Degree Search Title: Gender Studies (Grad 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 Gender Studies offers graduate students the opportunity to enhance their advanced degrees with demonstrated proficiency and knowledge about gender research and theories that they may apply in their own fields.

**Degree Requirements:** 15 credit hours

Students are required to complete:

Two required courses (6)
- WST 601 Critical Concepts in Gender
- WST 602 Mapping the Intersectionalities of Gender

Three additional courses (9)

Courses may be chosen from other WST graduate courses or from more than thirty approved courses from other departments from throughout the university. Other courses may also be used with the graduate director's approval. Up to 6 credits not used for another ASU degree or certificate can be transferred, with graduate director's approval, from another university. (Courses should be recorded on the transfer section of the student's iPOS.) Up to 9 credit hours of ASU non-degree credit can be transferred for students who are eventually admitted to an ASU graduate program.

**Admission Requirements:** Applicants must submit an online Graduate College application. Contact Rose Weitz (rose.weitz@asu.edu), director of graduate studies, Women and Gender Studies Program, or go to http://wgs.asu.edu/grad-certificate for more information about the certificate and a place to design course work.

**Contact Information:**
Liberal Arts and Sciences, College of
School of Social Transformation
http://wgs.asu.edu/
wgs.asutempe@asu.edu
WHALL 205
480/965-2358

**Gender Studies, PhD (LAGSTPHD)**
Online Degree Search Title: Gender Studies (PhD)

**Program Description:** The academic study of gender is increasingly recognized as central across academic fields, from literature to psychology to biology and law. The goal of the doctoral program is to train researchers who can take their place in the world as academic faculty, as researchers inside and outside of academia and as policy-makers.

**Degree Requirements:** 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam.

The gender studies program requires 84 credit hours for students admitted with only a bachelor's degree, a dissertation and both a written and oral comprehensive examination.

The gender studies Ph.D. program is designed to provide students with the interdisciplinary training in theory and methods needed to conduct original research and scholarship about gender. At the core of the program are four required courses:
• WST 601 Critical Concepts of Gender.
• WST 602 Mapping the Intersections of Gender.
• WST 603 Engendering Methodology.
• WST 701 Research Design and Proposal Development in Gender Studies.

Students also take two research methods courses relevant to their dissertation plus additional courses in one of three areas of specialization:

**Health, science and technology**

Courses in this area explore the impact of gender on health care, health occupations, science and technology. We have faculty expertise in health and sexuality, bioethics, women's roles as healers and caregivers, HIV/AIDS prevention, gender and technology and the participation of women in math and science in the developing world.

**Visual and narrative culture**

Courses in this area explore historical and contemporary representations of gender in all genres, including popular culture, literature, theater, art, and scientific, medical, historical and legal discourse. Our faculty focus especially on the intersections of gender representations with representations of race, sexuality, class and the ways in which representations produce rather than simply mimic gender inequality and polarized identities.

**Gender, justice and social change**

Courses in this area explore the gender dimension of social structures, institutions and organizations; the processes of social change and community development; and the ways policies and laws can change gender relations. We have faculty expertise in globalization, transnational feminisms, environment, sustainability, development, immigration, work, social policy, domestic violence and child welfare.

**Admission Requirements:** The women and gender studies program welcomes applications from qualified students without regard to race, creed, color, religion, sex or national origin.

Submit to the Graduate College:

1. Graduate College application (http://graduate.asu.edu/admissions).
2. Resume or curriculum vitae.
4. Application fee as required.
5. Official copies of all undergraduate and graduate transcripts.
6. Official GRE scores (cannot be more than 5 years old).
8. Three letters of reference, preferably from faculty or other researchers.
9. Students whose native language is not English must meet ASU's English proficiency requirements. For details, go to http://graduate.asu.edu/admissions/international.html.

Submit to the Women and Gender Studies Program an application for graduate research/teaching assistantship form: http://graduate.asu.edu/forms.

Mail to:

Women and Gender Studies
Graduate Admissions
Arizona State University
P.O. Box 874902
Tempe, AZ 85287-4902

For additional financial information, consult the Financial Aid Office at http://students.asu.edu/financialaid.
Contact Information:
Liberal Arts and Sciences, College of
School of Social Transformation
http://wgs.asu.edu/
wgs.asutempe@asu.edu
WHALL 205
480/965-2358

Geographic Education, MAS (LAGEOEDMAS)
Online Degree Search Title: Geographic Education (MAS)

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.

Degree Requirements: 30 Credit hours and an Applied Project

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 plan of study for a full-time student is located at http://geoplan.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, access to e-mail and access to a word processing program.

Admission Requirements: All applicants must submit a Graduate College application. 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 Information:
Liberal Arts and Sciences, College of
School of Geographical Sciences and Urban Planning
http://geoplan.asu.edu/
geoplan@asu.edu
COOR 5673
480/965-7533

Geographic Information Science (certificate), CERT (LAGEOGISCE)
Online Degree Search Title: Geographic Information Science (Grad 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.

Degree Requirements: 16 credit hours including a Capstone course (GPH 591)
Three required and two elective courses (three credit hours each) plus a capstone seminar (one-credit-hour) are 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 must 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 Information:**
Liberal Arts and Sciences, College of
School of Geographical Sciences and Urban Planning
http://geoplan.asu.edu/
geoplan@asu.edu
COOR 5673
480/965-7533

**Geographic Information Systems, MAS (LAGISMAS)**
Online Degree Search Title: Geographic Information Systems (MAS)

**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.

**Degree Requirements:** 30 credit hours and an Applied Project

Enrolling students must complete three sequential semesters of course work.

- 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:**

1. All applicants must submit the Graduate College online application.
2. 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.
3. 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.
4. 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 Information:**
Liberal Arts and Sciences, College of
School of Geographical Sciences and Urban Planning
http://geoplan.asu.edu/
geoplan@asu.edu
COOR 5673
480/965-7533

**Geography, MA (LAGEOGMA)**
Online Degree Search Title: Geography (MA)

**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.

**Degree Requirements:** 30 credit hours and a Thesis, or 30 credit hours and a Written Comprehensive Exam (MIP)

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 six 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 Information:**
Liberal Arts and Sciences, College of
School of Geographical Sciences and Urban Planning
http://geoplan.asu.edu/
geoplan@asu.edu
COOR 5673
480/965-7533

**Geography, PHD (LAGEOGPHD)**
Online Degree Search Title: Geography (PhD)

**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.

**Degree Requirements:** 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

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 course work 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 Information:**
Liberal Arts and Sciences, College of
School of Geographical Sciences and Urban Planning
http://geoplan.asu.edu/
geoplan@asu.edu
COOR 5673
480/965-7533

**Geography (Urbanism), PHD (LAGCUUPHD)**
Online Degree Search Title: Geographical Sciences (Urbanism) (PhD)

**Program Description:** This is a shared concentration designed to foster an understanding of the nature and dynamics of the urban habitat. The urban habitat is the place where communities of people live, and includes all living and nonliving factors and conditions of the surrounding environment. Topics and methods are wide-ranging, and will include spatial, historical and theoretical inquiry.

**Degree Requirements:** 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

The School of Geographical Sciences requires Ph.D. students to pass written and oral comprehensive examinations. These are taken at the completion of all course work. After students have passed the comprehensive examinations and satisfied the other requirements, they are eligible to apply for candidacy. A dissertation based on original work demonstrating creativity in research and scholarly proficiency in the subject area is required. A final oral examination in defense of the dissertation is also required. A minimum of 30 credit hours of course work at ASU beyond the master's degree is required, plus a minimum of 12 credit hours of dissertation credit. For the concentration in urbanism, 15 credit hours will be selected from an approved list of applicable courses related to urbanism.

**Admission Requirements:** All applicants must submit the Graduate College online application. Admission to the Ph.D. program requires a completed master's degree in geography or an equivalent degree. At a minimum, this preparation should include competence in cartography and quantitative methods and basic course work in human and physical geography. Students who have not already acquired these basic skills or taken these basic courses must do so during the first year of their graduate program. These courses are considered deficiencies, and will not count towards the degree.

**Contact Information:**
Liberal Arts and Sciences, College of
School of Geographical Sciences and Urban Planning
http://geography.asu.edu/
etalen@asu.edu
COOR 5302
480/965-7533

**Geological Sciences, MS (LAGEOSCMS)**
Online Degree Search Title: Geological Sciences (MS)

**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.

**Degree Requirements:** 30 credit hours and a Thesis, or 30 credit hours, a Research Paper and a Written Comprehensive Exam (MIP)

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
committees (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, six hours of GLG 599 Thesis, and one hour of GLG 591: Faculty Research Seminar. 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 January 15.

Contact Information:
Liberal Arts and Sciences, College of
Department of Geological Sciences
http://sese.asu.edu
seseinfo@asu.edu
PSF 686
480/965-5081

Geological Sciences, PHD (LAGEOSCPHD)

Online Degree Search Title: Geological Sciences (PhD)

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.

Degree Requirements: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

The plan of study for the Ph.D. is selected with the recommendation of the student’s supervisory committee. Each plan of study must include 12 credit hours of dissertation and 25 hours of course work. ASU Graduate College policies and procedures must also be met for admission into the program and for fulfilling the degree requirements.

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 January 15. 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 Information:
Liberal Arts and Sciences, College of
Department of Geological Sciences
http://sese.asu.edu
seseinfo@asu.edu
**German, MA (LAGERMMA)**

Online Degree Search Title: German (MA)

**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.

**Degree Requirements:** 30 credit hours and a Thesis, or 30 credit hours and an Applied Project

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 Information:**
Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.asu.edu/graduate
silc@asu.edu
LL 440
480/965-6281

**Global Health, MA (LASHHMA)**

Online Degree Search Title: Global Health (MA)

**Program Description:** In this master's degree, global health is considered to be much more and very different from international public health. It emphasizes that major health challenges stem from many factors well beyond disease itself - factors that are ecological, cultural, institutional, historical, evolutionary, social and technological. Any effective, sustainable solutions to our most pressing global health challenges will need to take all of these factors into account, including the complex ways in which they relate to each other. In this manner, this degree understands health as not simply a product of disease, but rather emerging in the contexts of our complex and interrelated ecology, politics, history, culture, social institutions and evolutionary biology. It also places primacy on how to address the broader (structural, cultural) bases of ill-health in complicated, ever-changing health challenges in low-resource community settings and a globalizing world. To do this, the degree combines both social and life science theory with on-the-ground research and its application. There is a strong emphasis on collaborative action as key to identifying and addressing global health problems in a sustainable and meaningful way. Students accepted into the program are tied to ongoing interdisciplinary global health projects that address complicated, multi-faceted health challenges that defy easy fixes (such as reemerging infectious diseases, obesity, or climate-change-related disease). Students develop an applied project to contribute to the team goals. By applying a collaborative, problem-solving format, the M.A. in global health is intended to provide those planning to enter health or related (e.g., environmental, social) fields with the interdisciplinary orientation, team-skills, and social and cultural acuity that the Pew Health Professional Consortium inter alia has identified as critical but lacking in current health workforce training. The degree also emphasizes experiential learning as a way to gain mastery and requires participation in a global internship program based in one of the international partnering communities.
**Degree Requirements:** 30 Credit Hours and an Applied Project (SSH 593)

All students must take SSH 502 Professional Seminar in Global Health (1) in their first and second semester for a total of two credits. This is the forum in which students will learn about the research teams and get to know faculty and other students. Students select four of the following courses (12), at least one of the four must be a methods-focused course:

- ASB 510/SSH 510 Health-Social and Biocultural Theories (3)
- ESS 513 Institutions (3)
- AML 613 Methods and Concepts in Math Epidemiology (3)
- ASB 500 Ethnographic Research Methods (3)
- ESS 514 Urban and Environmental Health (3)
- SSH/ASM 514 Infectious Disease and Human Evolution (3)
- SSH 511 Ethics in Health Social Science Research (3)
- ASM 591 ST: Infectious Disease and Human Evolution (3)
- ASM 546 Principles of Human Genetics (3)
- WST 710 Women and Health (3)
- SSH/ASB 400 Poverty, Social Justice, and Global Health (3)
- ASB 462 Culture & Health: Medical Anthropology (3)
- ASB 503 Medical Anthropology (3) or POS/SGS 531 Global Health Governance (3) or approved alternatives.

Students also complete a three credit hour elective course and a minimum of 10 hours of international research collaboration, internship or practicum, arranged through the school's global practicum program, which ties students to established faculty/ASU research initiatives and international collaborations.

**Admission Requirements:** In addition to general requirements for admission to the Graduate College, the M.A. in global health program application requires students to provide:

1. Official GRE scores.
2. Transcripts of all undergraduate and graduate course work.
3. A statement of purpose outlining career and educational goals.
4. Three letters of recommendation.
5. A current curriculum vitae or resume.
6. A sample of written work.

Admission is competitive and based on student academic excellence, additional relevant experience, plus fit to available faculty. Minimum GPA for consideration for admission would normally be 3.50, on a 4.00 scale, for the last two years of study leading to the bachelor's degree. A degree in the social or life sciences (e.g., anthropology, sociology, gender studies, geography, political science), public health, or related fields (nutrition, human biology) is generally expected for applicants. Value will be placed on prior social science and life science research, practical, cross-cultural/international experiences and foreign language skills. All applicants are required to submit the Graduate College's online application. Applicants who are from a country whose native language is other than English will need to meet English proficiency requirements. Please see the program's Web site for application deadlines.

**Contact Information:**
Liberal Arts and Sciences, College of
School of Human Evolution and Social Change
http://shesc.asu.edu/graduate_studies
shescgrad@asu.edu
SHESC 233
480/965-6215

**History, MA (LAHISTMA)**
Online Degree Search Title: History (MA)
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.

Degree Requirements: 30 credit hours and a Portfolio (MIP), or 30 credit hours, a Thesis and a Foreign Language Exam, or 30 credit hours, an Applied Project and a Foreign Language Exam

The following is required for a master’s degree in history: 24 credit hours of course work, plus six hours of thesis research credits (HST 599). The thesis equivalent option substitutes six credit hours of HST 592 in place of the six hours of HST 599 and requires as well an additional three credit hours of HST 591 (six total instead of three) in the 30 hours of the plan of study. See http://shprs.clas.asu.edu/masters_hst for more information. With the approval of the supervisory committee, candidates may take up to six credit hours of closely related interdisciplinary 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://shprs.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 and thesis. 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 plan of study. The advisor, with the candidate, is primarily responsible for determining the plan 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 or thesis-equivalent based on original research. 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. Online electronic application: Students applying for admission to a degree program such as the master’s program and the Scholarly Publishing Certificate Program are required to submit two separate applications (for the degree program and for the certificate program). Students can begin their application at: http://graduate.asu.edu/.

2. Transcripts: should be mailed to the Graduate College at the address below. It is not necessary to mail transcripts to the history program. Arizona State University, Graduate College, 1120 S. Cady Mall INTDSB-B256, Tempe, AZ 85287-1003.

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: addressed to the history admissions committee explaining your scholarly background and training, your career goals, the primary field you wish to pursue, your proposed research specialization, and why you want to pursue graduate study at ASU (about 500 words in length).
5. **Resume**: Upload into online application.

6. **Data form**: Please download the form to your desktop, and upload into your online application. The form is located at: [http://shprs.clas.asu.edu/history_application](http://shprs.clas.asu.edu/history_application).

7. **Writing sample**: A sample of your written work should be submitted electronically. The writing sample may be an article (published or unpublished), a research paper, or any other extended sample of your expository skill no longer than 35 pages in length. Longer writing samples should not be submitted without first consulting the Graduate Director. Documents should not be password protected. Acceptable file types are .rtf, .pdf, and .doc. Files should not be password protected.

8. **Assistantship application**: Application form for a graduate assistantship, if desired, can be downloaded at [http://shprs.clas.asu.edu/history_application](http://shprs.clas.asu.edu/history_application). The form should be emailed to: graduate.history@asu.edu.

9. **References**: Students should contact faculty to inform them they will be listed as a recommender and will be contacted by the Graduate College and asked to submit an electronic recommendation. Students are required to submit a minimum of three e-mail addresses from faculty or others qualified to speak the student's suitability for graduate study in history.

10. **International Students**: Students applying from outside the U.S. whose native language is not English must follow Graduate College guidelines demonstrating English language proficiency. See [http://graduate.asu.edu/admissions/international.html#credentials](http://graduate.asu.edu/admissions/international.html#credentials). The Graduate College's minimum TOEFL (Test of English as a Foreign Language) score is 550, however, the history program requires a score of at least 600. Students whose original language is other than English must send a copy of an article or research paper in their native or principal research language in addition to the English writing sample required of all students. Prospective international students applying for teaching assistant positions must achieve a score of 55 or higher on the Test of Spoken English (TSE) or SPEAK (Speaking Proficiency English Assessment Kit) test to assume full teaching responsibilities such as serving as the instructor of a class or leading discussion groups. More information on this requirement is available from the International Teaching Assistant Program [http://www.asu.edu/xed/aecp/ITAinfo](http://www.asu.edu/xed/aecp/ITAinfo). The Graduate College urges applicants interested in teaching assistantship positions to take the TSE in their home country and have the score sent directly to the Graduate College. The TSE is administered by TOEFL/TSE Services, PO Box 6151, Princeton, NJ, 08541-6151, USA or call 609-771-7100, or 609-771-7714 (TTY).

**Contact Information:**
Liberal Arts and Sciences, College of
Historical, Philosophical and Religious Studies, Sch
[http://history.clas.asu.edu/](http://history.clas.asu.edu/)
graduate.history@asu.edu
COOR 4587
480/965-3226

**History, PhD (LAHISTPHD)**
Online Degree Search Title: History (PhD)

**Program Description**: The Ph.D. in history offers candidates the opportunity to study past and contemporary civilizations and to learn research and writing techniques that may be used in scholarly careers at leading academic institutions, in historical societies and agencies, in the public sector and in business.

Major emphasis is placed upon developing a disciplined mind, expertise in a chosen subject area and competence in historical research methodology. The program is composed of small classes that bring students into a close working relationship with faculty and other graduate students.

**Degree Requirements**: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

The doctoral degree requires 84 total credit hours beyond the bachelor's. Students with a master's degree in history are allowed to apply 30 credit hours of that degree toward the 84 total credit hours required for the doctoral program. Sixty credit hours must be in history courses and must meet the following requirements:

1. Fifty-four credit hours must be taken in residence at ASU.
2. In general, all credit hours must be at the 500 level or above (graduate credit for 400-level courses must be approved in advance and documented in the student's file).

3. At least nine credit hours must be taken in the primary field and six hours in the secondary field. These will normally be HST 598 or HST 591 courses but may include directed readings, HST 790.

4. Three credit hours of HST 500 Historical Theory and Methodology, are required during the first year.

5. Nine credit hours must be taken of HST 591, research seminars. Only one seminar is transferable from a master's degree.

6. Six credit hours must be taken in "core" field courses for U.S. and European majors only.

7. Twenty-four credit hours must be taken in dissertation research, 12 hours each of HST 792 and HST 799.

Students must select a primary field, a secondary field, and a research specialization. There is a written qualifying exam in the primary field, a portfolio defense for the secondary field and an oral examination for the research field.

**Foreign Language Requirement:** Doctoral students must also demonstrate proficiency in one or more foreign languages relevant to their fields of study and/or an advanced research skill relevant to their dissertation research (e.g., oral history, geographic information systems, documentary editing, statistical analysis or methodological-theoretical training in a related discipline).

**Advising:** For guidance through the program, students select a supervisory committee of at least three faculty members, with the student's advisor serving as committee chair. Students also select a separate secondary field committee to evaluate their secondary field portfolio. The primary field qualifying examination is administered by an ad hoc committee composed of professors who have taught the core courses in that field. The research field oral examination is administered by the student's supervisory committee.

**Dissertation:** The culminating experience for the Ph.D. in history is the dissertation. Approximately 250-300 pages in length, it must be an original contribution to knowledge and demonstrate the candidate's proficiency in independent research and historical exposition. The research topic is chosen by the student in consultation with the faculty advisor who serves as chair of the supervisory committee. The dissertation will explore a limited subject in depth, analyzing and drawing conclusions from the information gleaned from primary and secondary sources. It will demonstrate 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. **Online electronic application:** Students apply for admission both to the Graduate College and to a degree program (e.g., the M.A. or the Ph.D. in History). The history department is affiliated with several graduate certificate programs, including scholarly publishing and medieval and renaissance studies. Students applying to the M.A. or Ph.D. in History as well as one of these certificate programs must submit two separate applications (for the degree program and for the certificate program).

2. **Transcripts:** should be mailed to the Graduate College at the address below. It is not necessary to mail transcripts to the history program. Arizona State University, Graduate College, 1120 S. Cady Mall INTDSB-B256, Tempe, AZ 85287-1003.

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:** addressed to the history review committee explaining your scholarly background and training, your career goals, the primary and secondary fields of study you wish to pursue, your proposed research specialization, and why you want to pursue graduate study at ASU (about 500 words in length).

5. **Resume:** upload into online application.

6. **Data form:** Please download the form to your desktop, and upload into your online application. The form is located at: http://shprs.clas.asu.edu/history_application.

7. **Writing sample:** A sample of your written work should be submitted electronically. The writing sample may be an article (published or unpublished), a research paper, or any other extended sample of your expository skill no
longer than 35 pages in length. Longer writing samples should not be submitted without first consulting the Graduate Director. Documents should not be password protected. Acceptable file types are .rtf, .pdf, and .doc. Files should not be password protected.

8. **Assistantship application:** Application form for a graduate assistantship, if desired, can be loaded at http://shprs.clas.asu.edu/history_application. The form should be emailed to: graduate.history@asu.edu. See special requirements below for international students applying for graduate assistantships.

9. **References:** Students should contact faculty to inform them they will be listed as a recommender and will be contacted by the Graduate College and asked to submit an electronic recommendation. Students are required to submit a minimum of three (3) e-mail addresses from faculty or others qualified to speak the student’s suitability for graduate study in History.

10. **International Students:** 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. The Graduate College's minimum TOEFL (Test of English as a Foreign Language) score is 550, however, the history program requires a score of at least 600. Students whose original language is other than English must send a copy of an article or research paper in their native or principal research language in addition to the English writing sample required of all students. Prospective international students applying for teaching assistant positions must achieve a score of 55 or higher on the Test of Spoken English (TSE) or SPEAK (Speaking Proficiency English Assessment Kit) test to assume full teaching responsibilities such as serving as the instructor of a class or leading discussion groups. More information on this requirement is available from the International Teaching Assistant Program http://www.asu.edu/xed/aecp/ITAInfo. The Graduate College urges applicants interested in teaching assistantship positions to take the TSE in their home country and have the score sent directly to the Graduate College. The TSE is administered by TOEFL/TSE Services, PO Box 6151, Princeton, NJ, 08541-6151, USA or call 609-771-7100, or 609-771-7714 (TTY).

**Contact Information:**
Liberal Arts and Sciences, College of Historical, Philosophical and Religious Studies, Sch http://history.clas.asu.edu/ graduate.history@asu.edu COOR 4587 480/965-3226

**Immigration Studies (certificate), CERT (LAIMMSTUCE)**
Online Degree Search Title: Immigration Studies (Grad 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.

**Degree Requirements:** 15 credit hours

All students will be required to take one core course, three approved elective courses on immigration, and three hours of a culminating experience (either an internship or a research project). For a list of approved courses, please contact the school. 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. Students will be required to write a report describing the organization and their experience as interns. 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. 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 submit the Graduate College online application. 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. Official GRE scores.
2. Transcripts of all undergraduate and graduate course work.
3. A statement of purpose outlining career and educational goals.
4. Three letters of recommendation.
5. An optional sample of their written work.

Applicants should have achieved a minimum GPA of 3.00 in the last 60 hours of their bachelor's degree. 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 Information:**
Liberal Arts and Sciences, College of
School of Human Evolution and Social Change
http://shesc.asu.edu/immigration_studies_certificate
shescgrad@asu.edu
SHESC 233
480/965-6215

**Infant Family Practice, MAS (LACDEMAS)**
Online Degree Search Title: Infant - Family Practice (MAS)

**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.

**Degree Requirements:** 30 Credit Hours and a Portfolio

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 Information:**
Liberal Arts and Sciences, College of
School of Social and Family Dynamics
http://ssfd.clas.asu.edu/
ssfd@asu.edu
SS 144
480/965-6978

**Justice Studies, MS (LAJUSSTMS)**
Online Degree Search Title: Justice Studies (MS)

**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.

**Degree Requirements:** 30 credit hours and a Written Comprehensive Exam (MIP), or 36 credit hours and a Thesis, or 36 credit hours and an Applied Project.

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 and six of these credit hours 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 and six of these credit hours 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:
Admission Requirements: All applicants must submit the Graduate College online application. 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 Justice and Social Inquiry by the same deadline:

1. Personal statement (1 1/2 to 2 pages, double spaced) outlining areas of interest, educational and career goals.
2. Three letters of reference (academic references are preferred).
3. A writing sample (research that best represents your academic thinking and writing skills and a minimum of ten pages).

Send these materials to:
Justice and Social Inquiry Graduate Programs
Arizona State University
P.O. Box 874902
Tempe, AZ 85287-4902

Contact Information:
Liberal Arts and Sciences, College of
School of Social Transformation
http://justice.clas.asu.edu/graduate
grahade@asu.edu
WILSN 217
480/965-6008

Justice Studies, PHD (LAJUSSTPHD)
Online Degree Search Title: Justice Studies (PhD)

Program Description: The doctoral program in justice studies is an interdisciplinary degree program offered through the auspices of Justice and Social Inquiry in the School of Social Transformation. 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.

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. The Ph.D./JD option allows qualified students to earn a Juris
Doctorate from ASU's Sandra Day O'Connor College of Law while simultaneously earning an interdisciplinary Ph.D. in Justice Studies. Students must apply separately to both programs.

**Degree Requirements**: 84 credit hours, a Dissertation and a Written Comprehensive Exam

Students in the doctoral program must 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 JD are required to complete 54 credit hours:

1. Twelve credit hours are earned as dissertation research.
2. Nine hours are Ph.D. core courses.
3. Fifteen credit hours are elective classroom hours, nine of which must have a JUS prefix.
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 are required to complete 84 credit hours:

1. Twelve credit hours are earned as dissertation research credit.
2. Twelve credit hours are 500-level foundation courses.
3. Nine credit hours are required Ph.D. courses.
4. Twenty-four credit hours are elective classroom hours, fifteen of which must have a JUS prefix.
5. Twenty-seven credit hours are comprised of any combination of additional elective courses, reading and conference hours or research hours.

**Admission Requirements**: All applicants must submit the Graduate College online application. 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 Justice and Social Inquiry by the same deadline:

1. A personal statement (1 1/2 to 2 pages, double spaced) outlining areas of interest, educational and career goals.
2. Three letters of reference (academic references are preferred).
3. A writing sample (research that best represents your academic thinking and writing skills and a minimum of ten pages).

Send these materials to:

Justice and Social Inquiry Graduate Programs
Arizona State University
P.O. Box 874902
Tempe, AZ 85287-4902
Contact Information:
Liberal Arts and Sciences, College of
School of Social Transformation
http://justice.clas.asu.edu/graduate
graduate.justice@asu.edu
WILSN 217
480/965-6008

Liberal Studies, MLSt (LAMLSMLS)
Online Degree Search Title: Liberal Studies (MLSt)

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.

Degree Requirements: 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

Eighteen 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:

1. Graduate College online application
2. A letter of interest in the program.
3. A resume, biographical statement or curriculum vitae.

Contact Information:
Liberal Arts and Sciences, College of
Dean, College of Liberal Arts and Sciences
http://clas.asu.edu/liberalstudies/mls
Wilson 310
480/727-0819

Liberal Studies (Film and Media Studies), MLSt (LAFMSMLS)
Online Degree Search Title: Liberal Studies - Film and Media Studies (MLSt)

Program Description: The M.L.St. in film and media studies offers students interested in a multidisciplinary approach to international 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 international film and media. The program connects students to the entire College of Liberal Arts and Sciences and integrates the disciplines.

**Degree Requirements**: 30 credit hours, an Applied Project and including a Capstone (MLS 593)

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

Eighteen hours of electives.

**Admission Requirements**: Applicants must submit:

1. A Graduate College online application.
2. A letter of interest in the program.
3. A resume, biographical statement or curriculum vitae.

**Contact Information**:  
Liberal Arts and Sciences, College of  
Dean, College of Liberal Arts and Sciences  
http://clas.asu.edu/liberalstudies/mls  
Wilson 310  
480/727-0819

**Linguistics (certificate), CERT (LALINGUICE)**  
Online Degree Search Title: Linguistics (Grad 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.

**Degree Requirements**: 18 credit hours

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**:

Eligibility and Application

The graduate certificate in linguistics is available to all ASU graduate students irrespective of their major and to nondegree graduate students and working professionals provided they meet eligibility criteria. Students are advised that only nine hours may be taken in nondegree/certificate status and applied to a graduate degree/certificate program. Eligibility requirements for obtaining the graduate certificate include having:

1. Complete of an undergraduate bachelor's degree from an U.S. accredited institution or equivalent.
2. Formal knowledge of a foreign language, equivalent to two years of study of a foreign language at the university level or plans to fulfill the language requirement concurrently with their certificate courses. The language requirement may be met by completion of courses through the second-year level (four semesters) at ASU or elsewhere, or completion of an upper-division language course with an average of "B" (3.00) or better for all such coursework (200 or 300-level), or through examination (language placement tests available online under (http://www.asu.edu/languages) Language Placement Policies and Tests), indicating they should be placed above the 200-level. If this requirement is not already fulfilled at the time of application, candidates must demonstrate completion of this requirement at the end of their certificate coursework, in order for their certificate to be granted.

3. Taken an introductory course in linguistics taken at the upper-division or graduate level, e.g., FLA 400/598, LIN 510, ASB 480/598 or equivalent.

Application Process

Students interested in earning the graduate linguistics certificate must apply (http://www.asu.edu/gradapp) University Graduate Admissions by completing an online application, and also to the Department of English. Official transcripts must be sent to Graduate Admissions, P.O. Box 871003, INTDSB 170, Tempe, AZ 85287-1003. The deadline is January 15th. Once the application is complete, certificate program staff will contact the applicant to arrange an appointment with Dawn Bates, the certificate faculty advisor. Normally, these appointments will be in late February. The following items must be mailed to the graduate program coordinator, English Department, Arizona State University, P.O. Box 870302, Tempe, AZ 85287-0302, preferably in one envelope.

1. A one- to two-page, well-considered statement of purpose detailing the student's background and reasons for wanting to complete the linguistics certificate.

2. Photocopies of transcripts.

Supporting Documentation

At the initial meeting with the certificate faculty advisor students must submit a copy of official transcripts attesting to the completion of a 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 as nondegree graduate students. Students who apply to the graduate certificate in linguistics, and who 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. 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 Information:
Liberal Arts and Sciences, College of
Department of English
http://english.clas.asu.edu/gradstudies-lingcert
enggrad@asu.edu
LL 543B
480/965-3194

Marriage and Family Therapy, MAS (LAMFTMAS)
Online Degree Search Title: Marriage and Family Therapy (MAS)

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.

Degree Requirements: 39 Credit Hours and a Research Paper
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. Written/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 Information:**
Liberal Arts and Sciences, College of
School of Social and Family Dynamics
http://ssfd.clas.asu.edu/
ssfd@asu.edu
SS 144
480/965-6978

**Mathematics, MA (LAMATHMA)**

Online Degree Search Title: Mathematics (MA)

**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.

**Degree Requirements**: 30 credit hours and 2 Written Comprehensive Exams, or 30 credit hours and 2 Written Comprehensive Exams (MIP), or 30 credit hours, a Thesis and a Written Comprehensive Exam

**Thesis Option**

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 one qualifying examination. See the School web site for examination information.
4. A final oral examination in defense of the thesis.

**Nonthesis Option**

The degree program requires:

1. Thirty credit hours of math or math related graduate course work.
2. Students must also complete two qualifying examinations. See the school Web site for examination information.

**Admission Requirements**: Applicants must submit:

1. The Graduate College online application.
2. Official transcripts.
3. Three letters of recommendation.
4. A statement of education and career goals.
5. The general GRE scores.

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) and advanced calculus (equivalent to ASU course MAT 371).

Contact Information:
Liberal Arts and Sciences, College of School of Mathematical and Statistical Sciences
http://math.asu.edu/
grad@math.la.asu.edu
PSA 216
480/965-3951

Mathematics, PHD (LAMATHPHD)
Online Degree Search Title: Mathematics (PhD)

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.

Degree Requirements: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

The program includes:
1. Twelve credit hours of dissertation (799).
2. Students must pass two qualifier examinations, a written comprehensive examination and an oral dissertation prospectus. See the school Web site for examination information.
3. Each student must write a dissertation and defend it orally in front of five dissertation committee members.

Admission Requirements: Applicants must submit:
1. The Graduate College online application.
2. Official transcripts.
3. Three letters of recommendation.
4. A statement of education and career goals.
5. The general GRE scores.

Minimum background for consideration of admission to the PhD program in mathematics 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) and advanced calculus (equivalent to ASU course MAT 371).

Contact Information:
Liberal Arts and Sciences, College of School of Mathematical and Statistical Sciences
http://math.asu.edu/
grad@math.la.asu.edu
PSA 216
480/965-3951
Mathematics Education, PHD (LAMTEPHD)

Online Degree Search Title: Mathematics Education (PhD) (Mathematics and Statistics Dept - Grades 9-20)

**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.

**Degree Requirements:** 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

PhD students must complete the following:

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. One two-part qualifying examination in mathematics education.
6. Two graduate math sequences from a list of options. See the School web site for examination information.
7. A written comprehensive examination.
8. An oral comprehensive examination.
10. 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:

1. The Graduate College online application.
2. Official transcripts.
3. Three letters of recommendation (at least two of these must be from faculty).
4. A statement of education and career goals.
5. A writing sample.
6. The general GRE scores (students must be competitive in an applicant pool as evidenced by GRE scores of 700 quantitative and 500 verbal).

Minimum background for consideration of admission to the Ph.D. program in mathematics education includes a master's degree in mathematics or a closely related area with a 3.00 GPA (4.00 scale) or a bachelor's degree in mathematics or a closely related area with exceptionally high grades and advanced course work in mathematics.

**Contact Information:**

Liberal Arts and Sciences, College of
School of Mathematical and Statistical Sciences
http://math.asu.edu/
grad@math.la.asu.edu
PSA 216
480/965-3951

Medieval Studies (certificate), CERT (LAMEDSTCE)

Online Degree Search Title: Medieval Studies (Grad 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.

**Degree Requirements:** 18 credit hours and a Thesis (MA Certificate), or 27 credit hours and a Dissertation (PhD Certificate)

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 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 Information:**
Liberal Arts and Sciences, College of Historical, Philosophical and Religious Studies, Sch
http://www.acmrs.org
acmrs@asu.edu
COOR 4426
480/965-5900

**Microbiology, MS (LAMICROMS)**

Online Degree Search Title: Microbiology (MS)

**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.

**Degree Requirements:** 30 credit hours and a Thesis, or 30 credit hours, an Oral Comprehensive Exam and a Written Comprehensive Exam (MIP), or 30 credit hours, a Thesis, an Oral Comprehensive Exam and a Written Comprehensive Exam

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 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 600 paper-based or 100 Internet-based, for non-native English speakers.

**Contact Information:**
Liberal Arts and Sciences, College of School of Life Sciences
http://sols.asu.edu/grad/
sols.grad@asu.edu
LSC 226
480/965-1768

**Microbiology, PHD (LAMICROPHD)**
Online Degree Search Title: Microbiology (PhD)

**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.

**Degree Requirements:** 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

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 600 paper-based or 100 Internet-based for non-native English speakers.

**Contact Information:**
Liberal Arts and Sciences, College of School of Life Sciences
http://sols.asu.edu/grad/
sols.grad@asu.edu
LSC 226
480/965-1768
Molecular and Cellular Biology, MS (LACELLMS)

Online Degree Search Title: Molecular/Cellular Biology (MS)

Program Description: The M.S. in molecular and cellular biology 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.

Degree Requirements: 30 credit hours and a Thesis, or 30 credit hours, an Oral Comprehensive Exam and a Written Comprehensive Exam (MIP)

A minimum of 10 designated credit hours of molecular and cellular biology 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 600 paper-based or 100 Internet-based for non-native English speakers.

Contact Information:
Liberal Arts and Sciences, College of
School of Life Sciences
http://sols.asu.edu/grad/
sols.grad@asu.edu
LSC 226
480/965-1768

Molecular and Cellular Biology, PHD (LACELLPHD)

Online Degree Search Title: Molecular/Cellular Biology (PhD)

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.

Degree Requirements: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam
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 600 paper-based or 100 Internet-based for non-native English speakers.

A GRE subject examination is strongly recommended.

**Contact Information:**
Liberal Arts and Sciences, College of
School of Life Sciences
http://sols.asu.edu/grad/
sols.grad@asu.edu
LSC 226
480/965-1768

**Museum Studies (certificate), CERT (LAMUSEUMCE)**
Online Degree Search Title: Museum Studies (Grad Certificate)

**Program Description:** 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.
- Educational programming.
- Exhibition work.
- Research.

**Degree Requirements:** 18 credit hours

Course work includes 12 hours of required course work and a six-credit-hour internship at an approved museum. 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. The certificate may be taken independently or in conjunction with the M.A. in anthropology with a concentration in museum anthropology. 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 submit the Graduate College online application. 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. Official GRE scores.
2. A statement of their interests and professional goals.
3. Three letters of recommendation.

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 Information:**
Liberal Arts and Sciences, College of
School of Human Evolution and Social Change
http://shesc.asu.edu/graduate_studies
shescgrad@asu.edu
SHESC 233
480/965-6215

**Nanoscience, PSM (LANANPSM)**

**Online Degree Search Title:** Nanoscience (PSM)

**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, nanomedicine 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.

**Degree Requirements:** 30 Credit Hours, an Applied Project and including a Capstone (NAN 593)

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, fall semester)
- **NAN 593 Applied Project** (three credits each, spring and final summer session)
- **NAN 505 Nanoscience and Society** (two credits, final summer session)
- **NAN 506 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 Information:
Liberal Arts and Sciences, College of
Department of Physics
http://physics.asu.edu/graduate/psm/overview
nanoscience@asu.edu
PSF 470
480/965-3561

Natural Science (Geological Sciences), MNS (LANATSCIMN)
Online Degree Search Title: Geological Sciences (MNS)

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.

Degree Requirements: 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: All applicants must submit the Graduate College online application. 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. The application deadline for fall semester is January 15.

Contact Information:
Liberal Arts and Sciences, College of
Department of Geological Sciences
http://sese.asu.edu/
seseinfo@asu.edu
Natural Science (Physics), MNS (LAPHYSMNS)

Online Degree Search Title: Physics (MNS)

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.

Degree Requirements: 30 credit hours and an Applied Project

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 re-certification, 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 on the department Web site.

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 the department Web site.

Contact Information:
Liberal Arts and Sciences, College of
Department of Physics
http://physics.asu.edu
physics.grad@asu.edu
PSF 470
480/965-3561

Philosophy, MA (LAPHILMA)

Online Degree Search Title: Philosophy (MA)
**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).

**Degree Requirements:** 30 credit hours and a Portfolio, or 30 credit hours and a Thesis, or 30 credit hours, a Written Comprehensive Exam and an Oral Comprehensive Exam (MIP)

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:

1. Complete transcripts.
The applicant's score in the GRE.

Three letters of recommendation from persons qualified to judge the applicant's potential for graduate work in philosophy.

A sample of philosophical writing.

A statement of purpose.

All applicants must submit the Graduate College online application. The application deadline is Feb. 15.

**Contact Information:**
Liberal Arts and Sciences, College of Historical, Philosophical & Religious Studies, Sch
http://shprs.clas.asu.edu/philosophy
philosophy@asu.edu
COOR 3312
480/965-5778

**Philosophy, PHD (LAPHILPHD)**

**Online Degree Search Title:** Philosophy (PhD)

**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.

**Degree Requirements:** 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

The student's plan 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:

- One graduate course in history of philosophy.
- Two graduate courses in value theory.
- Two graduate courses in metaphysics and epistemology, including areas such as philosophy of language, of science and of mind.
- One advanced course in symbolic logic (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 Information:
Liberal Arts and Sciences, College of
http://shprs.clas.asu.edu/philosophy
Historical, Philosophical & Religious Studies, Sch
philosophy@asu.edu
COOR 3312
480/965-5778

Philosophy (History and Philosophy of Science), MA (LAHPSMA)

Online Degree Search Title: Philosophy (History and Philosophy of Science) MA

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.

Degree Requirements: 30 credit hours, a Thesis and including a Capstone (HPS 551)

Graduate course work for the M.S. to 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 Information:
Liberal Arts and Sciences, College of
Historical, Philosophical & Religious Studies, Sch
http://sols.asu.edu/grad
Sols@asu.edu
**Philosophy (History and Philosophy of Science), PHD (LAHPSPHD)**

Online Degree Search Title: Philosophy (History and Philosophy of Science) PHD

**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.

**Degree Requirements:** 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

Graduate course work includes:

- 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)

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 Information:**
Liberal Arts and Sciences, College of 
Historical, Philosophical and Religious Studies, Sch 
http://sols.asu.edu/grad
Physics, MS (LAPHYSIMS)
Online Degree Search Title: Physics (MS)

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.

Degree Requirements: 30 credit hours and a Thesis, or 30 credit hours and a Written Comprehensive Exam (MIP)
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 Information:
Liberal Arts and Sciences, College of
Department of Physics
http://physics.asu.edu/
physics.grad@asu.edu
PSF 470
480/965-3561

Physics, PHD (LAPHYSIPHD)
Online Degree Search Title: Physics (PhD)

Program Description: The physics Ph.D. is intended for highly capable students having the interest and ability to follow a career in independent research. Graduates find positions in a variety of settings ranging from academic faculty, to government labs, to industrial labs, and even into management and administration. The recent advent of the Graduate Faculty Initiative at ASU extends the spectrum of potential physics Ph.D. topics and advisors to include highly multidisciplinary Ph.D. projects that draw upon chemistry, biochemistry, biology, electrical engineering, materials science and/or other related fields. Consequently students and Ph.D. advisors can craft novel Ph.D. projects that transcend the classical palette of physics subjects. Multidisciplinary expertise of this nature is increasingly vital to modern science and technology. Current areas of particular emphasis within the department include biological physics, electron diffraction and imaging, nanoscale and materials physics, particle physics and astrophysics, and cosmology. The department has over 100 doctoral students and over 40 faculty members.

Degree Requirements: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam
The physics Ph.D. program requires a student to complete 84 credit hours of course work, pass a written and an oral comprehensive examination, and prepare and defend a Ph.D. dissertation. Within the newly redesigned and modernized physics graduate curriculum, all Ph.D. students are required to take 18 credit hours of core physics courses, specifically:

- PHY 521 Classical and Continuum Mechanics (first semester)
- PHY 531 Electrodynamics (first semester)
- PHY 500 Research Rotation I (first semester)
- PHY 541 Statistical Physics (second semester)
- PHY 576 Quantum Theory (second semester)
- PHY 500 Research Rotation II (second semester)

Course work beyond these core courses is established by the student’s Ph.D. advisor and supervisory committee, working in partnership with the student. The intent is to tailor the Ph.D. training to the specific research interests and aptitudes of the student while ensuring that each graduating student emerges with the expertise, core knowledge, and problem-solving skills that define a successful Ph.D. in physics. Of particular note within the core courses are the PHY 500 Research Rotations, which are specifically designed to engage Ph.D. students in genuine, faculty-guided research starting in their very first semester at ASU.

**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. Courses in analytic mechanics, electromagnetism and modern physics, including quantum mechanics, are particularly important. Applicants must submit test scores for the verbal, quantitative, and analytical sections of the GRE. Submission of test scores for the physics GRE subject exam is highly recommended although not always mandatory. A 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. Applicants requesting credit for prior graduate courses, taken either at ASU or elsewhere, must demonstrate mastery of the relevant course material to the graduate level standards of the Department of Physics. Financial support in the form of teaching or research assistantships is contingent upon satisfactory performance in course work, timely completion of examinations (including the written and oral Ph.D. comprehensive examinations), and the need and availability of such support. Students on probation are offered support only under exceptional circumstances. The period for which a Ph.D. candidate may receive financial support through the Department of Physics does not normally exceed six years.

**Contact Information:**
Liberal Arts and Sciences, College of
Department of Physics
http://physics.asu.edu/
physics.grad@asu.edu
PSF 470
480/965-3561

**Plant Biology, MS (LAPLBIOMS)**
Online Degree Search Title: Plant Biology (MS)

**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 systematic. Although research training is focused primarily on acquiring basic knowledge, we offer opportunities for exposure to and participation in research with applied goals.

**Degree Requirements:** 30 credit hours and a Thesis, or 30 credit hours, an Oral Comprehensive Exam and a Written Comprehensive Exam (MIP)

The program must include:

1. A minimum of three semester hours of research.
2. Six 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 600 paper-based or 100 Internet-based, for non-native English speakers.

**Contact Information:**
Liberal Arts and Sciences, College of
School of Life Sciences
http://sols.asu.edu/grad/
sols.grad@asu.edu
LSC 226
480/965-1768

**Plant Biology, PHD (LAPLBIOPHD)**

*Online Degree Search Title:* Plant Biology (PhD)

**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.

**Degree Requirements:** 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

The program must include 12 hours of 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 600 paper-based or 100 Internet-based.
5. A GRE subject examination is strongly recommended.
Political Science, MA (LAPOLSCMA)

Online Degree Search Title: Political Science (MA)

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.

Degree Requirements: 30 credit hours and a Portfolio, or 30 credit hours and a Thesis, or 30 credit hours and an Oral Comprehensive Exam (MIP)

1. This program includes both a thesis and non-thesis 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.

2. All candidates must take POS 503 and the core course in the student's major and minor fields.

3. Additional hours must be taken in graduate-level courses and seminars each semester in the student's major field, minor field and electives until course work is completed.

4. 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 School of Politics and Global Studies 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
School of Politics and Global Studies
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 Information:
Liberal Arts and Sciences, College of
School of Government, Politics and Global Studies
http://www.asu.edu/clas/polisci/
polisci@asu.edu
COOR 6801
480/965-6551
**Political Science, PHD (LAPOLSCPHD)**

Online Degree Search Title: Political Science (PhD)

**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.

**Degree Requirements:** 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

The Ph.D. program in Political Science requires:

1. Eighty-four credit hours including 12 hours of Dissertation research
2. A written comprehensive examination in the major and minor fields
3. An oral comprehensive examination over the dissertation prospectus
4. POS 503 and 603 (part of the 84 hours)
5. The supervisory committee of three members, including the committee chair from the student's major field
6. A formal oral defense of the Dissertation
7. A maximum of 12 credit hours of approved course work outside the department but within ASU may count toward the 84 credit hours.
8. A maximum of 30 credit hours from a post-graduate program elsewhere may be transferred in and counted toward the 84 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
School of Politics and Global Studies
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 Information:**
Liberal Arts and Sciences, College of
School of Government, Politics and Global Studies
http://www.asu.edu/clas/polisci/
polisci@asu.edu
COOR 6801
480/965-6551

**Psychology, PHD (LAPSYCHPHD)**

Online Degree Search Title: Psychology (PhD)
**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., integrating cognition, action and perception studies with arts, media and engineering; integrating psychology and law). 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 and psychosocial processes that underlie behavior and health (e.g., drug abuse, stress, heart disease).
- Cognitive processes (e.g., attention, language) as they occur within the context of perception and action, personality and issues of stigma and prejudice.
- Lifespan developmental aspects of emotion and cognition.
- Prevention of child mental health problems.
- Individual resilience.
- Cultural influences on psychological processes.
- Women's issues.
- Evolution and behavior.

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.

**Degree Requirements:** 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

In addition to a core curriculum, students take courses related to their area of interest as determined in consultation with their supervisory committees. All doctoral students complete 12 dissertation credit hours. Requirements vary across training areas.

**Admission Requirements:** Completed Graduate College online applications, including all letters and supporting documents, must be received by Dec. 15 for applicants to the clinical program, and by January 5 for all other applicants (behavioral neuroscience, developmental, quantitative, social psychology, cognition, action, and perception).

1. Scores on the GRE.
2. Transcripts.
5. Test of English as a Foreign Language (TOEFL) for international students.

In addition to the materials sent to the Graduate College, the applicant must send another set of materials to the Department of Psychology as follows:

1. Original letters of recommendation from three references.
2. Statement of purpose.
3. Transcripts (unofficial copies are acceptable).
4. GRE scores (unofficial copies are acceptable).

Send these directly to:
Coordinator of Graduate Admissions
Psychology Department
P.O. Box 871104
Arizona State University
Tempe, AZ 85287-1104

Contact Information:
Liberal Arts and Sciences, College of
Department of Psychology
http://psychology.clas.asu.edu/
psygrad@asu.edu
PSY 296
480/965-7606

Psychology (Cognition, Action & Perception in Arts, Media & Engineering), PHD (LAPSYCPHD)

Online Degree Search Title: Psychology - Cogn, Act, & Perc (Arts, Media, & Engr) (PHD)

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.

Degree Requirements: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

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. In addition to the materials sent to the Graduate College, the applicant must send another set of materials to the Department of Psychology as follows:

1. Original letters of recommendation from three references
2. Statement of purpose
3. Transcripts (unofficial copies are acceptable)
4. GRE scores (unofficial copies are acceptable)

Send these directly to:
Coordinator of Graduate Admissions
Psychology Department
Arizona State University
P.O. Box 871104
Tempe, AZ 85287-1104

Application Deadline: Completed applications for admission in the fall semester, including all letters and supporting documents should be received by January 5.

Contact Information:
Liberal Arts and Sciences, College of
Department of Psychology
http://psychology.clas.asu.edu/cognitive
psygrad@asu.edu
PSY 296
480/965-7606

Psychology (Quantitative Research Methods), PHD (LAPSYQUPHD)
Online Degree Search Title: Quantitative Research Methods (PhD)

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.

Degree Requirements: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

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)
Twelve credits of PSY 792 (post-master's research)
Twelve 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.

In addition to the materials sent to the Graduate College, the applicant must send another set of materials to the Department of Psychology as follows:

1. Original letters of recommendation from three references.
2. Statement of purpose.
3. Transcripts (unofficial copies are acceptable).
4. GRE scores (unofficial copies are acceptable).

Send these directly to:
Coordinator of Graduate Admissions
Psychology Department
Arizona State University
P.O. Box 871104
Tempe, AZ 85287-1104

**Contact Information:**
Liberal Arts and Sciences, College of
Department of Psychology
http://psychology.clas.asu.edu/
psygrad@asu.edu
PSY 296
480/965-7606

**Religious Studies, MA (LARELIGMA)**

**Online Degree Search Title:** Religious Studies (MA)

**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 Religious 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.
• Nationalism and ethnicity.
• Religion and science.
• Religion and modernity.
• Popular religion.
• Ritual studies.
• Religion.

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.

**Degree Requirements:**
30 credit hours, a Thesis and a Foreign Language Exam, or
30 credit hours, a Thesis and a Foreign Language Exam (MIP), or
30 credit hours, an Applied Project and a Foreign Language Exam, or
30 credit hours, an Applied Project and a Foreign Language Exam (MIP)

**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 all languages 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 not count toward the fulfillment of degree requirements) at the beginning of their program of study.
3. Email addresses of three academic references. Referees will be contacted by the Graduate College to complete a reference questionnaire.
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 January 1.

**Contact Information:**
Liberal Arts and Sciences, College of Historical, Philosophical & Religious Studies, Sch http://shprs.clas.asu.edu/masters_rel Religious.Studies@asu.edu COOR 3312 480/965-5778

**Religious Studies, PhD (LARELIGPHD)**

**Online Degree Search Title:** Religious Studies (PhD)

**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.

**Degree Requirements:** 84 credit hours, a Dissertation, a Written Comprehensive Exam, an Oral Comprehensive Exam and a Foreign Language Exam.

**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:** All applicants must submit the Graduate College online application. 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. E-mail addresses of three academic references. Referees will be contacted by the Graduate College to complete a reference questionnaire.

The application deadline is January 1.

**Contact Information:**
Liberal Arts and Sciences, College of
**Renaissance Studies (certificate), CERT (LARENAISCE)**

Online Degree Search Title: Renaissance Studies (Grad 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.

**Degree Requirements:** 18 credit hours and a Thesis (MA Certificate), or 27 credit hours and a Dissertation (PhD Certificate)

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).

- **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 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 Information:**
Liberal Arts and Sciences, College of
Historical, Philosophical & Religious Studies, Sch
http://www.acmrs.org
acmrs@asu.edu
COOR 4426
480/965-5900

**Scholarly Publishing (certificate), CERT (LASCHPUBCE)**

Online Degree Search Title: Scholarly Publishing (Grad Certificate)

**Program Description:** The scholarly publishing certificate program offers training in publishing studies to graduate students in any discipline. The program prepares students to enter scholarly publishing at university presses, in higher education, at textbook and reference publishers or to engage in publishing activities encountered as academic professionals, such as journal publishing, book publishing, or documentary editing.

**Degree Requirements:** 23 credit hours.

Course work includes four required core courses and electives from a variety of disciplines. The certificate requires 23 credit hours of course work, including a summer internship. Some courses may be applied to both the certificate and the student's degree program.
Admission Requirements: Graduate students in any discipline may pursue a certificate in scholarly publishing in conjunction with their degree programs. The program is also open to students who already hold graduate degrees. Applicants need to submit:

1. A Graduate College online application. The Scholarly Publishing Certificate applicants are required to submit an application solely for the Scholarly Publishing program, regardless of any applications to other programs.
2. A resume or curriculum vitae. Upload it into the online application.
3. A writing sample. Submit a sample of your written work electronically. The writing sample may be an article (published or unpublished), a research paper, or any other extended example of your expository skill no longer than 35 double-spaced pages in length. Longer writing samples should not be submitted without first consulting the Graduate Director. Documents should not be password protected. Acceptable file types are .rtf, .pdf, and .doc.
4. A letter of intent. Should be addressed to the history review committee explaining your scholarly background and training, your career goals, and why you want to pursue graduate study at ASU (about 500 words in length).
5. Three reference letters. Students should contact their references and inform them they will be contacted by the Graduate College and asked to submit an electronic recommendation. Students are required to submit a minimum of three e-mail addresses from faculty or others qualified to speak the student's suitability for graduate study in scholarly publishing.
6. Transcripts. Should be mailed to the Graduate College at the following address. It is not necessary to mail transcripts to the history program. Arizona State University, Graduate College, 1120 S. Cady Mall INTDSB-B256, Tempe, AZ 85287-1003.
7. GRE scores. A report of the scores received on the GRE submitted to the Graduate College. Scores should be no more than five years old.
8. Data form. Please download this form to your desktop, complete it, and upload into your online application.

The application deadline is January 1 for enrollment in August.

Contact Information:
Liberal Arts and Sciences, College of
Historical, Philosophical & Religious Studies, Sch
http://shprs.clas.asu.edu/scholarlypublishing
scholarly.publishing@asu.edu
COOR 4589
480/965-5775

Science and Technology Policy, PSM (LAHSDPSM)
Online Degree Search Title: Science and Technology Policy (PSM)

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.

Degree Requirements: 30 credit hours

The program includes:
1. Twelve credits of required core courses.
   a. Theories of science and democracy. (3)
   b. Analysis of knowledge and expertise in policy advice. (3)
   c. Analysis of scientific and technological innovation. (3)
   d. Analysis of large-scale sociotechnological systems. (3)
2. Six credits of applied policy analysis courses.
   a. Capstone science and technology policy workshop.
   b. Applied science and technology policy project.
3. Three credits of science and technology policy internship.

Admission Requirements: All applicants must submit the Graduate College online application. 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 Information:
Liberal Arts and Sciences, College of
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)

Online Degree Search Title: Social Science and Health (PhD)

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, non-governmental 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 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.

**Degree Requirements:** 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

The Ph.D. program consists of:

• Eighty-four hours of course work post-bachelor’s.
• Fifty-four hours (30 course work, 12 research, and 12 dissertation hours) post-master's.
• A written comprehensive examination and the oral defense of a doctoral proposal/prospectus.
• A dissertation.

Students entering with a M.A. in a related field may be granted up to 30 credit hours toward the 84 hour total required for the Ph.D. Students must maintain a 3.20 average GPA in their courses and complete degree requirements per the program’s satisfactory progress policy. Students without an M.A. must earn an additional 30 hours of graduate credit, selecting courses from a number of appropriate programs on campus. 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:** All applicants must submit the Graduate College online application. In addition to general requirements for admission to the Graduate College, the social science and health Ph.D. program requires students to provide:

1. Official GRE scores.
2. Transcripts of all undergraduate and graduate course work.
3. A statement of purpose outlining career and educational goals.
4. Three letters of recommendation.
5. A sample of their written work.

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 Information:**
Liberal Arts and Sciences, College of
School of Human Evolution and Social Change
http://shesc.asu.edu/graduate_studies
shescgrad@asu.edu
Social Science and Health (Urbanism), PHD (LASSHURPHD)

Online Degree Search Title: Social Science and Health (Urbanism) PhD

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:

- Biocultural approaches to human coping.
- Computer-based complexity modeling.
- Culture and health.
- Health in the Americas.
- Indigenous and minority health.
- Mathematical epidemiology.
- Nutritional anthropology.
- Social justice and vulnerable populations.
- Social networks.
- Urban and environmental health.

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. 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 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.

Degree Requirements: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam
The Ph.D. program consists of:

1. Eighty-four hours of course work post-bachelor's.
2. Fifty-four hours (30 course work, 12 research, and 12 dissertation hours) post-master's.
3. A written comprehensive examination and the oral defense of a doctoral proposal/prospectus.

Students entering with a M.A. in a related field may be granted up to 30 credit hours toward the 84 hour total required for the Ph.D. Students must maintain a 3.20 average GPA in their courses and complete degree requirements per the program's satisfactory progress policy. Students without an M.A. must earn an additional 30 hours of graduate credit, selecting courses from a number of appropriate programs on campus. 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. Built form.
2. Culture and society.
3. Institutions and governance.
4. Natural environment.

**Admission Requirements:** All applicants must submit the Graduate College online application. 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. Official GRE scores.
2. Transcripts of all undergraduate and graduate course work.
3. A statement of purpose outlining career and educational goals.
4. Three letters of recommendation.
5. A sample of their written work.

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 Information:**
Liberal Arts and Sciences, College of
School of Human Evolution & Social Change
http://shesc.asu.edu/PhD_anthropology
shescgrad@asu.edu
SHESC 233
480/965-6215

**Socio-Economic Justice (certificate), CERT (LAECJUGRCT)**

Online Degree Search Title: Socio-Economic Justice (Grad Certificate)

**Program Description:** The graduate certificate in socio-economic justice addresses the social and political implications of global and local economies for economic inequality and social justice. This transdisciplinary program fuses interests in political economy, socio-economic inequality and analysis of related policies and their consequences for social welfare in areas of income, housing, employment and education. This certificate complements the current graduate curriculum at ASU and is structured to allow students to draw upon a combination of core courses in justice and social inquiry, and
course work from units from across the ASU campuses. Our approach is transdisciplinary (i.e., inclusive of courses in a variety of disciplines but transcending disciplinary boundaries through an integrative core curriculum), intersectional (i.e., considering gender, race, class, nation and sexual relations) and transnational (courses that examine global and local concerns). It will strengthen student understanding of the justice implications of the convergence of social and economic inequalities in the global economy.

**Degree Requirements:** 16 credit hours

Students must complete 16 hours of qualifying course work. This includes two core (required) courses, three elective courses and a one-credit hour culminating experience that includes a research paper.

Required Certificate Core Courses

1. Economic Justice. (3) Students must select one of the following courses:
   
   JUS 550 Gender, Race and Economic Justice  
   JUS 660 Globalization and Socio-Economic Justice

2. Conducting Research in Communities. (3) Students must select one of the following courses:
   
   JUS 633 Community Research  
   JHR 525 Action Research

3. Elective Courses. (9)Students must select three electives on socio-economic justice from among the following courses:
   
   ASB 591 Environmental Justice and the City  
   ASB/POL 447 Citizenship, Nationalism and Identity*  
   JHR 510 Problem Based Seminar: Oaxaca; Migration, Gender and Human Rights  
   JHS 511 Community Embedded Seminar: Contemporary Slavery and Trafficking  
   JHR 525 Action Research JUS 405 Economic Justice*  
   JUS 415 Gender and International Development*  
   JUS 494 Advanced Topics in Global Justice*  
   JUS 591 Family Work and Justice  
   JUS 550 Gender, Race and Economic Justice  
   JUS 555 Migration, Immigration and Justice  
   JUS 591 Globalization and Livable Cities  
   JUS 591/691 Difference, Citizenship and Globalization  
   JUS 591/691 Governance, Citizenship and Justice  
   JUS 660 Globalization and Socio-Economic Justice  
   JUS 633 Community Research  
   POS 598 Urban Politics and Policy  
   POS 598 North-South Relations  
   SOS 514 Human Dimensions of Sustainability  
   SWG 531 Social Policy and Services  
   SWG 533 Diversity and Oppression  
   SWG 591 Border Family and Community Asset Building Policies  
   WST 598 Gender and Globalization in Latin America

   *Note: Only one 400-level courses listed above is allowed. Must have prior approval from the director of the certificate in economic justice program for any 400-level course.

4. Culminating Experience. (1) This capstone writing/research paper synthesizes the student’s disciplinary interests with their implications for socio-economic justice. Students register for JUS 590 Readings and Conference.

**Admission Requirements:** All applicants must submit the Graduate College online application. Graduate students who are regularly admitted to a graduate degree program at ASU or students who have completed a bachelor’s degree at a regionally accredited U.S. institution or equivalent are welcome to apply for the socio-economic justice graduate certificate program. To be considered for admission, students should submit the following documents to the justice and social inquiry program office:
5. A statement of purpose for pursuing the certificate.
6. A writing sample demonstrating excellent writing and analytical skills.
7. Students who are already enrolled in an ASU graduate program must submit an unofficial copy of their graduate transcripts and be in good standing with the ASU Graduate College; students who are not regularly admitted to an ASU graduate program must submit an official transcript showing the completion of a bachelor's degree in any academic field with a junior/senior GPA of at least 3.00 or equivalent.
8. At least two letters of recommendation.
9. Applicants must meet the Graduate College criteria for admission to a graduate certificate program at ASU.

Contact Information:
Liberal Arts and Sciences, College of School of Social Transformation
http://justice.clas.asu.edu/graduate
graduate.justice@asu.edu
WILSN 217
480/965-6008

Sociology, MA (LASOCMA)
Online Degree Search Title: Sociology (MA)

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.

Degree Requirements: 32 credit hours and a Thesis, or 32 credit hours and an Oral Comprehensive Exam (MIP)

The M.A. in sociology program includes:
1. A 10-credit-hour core curriculum.
2. Three credit hours of theory (SOC 585).
3. Six credit hours of research methods and statistics (SOC 500 and 505).
4. One credit hour of sociology as a profession (SOC 503).
5. Six credit hours earned through a thesis (SOC 599).
6. 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 Information:
Liberal Arts and Sciences, College of School of Social and Family Dynamics
http://ssfd.clas.asu.edu/
ssfd@asu.edu
SS 144
480/965-6978
Sociology, PHD (LASOCPHD)

Online Degree Search Title: Sociology (PhD)

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.

Degree Requirements: 84 credit hours, a Dissertation and a Written Comprehensive Exam

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. All applications are due January 15.

Contact Information:
Liberal Arts and Sciences, College of
School of Social and Family Dynamics
http://ssfd.clas.asu.edu/
ssfd@asu.edu
SS 144
480/965-6978

Spanish, MA (LASPANMA)

Online Degree Search Title: Spanish (MA)

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.

Degree Requirements: 30 credit hours, a Thesis and a Written Comprehensive Exam

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. Thesis: all candidates must write a thesis.

**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.

**Contact Information:**
Liberal Arts and Sciences, College of
School of International Letters and Cultures
http://silc.asu.edu/graduate
silc@asu.edu
LL 440
480/965-6281

**Spanish, Ph.D. (LASPANPHD)**
Online Degree Search Title: Spanish (PhD)

**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 and culture studies.

**Degree Requirements:** 84 credit hours, a Dissertation, a Written Comprehensive Exam, an Oral Comprehensive Exam and two Foreign Language Exams

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 submit the Graduate College online application and fulfill the general requirements of the Graduate College concerning admission. 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 chapter of the M.A. thesis. 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 Information:**
Liberal Arts and Sciences, College of
School of International Letters and Cultures
Speech and Hearing Science, PHD (LAHEARPHD)

Online Degree Search Title: Speech and Hearing Science (PhD)

Program Description: The Ph.D. in speech and hearing science is designed to prepare scholars for careers of basic and applied research in educational, industrial or healthcare delivery environments. The student pursues a program with the unifying theme of human communication and its disorders.

Degree Requirements: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam.

After a core curriculum, which may include aspects of neuroscience, methodology or speech and hearing science, the student completes a program of study under the guidance of the program committee. As part of the Ph.D. program, a programmatic research experience prepares the student for basic or applied research leading to the dissertation.

Admission Requirements: Applicants typically have completed a master’s degree or equivalent in speech and hearing science, psychology, linguistics or a related discipline. Applicants with a bachelor's degree, strong research interests and a strong academic record are also considered.

Applicants must submit the following evidence for admission review:

1. Application for admission to the Graduate College and official transcripts of undergraduate and graduate study.
2. GRE scores, including the writing score, taken within the last five years.
3. Professional references from three individuals who are familiar with the applicant's academic record.

Contact Information:
Liberal Arts and Sciences, College of
Department of Speech and Hearing Science
http://shs.asu.edu/
shsgrad@asu.edu
COOR 2211
480/965-2374

Statistics, PHD (LASTPPHD)

Online Degree Search Title: Statistics (PhD)

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 Schools 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.

Degree Requirements: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

This program includes:

1. Fifteen credit hours of core course work (mathematical statistics, probability, STP 526, STP 527, STP 530 or IEE 578, STP 531 or IEE 572).
2. Forty-five credit hours of elective statistics or related area courses approved by the student's supervisory committee.

3. Twelve credit hours of research (792).

4. Twelve credit hours of dissertation (799).

Students must pass:

1. One qualifier examination and course work in analysis. See the school Web site for examination information.

2. A written comprehensive examination.

3. A dissertation prospectus 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, official transcripts, three letters of recommendation, a statement of education and career goals, and the general GRE scores.

Minimum background for consideration of admission to the Ph.D. program in statistics includes:

1. A bachelor's degree in statistics, mathematics or a closely related area with a 3.00 GPA (4.00 scale).

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.

**Contact Information:**
Liberal Arts and Sciences, College of
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 as a Second Language, MTE Speake (LAENGMTESL)**
Online Degree Search Title: Teaching English to Speakers of Other Languages (MTESOL)

**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. The focus of the program is on theories and methods of language teaching and the aspects of linguistics that teachers need for effective classroom performance.

**Degree Requirements:** 30 credit hours, an Applied Project and a Foreign Language Exam

Approved graduate course work must include:

1. LIN 500 Research Methods. LIN 510 Linguistics.

2. LIN 520 Second-Language Acquisition Theories.

3. LIN 521 Methods of Teaching English to Speakers of Other Languages.


5. An internship is recommended if a student has no teaching experience.

**Foreign Language Requirement:** A foreign language is required and must be completed during the program. Applied Project: A three-hour Applied Project (LIN 593), which is overseen by a director, chosen from the English department linguistics/TESOL faculty.
**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.

The Graduate College requires a grade point average of "B" (3.00) or better in the last two years of work leading to the bachelor's degree, and the recommendation of the department or the academic unit in which the student plans to study. International students must submit a TOEFL score of at least 250 computer-based, 100 Internet-based, or an IELTS score of 6.5 or above before admission is considered. Applicants apply online at http://www.asu.edu/graduate/admissions. The deadline is January 15. The following supporting documents are required and can be uploaded during the online application process:

1. Three letters of recommendation.
2. Statement of purpose.
4. TOEFL scores.

**Contact Information:**
Liberal Arts and Sciences, College of
Department of English
http://english.clas.asu.edu/gradstudies-mtesol
enggrad@asu.edu
LL 543B
480/965-3194

**Transportation Systems (certificate), CERT (GCTRANSCE)**
Online Degree Search Title: Transportation Systems (Grad Certificate)

**Program Description:** Transportation has emerged as one of the highest priority issues for policy makers, employers and citizens. The transportation systems certificate program enhances the education of current and future transportation professionals to respond to this challenging environment. It builds upon existing programs in five disciplines, offered in five colleges and two campuses in the ASU system. The program approaches the subject from an integrated systems perspective. It exposes students to a range of transportation alternatives and the interrelationships among transportation, economic development, land use, energy and the environment.

The certificate program offers current ASU graduate students and transportation professionals the opportunity to pursue a wide range of transportation-related issues from a multimodal and interdisciplinary perspective. The certificate is intended to be either a specialization within an existing master's degree or a stand-alone, 15-credit-hour, nondegree program.

**Degree Requirements:** 15 Credit hours including a Capstone (PUP 531)

This graduate certificate requires: a proseminar class (three hours), three elective courses from an approved list of transportation-related courses (including at least one from a field outside the student's major) and a capstone research paper that explores a transportation problem from a multidisciplinary perspective (three hours). Students are strongly encouraged to include, as one of the three elective courses, a course in methods or techniques applicable to
transportation systems planning. In developing a capstone paper, students are encouraged to work with transportation professionals in their area of interest to identify a topic that is of interest to the broader public.

All decisions related to program offerings and departmental participation are made in cooperation with the transportation systems certificate admissions and advisory committee, which includes a member from each participating department.

Admission Requirements: Admission to the transportation certificate program is the same for both new students and current degree-seeking students.

Application requirements are as follows.

Applicants must:

1. Complete the online application through the Graduate College.
2. Submit responses to two essay questions:
   a. What do you expect to gain from the transportation certificate?
   b. What types of courses within the certificate would be the most helpful in meeting your objective?
3. Provide official transcripts.
4. Provide a current resume.
5. Provide official Test of English as a Foreign Language (TOEFL) scores for international students. Information regarding English proficiency requirements can be found on the Graduate College Web site.

Questions regarding transcript requirements need to be directed to the Graduate College.

Applicants who wish to seek a graduate degree in any of the cooperating departments and who are not currently enrolled in ASU must complete the full graduate school application process as specified by the department of interest, in addition to an online application for the transportation certificate. Please see department guidelines for admission to a degree program. Please be aware that admission to a degree program and the transportation certificate program are independent of each other. Applicants interested in applying for the transportation certificate in addition to a degree program must also complete an admission essay for the certificate program that is independent from an admission essay for a degree program.

Admission to the program will be determined by the transportation systems certificate admissions and advisory committee, consisting of representatives from each of the participating programs.

Contact Information:
Liberal Arts and Sciences, College of
School of Geographical Sciences and Urban Planning
http://geoplan.asu.edu/certificates
geoplan@asu.edu
COOR 5673
480/965-7533

Urban and Environmental Planning, MU/EP (ARURBMUEP)
Online Degree Search Title: Urban & Environmental Planning (MUEP)

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.

**Degree Requirements:** 47 credit hours and a Thesis, or 47 credit hours and an Applied Project, or 47 credit hours including a Capstone Course (PUP 580)

The plan has the typical distribution as follows:

- Required core courses, including either the capstone studio, thesis or professional project (26).
- Specialization courses (12).
- Electives (9).

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 submit the Graduate College online application and 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 resume.

**Contact Information:**
Liberal Arts and Sciences, College of
School of Geographical Sciences and Urban Planning
http://geoplan.asu.edu/muep
geoplan@asu.edu
COOR 5673
480/965-7533

**New College of Interdisciplinary Arts & Sciences**
Communication Studies, MA (ASCOMSTMA)

Online Degree Search Title: Communication Studies (MA)

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.

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.

Degree Requirements: 36 credit hours and a Thesis, or 36 credit hours and a Written Comprehensive Exam, or 36 credit hours and an Applied Project.

The degree consists of these courses:

- CMN 502 Theory and Practice in Communication and Persuasion (3) or CMN 522 Argumentation and Advocacy (3)
- CMN 505 Methods in Applied Communication Research (3)
- 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 program.

Additional Requirements

CMN 502 or 522, 505, and 506 must be completed with a grade of "B" (3.0) or higher. In addition, the student must earn a cumulative GPA of 3.0 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 Communication Studies Program 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, non-academic 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 Information:**
Interdisciplinary Arts and Sciences, New College of
Division of Social and Behavioral Sciences - W
janis.lacey@asu.edu
FABN301G
602/543-6266

**Interdisciplinary Studies, MA (ASINTERMA)**
Online Degree Search Title: Interdisciplinary Studies (MA)

**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 comprises 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 educational goals. With approval from the director 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. Examples include plans to study philosophy, rhetoric and literature, women's studies, non-profit leadership, ethics and environment, media and ethnicity, urban studies or applied arts. The program concludes with a capstone experience requiring a written or applied project.
**Degree Requirements**: 30 credit hours including a Capstone Course (MAS 585)

**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 credit hours)

**Elective** (0-3 credit hours)

**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.

**Elective**

Students can select 3 credit hours of a graduate level elective in order to reach the required 30 credit hours for the degree program.

**Admission Requirements**: Admission is granted on a competitive basis. To be admitted to the M.A. in Interdisciplinary Studies, 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 if undergraduate GPA is below 3.0.
4. A personal statement.
5. Three letters of recommendation.
6. Writing Sample.
7. Resume.

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).

**Deadlines**

**Fall Semester**
- Priority: Feb. 15
- Final: June 1

**Spring Semester**
- Priority: Oct. 1
- Final: Dec. 1

**Contact Information**:

Interdisciplinary Arts & Sciences, New College of
Division of Humanities, Arts, and Cultural Studies
http://newcollege.asu.edu/programs/interdisciplinary_studies/
mais@asu.edu
FAB N 301F
6025436241

**Psychology, MS (ASPGSMS)**

Online Degree Search Title: Psychology (MS)
**Program Description:** The Master of Science (M.S.) in psychology program is a two-year research-oriented program most appropriate for students who plan to continue on to a doctoral program or pursue careers in the professional sector addressing real-world situations and solving real-world problems where research methods tools are essential. Students receive intensive training in advanced research methodology and statistical analysis, and are offered a wide variety of elective graduate seminar courses including:

- Abnormal psychology.
- Affective science.
- Behavior analysis.
- Cognitive psychology.
- Developmental psychology.
- Health psychology.
- Legal psychology.
- Psychophysiology.
- Social psychology.

Our students receive hands-on experience with experimental design, laboratory instrumentation, data collection and analysis, manuscript development, and grant proposal writing. We expect all students to participate in faculty-guided research, including the opportunity to present research at regional and national conferences, and participate as coauthors in published research reports and monographs. In addition, students will complete one of two possible capstone projects:

**Degree Requirements:** 31 credit hours and a Thesis, or 31 credit hours and an Applied Project

The two-year program requirements include:

- Training in advanced research methods and statistics (6 credit hours).
- Five elective courses in several areas of psychology (e.g., abnormal psychology, affective science, behavior analysis, cognitive psychology, developmental psychology, health psychology, legal psychology, psychophysiology, and social psychology) where the student will become familiar with theoretical analysis and the current state of the field (15 credit hours).
- A seminar for all newly admitted students, that will address professional issues such as locating and applying for external funding, ethical issues in research and practice, and participation in professional organizations. All faculty members will participate in the seminar in order to foster a sense of community (one credit hour).
- Independent research hours accrued in faculty laboratories or applied projects where students will receive hands-on experience in experimental design, laboratory instrumentation, data collection and analysis, and UGC Final Copy manuscript development. Independent research credits cannot substitute for elective courses (three or more credit hours).
- Completion during the second year of the program of either a thesis or an applied research project. This work will be approved and overseen by the three-member supervisory committee, as stipulated by Graduate College policy (six credit hours).

**Admission Requirements:** Applicants must meet Graduate College Admission requirements and submit the Graduate College online application. All applicants must submit the following:

1. Bachelor's degree in Psychology or a related field.
2. Minimum cumulative grade point average (GPA) of 3.0 on a 4.0 scale.
3. Completion of the GRE, with a recommended verbal plus quantitative score of 1,100.
4. Successful completion of undergraduate statistics and research methods courses.
5. Three letters of recommendation from faculty.

A personal statement no longer than three pages, double-spaced, must be submitted describing how you would be a good fit for our program, including your research interests and career plans. Your statement should specify the faculty member(s) with whom you are interested in working.

Contact Information:
Interdisciplinary Arts and Sciences, New College of
Division of Social and Behavioral Sciences - W
dawn.mcquiston@asu.edu
FAB 5121
602/543-6157

Social Justice and Human Rights, MA (ASJHRMA)

Online Degree Search Title: Social Justice and Human Rights (MA)

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 non-governmental organization (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 coursework 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.

Degree Requirements: 33 credit hours and a Thesis, 33 credit hours and an Applied Project

The program includes:

1. Core requirements. (21)
2. Career-oriented tracks. (6)
3. Electives. (6)

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 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.

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). 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

Contact Information:
Interdisciplinary Arts & Sciences, New College of
Division of Social and Behavioral Sciences - W
http://newcollege.asu.edu/programs/social_justice/
NewCollegeGrad@asu.edu
FAB 301H
602/543-6241

Nursing & Health Innovation, College of

Advanced Nursing Practice, DNP (NUANPDNP)
Online Degree Search Title: Advanced Nursing Practice - DNP

Program Description: The D.N.P. program is designed for master's prepared, advanced practice nurses. Courses are designed for clinical experts and are innovative, interesting and organized to provide you with expert colleagues and mentors across the U.S. who can challenge you to take your practice to a new level.

Degree Requirements: 84 credit hours and an Applied Project

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 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: 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. Completion of a master of science in nursing degree accredited by a nationally recognized and regionally accredited agency.

3. A current unencumbered license in the state where clinical practice will be conducted and/or an unencumbered Arizona license to practice as a registered nurse, and current certification as an advanced practice nurse.

4. Three letters of recommendation from individuals knowledgeable about the applicant's academic and nursing leadership potential and one self-evaluation submitted by the applicant.

5. An interview with a representative of the specialty area.

6. Completion of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS), if considered an international student.

Contact Information:
Nursing & Health Innovation, College of Nursing
http://nursingandhealth.asu.edu
gponursing@asu.edu
NHI 201F
602/496-0857

Advanced Nursing Practice (Adult Psychiatric Mental Health Nurse Practitioner), DNP (NUANPPMDNP)

Online Degree Search Title: Adult Psychiatric Mental Health Nurse Practitioner (DNP)

Program Description: Designed for nurses seeking to become an advanced practice nurse as an adult 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. 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.

Degree Requirements: 84 credit hours and an Applied Project.

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. This program includes 1170 practicum hours, exceeding the ANCC requirement.

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. 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. Completion of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS), if considered an international student.

Contact Information:
Nursing & Health Innovation, College of
Advanced Nursing Practice (Adult Nurse Practitioner), DNP (NUANPADDNP)

Online Degree Search Title: Adult Nurse Practitioner (DNP)

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. 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.

Degree Requirements: 84 credit hours and an Applied Project

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. This program includes 1170 practicum hours, exceeding the ANCC requirement.

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 letters of recommendation from individuals knowledgeable about the applicant’s academic and nursing leadership potential along with one self-evaluation submitted by the applicant.

Contact Information:
Nursing & Health Innovation, College of
http://nursingandhealth.asu.edu/
gponursing@asu.edu
NHI 201F
602/496-0857

Advanced Nursing Practice (Child/Family Psychiatric Mental Health Nurse Practitioner), DNP (NUANPCFDNP)

Online Degree Search Title: Child/Family Psychiatric Mental Health Nurse Practitioner - DNP

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. 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.
**Degree Requirements:** 84 credit hours and an Applied Project

The American Nurses Credentialing Center (ANCC) has recommended a minimum of 1,000 post-baccalaureate practicum hours for all students completing a DNP. This program includes 1170 practicum hours, exceeding the ANCC requirement.

**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. 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 letters of recommendations from individuals knowledgeable about the applicant's academic and nursing leadership potential and one self-evaluation submitted by the applicant.
6. An interview with a representative of the specialty area.
7. Completion of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS), if considered an international student.

**Contact Information:**
Nursing & Health Innovation, College of
http://nursingandhealth.asu.edu/
gponursing@asu.edu
NHI 472
602/496-0869

**Advanced Nursing Practice (Family Nurse Practitioner), DNP (NUANPFNDNP)**

**Online Degree Search Title:** Family Nurse Practitioner - DNP

**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. 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.

**Degree Requirements:** 84 credit hours and an Applied Project

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. This program includes 1170 practicum hours, exceeding the ANCC requirement.

**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. 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 letters of recommendation from individuals knowledgeable about the applicant’s academic and nursing leadership potential and one self-evaluation submitted by the applicant.

6. An interview with a representative of the specialty area.

7. Completion of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS), if considered an international student.

Contact Information:
Nursing & Health Innovation, College of
http://nursingandhealth.asu.edu
gponursing@asu.edu
NHI 201F
602/496-0857

Advanced Nursing Practice (Geriatric Nurse Practitioner), DNP (NUGPNPDNP)
Online Degree Search Title: Advanced Nursing Practice (Geriatric Nurse Practitioner)( DNP)

Program Description: The program is designed for nurses seeking to become an advanced practice nurse as a gerontological/geriatric nurse practitioner. Graduate courses in application of theory to advanced practice, application of evidence to advanced practice, advanced pathophysiology, advanced health assessment, pharmacology and advanced practice nursing roles provide a foundation for this specialty.

A major focus of this program is acquisition of advanced knowledge and skills for primary care, case management, screening and health promotion of older adults in a variety of settings, including private practice, ambulatory clinics, acute care, long-term care facilities and the patient’s home.

Degree Requirements: 84 credit hours and an Applied Project.

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. This program includes 1170 practicum hours, exceeding the ANCC requirement.

Admission Requirements: 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. 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 only the analytical writing section of the GRE.

5. Three letters of recommendation from individuals knowledgeable about the applicant’s academic and nursing leadership potential and one self-evaluation submitted by the applicant.

6. An interview with a representative of the specialty area.

7. Completion of the English language proficiency test per graduate college requirements and all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS), if considered an international student.

Contact Information:
Nursing & Health Innovation, College of
http://nursingandhealth.asu.edu
gponursing@asu.edu
NHI 201F
602/496-0857
Advanced Nursing Practice (Neonatal Nurse Practitioner), DNP (NUANPNDNP)

Online Degree Search Title: Neonatal Nurse Practitioner - DNP

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. Focused clinical experiences are arranged with preceptors and administrators in the student's local health care setting. Rural health and experiences with disadvantaged and multicultural populations are encouraged.

Degree Requirements: Program requires the following: 84 credit hours and an Applied Project

The American Nurses Credentialing Center (ANCC) has recommended a minimum of 1,000 post-baccalaureate practicum hours for all students completing a DNP. This program includes 1170 practicum hours, exceeding the ANCC requirement.

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. 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 letters of recommendation 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. Completion of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS), if considered an international student.

Contact Information:
Nursing & Health Innovation, College of
http://nursingandhealth.asu.edu
gponald@asu.edu
NHI 201F
602/496-0857

Advanced Nursing Practice (Pediatric Nurse Practitioner), DNP (NUANPPDNP)

Online Degree Search Title: Pediatric Nurse Practitioner - DNP

Program Description: Designed for nurses seeking to become an advanced practice nurse as a pediatric 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 pediatric nurse practitioners. Advanced pediatric 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. 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.

Degree Requirements: 84 credit hours and an Applied Project
The American Nurses Credentialing Center (ANCC) has recommended a minimum of 1,000 post-baccalaureate practicum hours for all students completing a DNP. This program includes 1170 practicum hours, exceeding the ANCC requirement.

**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. 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 letters of recommendation 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. Completion of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS), if considered an international student.

**Contact Information:**
Nursing & Health Innovation, College of
http://nursingandhealth.asu.edu
gponursing@asu.edu
NHI 201F
602/496-0857

**Advanced Nursing Practice (Women’s Health Nurse Practitioner), DNP (NUANPWHDDNP)**

Online Degree Search Title: Women’s Health Nurse Practitioner - DNP

**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 health care 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.

**Degree Requirements:** 84 credit hours and an Applied Project

The American Nurses Credentialing Center (ANCC) has recommended a minimum of 1,000 post-baccalaureate practicum hours for all students completing a DNP. This program includes 1170 practicum hours, exceeding the ANCC requirement.

**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. 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 letters of recommendation from individuals knowledgeable about the applicant’s academic and nursing leadership potential, along with one self-evaluation submitted by the applicant.

6. An interview with a representative of the specialty area.

7. Completion of all requirements for the Commission on Foreign Graduate Nursing Schools (CFGNS), if considered an international student.

Contact Information:
Nursing & Health Innovation, College of
http://nursingandhealth.asu.edu
gponursing@asu.edu
NHI 201F
602/496-0857

Child and Adolescent Mental Health Intervention Specialist (certificate), CERT (NUCAMHICE)
Online Degree Search Title: Child and Adolescent Mental Health Intervention Specialist (Grad 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.

Degree Requirements: 15 credit hours.

This 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. Applications to the program are due each year by March 1 for fall semester enrollment.

Contact Information:
Nursing & Health Innovation, College of
http://nursingandhealth.asu.edu
gponursing@asu.edu
NHI 472
602/496-0869

Child/Family Mental Health Nurse Practitioner (certificate), CERT (NUPMNUPRCE)
Online Degree Search Title: Child/Family Mental Health Nurse Practitioner (Grad 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.

Degree Requirements: 28 credit hours
This graduate certificate program (including 585 clinical hours) prepares 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. Graduate College online application.
2. Master of Science in nursing.
3. Official transcripts from all universities.
4. 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. Goal statement.
6. Three professional references.
7. Interview.

**Contact Information:**
Nursing & Health Innovation, College of
http://nursingandhealth.asu.edu
gponursing@asu.edu
NHI 201F
602/496-0857

**Clinical Research Management (certificate), CERT (NUHCGRGRC)**

**Online Degree Search Title:** Clinical Research Management (Grad Certificate)

**Program Description:** The graduate certificate in clinical research management 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 health care professionals. Health care professionals from fields outside of nursing may complete the curriculum to obtain a certificate in clinical research management, with completion of stated prerequisites. The clinical research management specialty takes a transdisciplinary approach in providing an education strong in the commercial and fiscal practices of clinical research, ethical and regulatory aspects of research, and overall operational leadership of clinical drug, biological and medical device trials. The program is designed to be flexible and conducive to the adult learner.

**Degree Requirements:** 15 credit hours including a Capstone course (HCR 564).

The clinical research management graduate certificate is offered online with an initial three- or four-day immersion/practicum program. A three credit hour capstone clinical research project is required and part-time study is available.

**Admission Requirements:** Students must submit a Graduate College online application and meet Graduate College admission requirements.
1. Must hold a bachelors degree from a regionally accredited institution and have a cumulative junior/senior undergraduate GPA of 3.00 or higher in the last two years of course work leading to the bachelor’s degree.

2. All applicants must have completed the following undergraduate three credit pre-requisite courses (or equivalent) with a grade of “C” (2.00) or better:

- Anatomy and physiology.
- Health care system overview.
- Health policy.
- Medical terminology.

**Contact Information:**
Nursing & Health Innovation, College of
http://nursingandhealth.asu.edu
gponursing@asu.edu
NHI 411
602/496-0935

**Clinical Research Management, MS (NUCRMMS)**
Online Degree Search Title: Clinical Research Management, Nursing (MS)

**Program Description:** The M.S. in clinical research management 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. Health care professionals from fields outside of nursing may complete the curriculum to obtain an M.S. in clinical research management, with completion of stated prerequisites.

The clinical research management specialty takes a transdisciplinary approach in providing an education strong in the commercial and fiscal practices of conducting clinical research, ethical and regulatory aspects of research, and overall operational leadership of clinical drug, biological and medical device trials. The program is designed to be flexible and conducive to the adult learner.

**Degree Requirements:** 33 credit hours including a Capstone (HCR 566)

The clinical research management 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 submit a Graduate College online application and be admitted to the ASU Graduate College. To be considered for this program, the applicant must have either of the following:

1. A bachelor's degree in nursing or related field.
2. A bachelor's degree with health care-related experience and completion of all prerequisite courses.
3. 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.
   - Health care system overview.
   - Medical terminology.

**Contact Information:**
Nursing & Health Innovation, College of
http://nursingandhealth.asu.edu
Community and Public Health Practice (certificate), CERT (NUCHPGRCH)

Online Degree Search Title: Community and Public Health Practice (Graduate 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.

Degree Requirements: 16 credit hours.

The graduate certificate in community and public health practice includes one to three credit hours of internship. Internship credit hours are based on previous documented community/public health experience. A minimum of one credit (45 clock hours) of internship is required for all students and three credits (135 clock hours) is required if no prior experience.

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. Completion of a baccalaureate degree in nursing (or related field) from an academic institution accredited by a nationally recognized and regionally accredited agency.
2. An undergraduate junior / senior GPA equal to 3.00, or a cumulative GPA equal to 3.00 (4.00=A) or higher for any baccalaureate or graduate degree attained.
3. A current unencumbered professional license in the state where the internship will be conducted and/or an unencumbered Arizona professional practice license (if necessary).
4. Three professional recommendations from individuals knowledgeable about the applicant's academic and leadership potential.
5. An interview with the program faculty.
6. If considered an international student, completion of the English language proficiency test per Graduate College requirements.

Applications to the program are due each year by March 1 for fall semester enrollment.

Contact Information:
Nursing & Health Innovation, College of
http://nursingandhealth.asu.edu
gponursing@asu.edu
NHI 201E
602/496-0703

Evidence-Based Practice Nursing Science (certificate), CERT (NUEVIDNSCE)

Online Degree Search Title: Evidence-Based Practice Nursing Science (Grad Certificate)

Program Description: The evidence-based practice online graduate certificate program designed to prepare nurse clinicians, educators and other healthcare professionals as experts in evidence-based practice (EBP).

Degree Requirements: 17 credit hours.

This 18-month 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 an orientation and the final visit is an immersion.

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 supporting the applicant's enrollment.
3. Submit official transcripts from a master's program.
4. Submit a curriculum vitae or résumé.

Admission is granted once a year and classes begin in January. Application deadline is November 15.

**Contact Information:**
Nursing & Health Innovation, College of
http://nursingandhealth.asu.edu
gponursing@asu.edu
NHI 201E
602/496-0703

**Exercise and Wellness, MS (ECEXERMS)**
Online Degree Search Title: Exercise and Wellness (MS)

**Program Description:** This degree offers unique opportunities for those interested in becoming scholarly professionals and contributors to public health through the delivery of effective exercise and wellness programs to all segments of society. Professionals in education, counseling, commercial fitness and wellness, worksite or corporate health promotion and personal training/life coaching who are interested in an advanced training in health promotion, exercise and physical activity promotion, fitness and conditioning, or in exercise and chronic disease prevention should consider the program.

**Degree Requirements:** 30 credit hours and a Thesis, or 30 credit hours and a Written Comprehensive Exam

All students must focus their plan of study in one of two areas: health promotion and physical activity or fitness and conditioning.

The thesis is considered the final integrative experience of the degree. It involves conducting research that is guided by a recognized research paradigm (e.g., scientific, interpretive) producing a scholarly report of the process and results. The thesis option is a good choice for students who are interested in pursuing more advanced graduate study in the field. Thesis track:

1. Twelve credit hours of core course work (NTR 500 Research Methods, EXW 501 Research Statistics, EXW 536 Physiology of Physical Activity and Chronic Disease, EXW 542 Health Promotion Theory).
2. Twelve credit hours of elective courses in focus area.
3. Six credit hours of Thesis research.

The non-thesis option is an appropriate choice for those students who cannot devote full-time to their research endeavors and/or for students who are seeking to continue their education, advance their skill level as practitioners, or advance their current careers. Non-thesis track:

1. Twelve credit hours of core course work (NTR 500 Research Methods, EXW 501 Research Statistics, EXW 536 Physiology of Physical Activity and Chronic Disease, EXW 542 Health Promotion Theory).
2. Eighteen credit hours of elective courses in focus area.
3. Written comprehensive exam (representing core courses and focus area).

**Admission Requirements:** Applicants must submit the Graduate College online application.

In addition to meeting the Graduate College requirements, all applicants to program are required to submit scores from the GRE.

International applicants whose native language is not English must also submit a Test of English as a Foreign Language (TOEFL) score.
Admission to the master's degree program is based on a number of factors including: undergraduate grade point average (GPA), GRE scores, letters of recommendation and statement of career/research interests.

Applications are accepted for admission to the fall semester only, with first priority given to completed applications received by Jan. 15. Students who do not have undergraduate credit for the basic courses required for a bachelor's degree in exercise and wellness (human anatomy/physiology, human nutrition, exercise physiology, health behavior change, exercise testing and exercise prescription) can be admitted with course deficiencies. However, it is required that these deficiencies be taken prior to or within the first year of graduate study. Undergraduate courses taken as deficiencies are not considered part of the graduate plan of study.

Contact Information:
Nursing & Health Innovation, College of
http://nursingandhealth.asu.edu/programs/wellness/graduate/ms/index.htm
exerciseandwellness@asu.edu
EAW 109
480/727-1945

Family Nurse Practitioner (certificate), CERT (NUFMPGRCE)
Online Program Degree Search Title: Family Nurse Practitioner (Grad Certificate)

Program Description: This program is designed for nurses seeking to become an advanced practice nurse as a family 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. The course focus is on development of expertise in providing primary care to individuals of all ages within traditional, non-traditional and culturally diverse families. Focused clinical experiences are arranged with preceptors and administrators in the student's local health care setting. Rural health and experiences with disadvantaged and multi-cultural populations are encouraged.

Degree Requirements: 22 credit hours.
This graduate certificate program (including 585 clinical hours) prepares nurses with a master's degree to become family nurse practitioners.

Prerequisites required:

DNP 604 and 630 Human Pathophysiology (3)
DNP 605 and DNP 631 Advanced Health Assessment (3)
DNP 608 and 632 Pharmacology (3)
DNP 609 and 610 Advanced Practice Nursing Role (3)
Equivalent courses taken in master's degree program

Students will have an individual review of their transcripts and an individualized program of study designed. This may add up to one and a half years of additional study to complete this specialty (depends on how many of the prerequisite courses are completed in the master's degree).

Admission Requirements:

1. Online application to the Graduate College.
2. Goal statement.
3. Interview.
4. Master of Science in nursing.
5. Official transcripts from all applicable universities.
6. Three letters of recommendation
7. 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.

**Contact Information:**
Nursing & Health Innovation, College of
http://nursingandhealth.asu.edu/
gponursing@asu.edu
NHI 201E
602/496-0857

**Geriatric Nursing (certificate), CERT (NUGNCERT)**
Online Degree Search Title: Geriatric Nursing (Grad Certificate)

**Program Description:** This program will prepare practice leaders who are responsive to societal and cultural needs, and who are committed to providing and improving evidence-based practice in geriatric nursing. The target groups for this certificate are nurses, nursing faculty and nurse practitioners who want to increase their knowledge related to evidence-based practice geriatric care. Nursing faculty teaching in associate degree programs and baccalaureate programs are particularly targeted so that this knowledge area can be added to basic programs of nursing in Arizona.

**Degree Requirements:** 15 credit hours
The following five courses totaling 15 credit hours are required for this certificate:

- DNP 682 (3)
- DNP 686 (3)
- DNP 688 (3)
- HCR 571 (3)
- NUR 630 (3)

**Admission Requirements:**
1. Students must apply online to the Graduate College and meet all Graduate College admission requirements.
2. Applicants must have a bachelor’s degree in nursing from a regionally accredited institution in the U.S. or an equivalent degree.
3. Applicants must provide a resume, goal statement and three letters of recommendation.

Completed applications will be reviewed by program faculty and a face-to-face, online or telephone interview will be conducted with a program faculty member. Please note that only completed applications will be reviewed. Selected and approved students for the next admission cycle will then receive an acceptance letter.

**Contact Information:**
College of Nursing and Health Innovation
http://nursingandhealth.asu.edu/
eula.bradley@asu.edu
NHI2 201E
602/496-0703

**Healthcare Innovation, MHI (NUHCINNMHI)**
Online Degree Search Title: Healthcare Innovation (MHI)

**Program Description:** The M.H.I. is a 33-credit master’s degree program using a hybrid online format open to nursing and non-nursing students working and living locally or at a distance. This program is an initiative led by the ASU College of Nursing and Health Innovation.

**Degree Requirements:** 33 credit hours and an Applied Project
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 health care
leaders during two- to four-day immersion sessions. These sessions take place at the beginning of each semester and at mid-semester (except for the summer session). 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, voice-over lectures, discussion boards and other online learning tools.

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 university.
3. Three professional recommendations from individuals knowledgeable about the applicant's academic and leadership potential and one self-evaluation.
4. A completed application questionnaire.
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 July 1 or until the class is filled for fall semester enrollment.

Contact Information:
College of Nursing and Health Innovation
http://nursingandhealth.asu.edu/
gonursing@asu.edu
NHI 201E
602/496-0703

International Health for Healthcare Professionals (certificate), CERT (NUHCRGRCI)
Online Degree Search Title: International Health for Healthcare Professionals (Grad Certificate)

Program Description: The international health for health professionals graduate certificate prepares health care personnel to meet the global health challenges of the 21st century. Students receive comprehensive education in the promotion of holistic, culturally responsive evidence-based care within and outside the U.S. Course content includes the provision of care in the presence and absence of natural (e.g., earthquakes) and human made disasters (e.g., war), the spread of chronic and infectious diseases, economic and political issues, and other factors that pose substantial challenges to world health promotion and disease prevention.

Degree Requirements: 16 credit hours including a Capstone course (HCR 572)

This graduate certificate is offered as a part or full-time hybrid online distance program with two day visits to ASU Downtown Phoenix campus and a capstone immersion experience.

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 (4.00=A), or a cumulative GPA equal to 3.00 or higher for any bachelor 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 or internationally 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. Graduate College online application to the certificate program.
6. Email addresses of three professional references who can be contacted (do not include friends or relatives).
7. Fingerprint clearance or proof of application for U.S. citizens and applicants with permanent U.S. resident status.
8. Photocopy of 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.

Priority application due dates are March 1 for fall semester enrollment and August 1 for spring enrollment. Applications may be accepted after these dates as long as space remains available.

**Contact Information:**
Nursing & Health Innovation, College of
http://nursingandhealth.asu.edu/international
gponursing@asu.edu
NHI 201E
602/496-0703

**Nurse Education in Academic and Practice Settings (certificate), CERT (NUNURSEDCE)**
Online Degree Search Title: Nurse Education in Academic and Practice Settings (Grad 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.

**Degree Requirements:** 15 credit hours

This 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:** 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. Minimum of a bachelor's degree in nursing (or a related field) accredited by a nationally recognized and regionally accredited agency.
2. 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.
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 letters of recommendation from individuals knowledgeable about the applicant's academic and nursing leadership potential;
5. Statement of professional goals.
6. An interview with program faculty.
7. Completion of the English language proficiency test per graduate college requirements and of all requirements for the Commission on Graduates of Foreign Nursing Schools (CGFNS), if considered an international student.

Applications to the program are due each year by March 1 for fall semester enrollment.

**Contact Information:**
Nursing & Health Innovation, College of
http://nursingandhealth.asu.edu/
gponursing@asu.edu
Nursing (Community Health Advanced Practice Nursing), MS (NUCHNDTMS)

Online Degree Search Title: Community Health Nursing (MS)

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.

Degree Requirements: 45 credit hours and a Thesis, or 45 credit hours 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: 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/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 conducted 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 letters of recommendation from individuals knowledgeable about the applicant’s academic and nursing leadership potential along with one self-evaluation submitted by the applicant.
6. An interview with a representative of the specialty area.
7. 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 Information:
Nursing & Health Innovation, College of
http://nursingandhealth.asu.edu/
gponursing@asu.edu
NHI 201E
602/496-0703

Nursing Education, MS (NUNURSEDMS)

Online Degree Search Title: Nursing Education (MS)

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.
Degree Requirements: 38 credit hours and a Thesis, or 38 credit hours and an Applied Project

This degree program culminates 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:** 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. Completion of a baccalaureate degree in nursing at an academic institution accredited by a nationally recognized and regionally accredited agency.
2. 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.
3. Current unencumbered license in the state where teaching practicum will be conducted and/or an unencumbered Arizona license to practice as a registered nurse to enroll in nursing practicum courses.
4. Résumé or curriculum vitae.
5. Application questionnaire and self-assessment form.
6. Three letters of recommendations from individuals knowledgeable about the applicant's academic potential.
8. 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 Information:**
Nursing & Health Innovation, College of
http://nursingandhealth.asu.edu/
gponursing@asu.edu
NHI 201E
602/496-0703

**Nursing and Healthcare Innovation, PHD (NUNHIPHD)**

Online Degree Search Title: Nursing and Healthcare Innovation (PHD)

**Program Description:** The College of Nursing and Health Innovation continues to offer this program in both traditional on-site delivery format and innovative synchronous on-line delivery, 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.

**Degree Requirements:** 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

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 in a minimum of nine 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. Students may choose from five substantive areas:

1. Healthy outcomes in aging.
2. Health outcomes in children, teens and families.
3. Education.
4. Health care innovation.
5. World health promotion and disease prevention.

The program may incorporate courses from other disciplines to further refine substantive areas of study. 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 by February 15. 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 Information:
Nursing & Health Innovation, College of Nursing
http://nursingandhealth.asu.edu
phdnursing@asu.edu
CONHI
602/496-0930

Nutrition, MS (ECHNUTMS)
Online Degree Search Title: Nutrition (MS)

Program Description: The M.S. program in human nutrition at Arizona State University 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 in order to meet the requirements to become a registered dietitian 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.

Degree Requirements: 30 credit hours and a Thesis

The plan of study must contain approved graduate-level work and a thesis. The following courses are required:

1. Research methods, NTR 500 and NTR 501. (6)
2. Statistics; three to 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 (six credit hours from NTR 521/523/525/527/529/598). 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.
4. Thesis. (6)

Admission Requirements: Applicants must submit a Graduate College online application. The following are prerequisites for admission into the program:

1. General nutrition for majors (such as NTR 241 at ASU).
2. Microbiology with lab (such as MIC 205 and 206 at ASU).
3. Anatomy and physiology I and II with labs (such as BIO 201 and 202 at ASU).

Academic Catalog Archive 2010-2011 431
4. General chemistry I and II with labs (such as CHM 113 and 116 at ASU).
5. Organic chemistry with lab (one semester only is required, such as CHM 231 and 235 lab at ASU).
6. Biochemistry (one semester only is required, such as BCH 361 and 367 lab at ASU).
7. Statistics (any statistics course).

**Contact Information:**
Nursing & Health Innovation, College of
http://nursingandhealth.asu.edu/nutrition/
nutrition@asu.edu
HSC 1386
480/727-1728

**Nutrition (Dietetics), MS (ECNTRDMS)**
**Online Degree Search Title:** Nutrition (Dietetics) MS

**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.

**Degree Requirements:** 30 credit hours, an Applied Project and including a Capstone Course (NTR 593)

1. Required courses. (9)
2. Required concentration courses. (6)
3. Elective courses. (9)
4. Applied project. (6)

**Admission Requirements:** Prospective students must apply online to the Graduate College and applicants must submit the following materials:

1. Three letters of recommendation, including at least one from an individual who has employed or supervised the applicant’s work.
2. A resume that summarizes the academic, volunteer and employment experiences of the applicant and credentialing as a registered dietitian.
3. A one to two page, typed, double-spaced, personal statement addressing the following: significant professional responsibilities you have held; your professional goals and reasons for desiring to enroll in this program; your strengths that will help you succeed in this program and in reaching your professional goals; and your personal research interests as specifically as possible.

Credentials submitted by applicants to the M.S. in dietetics 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:

1. One general nutrition course for majors (e.g., NTR 241 at ASU).
2. One microbiology course with laboratory component (e.g., MIC 205 and 206 at ASU).
3. Two anatomy and physiology courses with laboratory component (e.g., BIO 201 and 202 at ASU).
4. Two general chemistry courses with laboratory components (e.g., CHM 113 and 116 at ASU).
5. One organic chemistry course with laboratory component (e.g., CHM 231 and 235 at ASU).
6. One biochemistry course with laboratory component (e.g., BCH 361 and 367 at ASU).
7. 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.

Contact Information:
Nursing & Health Innovation, College of
http://aas.asu.edu/
nutrition@asu.edu
HSC 1403
480/727-1728

Physical Activity, Nutrition and Wellness, PHD (ECNUTRIPHD)

Online Degree Search Title: Physical Activity, Nutrition, and Wellness (PhD)

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. The program focuses on issues that contribute to health through the reduction of disease risk, quality of life promotion and enhancement of well being. While many healthy lifestyles are studied, the emphasis is on physically active living and sound nutrition. 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:

1. Physical activity/health promotion.

The program prepares research scholars, academic faculty 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 directed research internships, independent research experiences, seminars/colloquia and dissertation research.

Degree Requirements: 97 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

Requirements are distributed across five areas of study:
Previously awarded master's degree (30)
1. Research and statistics courses. (18)
2. Elective applied research experience or courses. (20)
3. Professional development courses. (5)
4. Concentration courses. (12)
5. Dissertation. (12)

The concentration courses have two focus areas:

1. Physical activity/health promotion.

Students are encouraged to take courses in both areas. At least one class (three credit hours) must be taken in each area. The concentration courses allow students to focus on an interest area (e.g., aging, stress reduction, diabetes, strength, worksite health promotion, physical activity public health, bioenergetics, weight management, etc.) within the Ph.D. program. The concentration courses are selected by the student in consultation with his or her academic mentor and supervisory committee. It is expected that none of the 12 credit hours in the concentration will be in a focused content area and that any research projects will reflect these interests. At least three but not more than nine credit hours in the concentration should be taken from a program or department outside the exercise and wellness or nutrition program.

**Admission Requirements:** Applicants must submit the Graduate College online application. In addition to meeting Graduate College requirements, applicants must have successfully received a master’s degree prior to admission to the Ph.D. program and it is preferable that they have completed a data-based research thesis. Applicants must include the following materials with their online application:

1. A letter of intent (indicating research /scholarly goals and designating the name of a potential mentor from a list of approved faculty mentors).
2. Statement of career goals.
3. GRE scores (verbal, quantitative and writing).
5. A professional résumé.
6. Three letters of recommendation.
8. Applicants whose native language is not English must submit a Test of English as a Foreign Language (TOEFL) score unless they meet the requirements for an exception.

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. 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.
Public Health, MPH (BAPHMPH)

Online Degree Search Title: Public Health (MPH)

Program Description: The M.P.H. is the recognized professional degree for leadership in public health. The interdisciplinary program combines acquisition of fundamental public health skills (biostatistics, epidemiology, environmental health, health administration, social/behavioral health) with the particular competencies relevant for service in urban areas, and the business skills needed for sustainable public health interventions. The program focuses on health promotion and disease prevention in urban communities, and especially in vulnerable populations. The program integrates mental health policy and perspectives across the curriculum. Students engage in community-based practice throughout the program. Graduates of the two-year program will be prepared to assume leadership positions in diverse spheres: for example, federal, state and local government; voluntary health organizations; and community-based primary care.

Degree Requirements: 51 credit hours, an Applied Project and including a Capstone (UPH 593)

The Master of Public Health program includes:

- Change Leadership. (14)
- Electives. (6)
- Evidence-based decision-making. (10)
- Practicum project. (3)
- Urban public health. (18)

Admission Requirements: Applications must be submitted online to the Graduate College and meet all Graduate College admissions requirements. All applicants must possess a bachelor's degree from an accredited college/university or international equivalent at the time they commence their graduate studies. A minimum undergraduate 3.00 GPA is required. Applicants from countries whose native language is other than English must meet the University's English proficiency requirements. Applicants must submit:

1. Transcripts from all colleges/universities attended.
2. M.P.H. online application.
3. Three letters of recommendation.
4. Two-page, typed, personal statement.
5. A GRE, MCAT, PCAT, or DAT test score; the GRE is preferred. (Applicants with a Ph.D., M.D., D.O., Pharm.D., or D.D.S. are not required to submit a test score.)

Contact Information:
Nursing & Health Innovation, College of
http://nursingandhealth.asu.edu/programs/wellness/graduate/iphd/index.htm
interdisciplinaryphd@asu.edu
EAW 109
480/727-1945

Regulatory Science and Health Safety, MS (NURSHSMS)

Online Degree Search Title: Regulatory Science and Health Safety (MS)

Program Description: The M.S. in regulatory science and health safety is designed to prepare students for careers in the field of regulatory affairs. The program will focus on safety, as a fundamental aspect of regulatory science, and on
leadership development. The M.S. in regulatory science and health safety uses a multidisciplinary approach to meet the unique needs of regulating bodies and the regulated industry. It encompasses coursework in clinical research, ethics, quality systems, quantitative methods and statistics, leadership and project management in the regulatory field. All M.S. in regulatory science and health safety core courses are offered as classroom-based courses. Students will develop skills that incorporate an evidence-based approach to decision-making, clinical research, regulations and the evaluation of the safety of health products including drugs, medical devices and nutritional products. They will also develop leadership and project management skills.

**Degree Requirements:** 39 credit hours including a Capstone (HCR 560).

This 39 credit hour program consists of:

- IEE 571 Quality Management (3)
- HCR 557 Quantitative Research and Design Methods for Clinical Research and Regulatory Science (3)
- HCR 558 Technical Writing for the Regulatory Professional (3)
- HCR 559 Internship for Regulatory Science (2)
- HCR 559 Internship for Regulatory Science (1)
- HCR 560 Regulatory Science Capstone (3)
- HCR 561 Responsible Conduct of Research (3)
- HCR 563 Clinical Research Management and Regulatory Affairs (3)
- HCR 565 Clinical Research Operations (3)
- HCR 568 Healthcare Project Management (3)
- HCR 569 Applied Principles of Data Management & Inferential Statistics in Healthcare Research (3)
- LAW 691 Topic: FDA Regulation (3)
- MHI 538 Innovation and the Individual (3)
- NTR 442 Advanced Food Development (3)

**Admission Requirements:** All applicants must submit the Graduate College online application and meet Graduate College admission standards. A bachelor’s or graduate degree from a regionally accredited college or university of recognized standing in a related field is required, such as:

- A health care degree or background.
- Audiology.
- Biological or life sciences.
- Biostatistics or statistics.
- Computer science.
- Dentistry.
- Dietician.
- Engineering.
- Medicine or health sciences.
- Nursing.
- Optometry.
- Pharmacy.
- Physical sciences.
- Physical therapy.
- Podiatry.
- Public health.
- Speech pathology.
Public Programs, College of

Applied Ethics and the Professions (Leadership, Management, and Ethics), MA (LAAEPLMEMA)

Online Degree Search Title: Applied Ethics (Ldrshp, Mgmt, and Ethics) MA

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.

Degree Requirements: 30 credit hours, an Applied Project and including a Capstone Course (AEP 593)

Graduate course work is 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 Information:
Public Programs, College of
School of Public Affairs
http://spa.asu.edu/
spa@asu.edu
UCENT 400
602/496-0450

Assessment of Integrative Health Modalities (certificate), CERT (PPSWGGRCH)
Online Degree Search Title: Assessment of Integrative Health Modalities (Grad 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.

Degree Requirements: 15 credit hours
Course work is distributed among three core courses and two interdisciplinary electives. 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 Information:
Public Programs, College of
School of Social Work
http://ssw.asu.edu/certificates/index.html
social.work@asu.edu
UCENT 800
602/496-0800

Community Resources and Development, PHD (PPCRDPHD)
Online Degree Search Title: Community Res and Dev PhD

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:

1. Community studies.
2. Nonprofit leadership and management.
3. Parks and recreation management.
4. Tourism development and management.

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.

Degree Requirements: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam
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:

1. A statement of academic and professional goals in sufficient detail to indicate compatibility with the educational objectives and capabilities of the Ph.D. program.
2. GRE test scores.
3. A current and professional resume.
4. 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.
5. 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 in the 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 Information:
Public Programs, College of
School of Community Resources and Development
http://crdphd.asu.edu
scrd@asu.edu
UCENT 550
602/496-0550

Criminal Justice, MA (PPCRIMJMA)

Online Degree Search Title: Criminal Justice (MA)

Program Description: The M.A. in criminology and criminal justice is designed to provide criminal justice agency professionals with course work in criminology and the operation of the criminal justice system, and training in research methods and statistics. The degree program also provides students with advanced training in program planning and management, policy analysis and program evaluation.

Degree Requirements: 33 credit hours including a Capstone.

The program includes 12 credit hours of required core courses, a three-credit-hour capstone project and 15 credit hours of electives. Students can develop specializations in areas such as policing, corrections and management by combining required and elective course work. The planning of specializations is done jointly by the student and his or her faculty program committee.

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)

Capstone Course
CRJ 505 Theory and Practice in Criminal Justice (3)

Electives
Choose five in consultation with the faculty program committee (15)

Admission Requirements: Students must submit an online application for admission, an official transcript from every university or institution attended 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 recommendation.
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 those goals. The personal statement is submitted online.

The letters of recommendation should be sent to:

Arizona State University
Graduate College
Graduate Admissions
Admin. B 170 A
P.O. Box 871003
Tempe, AZ 85287-1003

Contact Information:
Public Programs, College of
School of Criminology and Criminal Justice
http://ccj.asu.edu/degree-programs/ma
sccj@asu.edu
UCENT
602/496-2365

Criminology and Criminal Justice, MS (PPCRJMS)
Online Degree Search Title: Criminology and Criminal Justice (MS)

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.

Degree Requirements: 30 credit hours and a Thesis

Required hours for this program 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)
Choose three in consultation with the supervisory committee (9)

Admission Requirements: Students must submit an online 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 personal statement is submitted online. The letters of recommendation should be sent to:

Arizona State University
Graduate College
Graduate Admissions
Admin B 170A
P.O. Box 871003
Tempe, AZ 85287-1003

Contact Information:
Public Programs, College of
School of Criminology and Criminal Justice
http://ccj.asu.edu/degree-programs/ms
sccj@asu.edu
UCENT 600
602/496-2365

Criminology and Criminal Justice, PHD (PPCRJPHD)

Online Degree Search Title: Criminology and Criminal Justice (PhD)

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.

Degree Requirements: 84 credit hours, a Dissertation, and a Written Comprehensive Exam, or 84 credit hours, a Dissertation, and a Written Comprehensive Exam.

The Ph.D. in criminology and criminal justice 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 JD 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 JD (30)

Admission Requirements: Students must submit an online 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 JD 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 personal statement is submitted online. The letters of recommendation should be sent to:

Arizona State University
Graduate College
Graduate Admission
Admin. B170A
P.O. Box 871003
Tempe, AZ 85287-1003

Contact Information:
Public Programs, College of
School of Criminology and Criminal Justice
http://ccj.asu.edu/degree-programs/phd
sccj@asu.edu
UCENT 600  
602/496-2365

**Latino Cultural Competency in Social Work (certificate), CERT (PPSWGGRCL)**  
Online Degree Search Title: Latino Cultural Competency in Social Work (Grad 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.

**Degree Requirements:** 15 credit hours

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 Information:**
Public Programs, College of  
School of Social Work  
http://ssw.asu.edu/portal/academic/certificates  
social.work@asu.edu
Nonprofit Leadership and Management (certificate), CERT (PPNONPROCE)

Online Degree Search Title: NonProfit Leadership and Management (Grad 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.

Degree Requirements: 15 credit hours

Three Required Courses (9)

- NLM 510 Foundations of Nonprofit Management
- NLM 520 Financial Management in Nonprofit Organizations
- NLM 540 Volunteer and Human Resources in Nonprofit Organizations

Two Elective Courses (6)

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 Information:
Public Programs, College of
School of Community Resources and Development
http://nonprofit.asu.edu
nonprofit@asu.edu
UCENT 500
602/496-0500

Nonprofit Studies, MNPS (PPNPSMNS)

Online Degree Search Title: Nonprofit Studies (MNpS)

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.

Degree Requirements: 33 credit hours including a Capstone Course (NLM 620)

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 online application 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 Information:
Public Programs, College of
School of Community Resources and Development
http://nonprofit.asu.edu
nonprofit@asu.edu
UCENT
602/496-0500

Public Administration, MPA (PPPADTMPA)
Online Degree Search Title: Public Administration (MPA) - Downtown Phoenix

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:


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.

Degree Requirements: 42 credit hours including a Capstone (PAF 509)

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. 400  
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, AZ 85287-1003

Contact Information:

Public Programs, College of  
School of Public Affairs  
http://spa.asu.edu/new/mpa/default.htm  
spa@asu.edu  
UCENT 400  
602/496-0450

Public Administration, PHD (PPUBADPHD)  
Online Degree Search Title: Public Administration (PhD)

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.

**Degree Requirements:** 96 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

Students must have a Master of Public Administration or Master of Public Policy degree. The program consists of a minimum of 96 credit hours of graduate work with 30 of the 96 hours being satisfied by the student's master’s degree. The remaining 66 hours are composed of 42 hours of graduate course work, 12 hours of dissertation, and 12 hours of research. Students are required to complete course work in two areas of specialization. These specializations are developed in consultation with the student’s Plan of Study Committee and can focus on a variety of topics related to public administration and public policy. Students may work with faculty from other departments, if appropriate, to complete their specializations. As an alternative, students may opt for the urbanism concentration.

**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, AZ 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. 400
Phoenix, AZ 85004-0687
Contact Information:
Public Programs, College of
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 (PPNONPRMPA)

Online Degree Search Title: Public Administration (NonProfit Administration) (MPA)

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.

Degree Requirements: 42 credit hours including a Capstone (PAF 509)

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. 400
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 CollegeAdmissions
Interdisciplinary Building, B-Wing, Room 170
P.O. Box 871003
Tempe, AZ 85287-1003

Contact Information:
Public Programs, College of
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 (PPPAFUMPA)

Online Degree Search Title: Public Administration (Urban Management) (MPA)

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:


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 (http://spa.asu.edu/new/mpa/mpa_msw.htm) with the School of Social Work.

Degree Requirements: 42 credit hours including a Capstone Course (PAF 509)

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 on a 4.00 scale) 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, 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. 400
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, AZ 85287-1003

Contact Information:
Public Programs, College of
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)
Online Degree Search Title: Public Administration (Urbanism) PHD

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.
3. 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.

**Degree Requirements:** 96 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

Students must have a Master of Public Administration or Master of Public Policy degree. The program consists of a minimum of 96 credit hours of graduate work with 30 of the 96 hours being satisfied by the student's master's degree. The remaining 66 hours are composed of 42 hours of graduate course work, 12 hours of dissertation, and 12 hours of research. Students are required to complete course work in two areas of specialization. These specializations are developed in consultation with the student's Plan of Study committee and can focus on a variety of topics related to public administration and public policy. Students may work with faculty from other departments, if appropriate, to complete their specializations.

**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:

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, AZ 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. 400
Phoenix, AZ 85004-0687
Contact Information:
Public Programs, College of
School of Public Affairs
http://spa.asu.edu/new/phd/default.htm
spa@asu.edu
UCENT 400
602/496-0450

Public Policy, MPP (PPUBPMPP)
Online Degree Search Title: Public Policy (MPP)

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.

Degree Requirements: 42 credit hours including a Capstone (PAF 509 or PAF 579)

Course work includes 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 on a 4.00 scale) 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 on a 4.00 scale) 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. 400
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 CollegeAdmissions
Interdisciplinary Building, B-Wing, Room 170
P.O. Box 871003
Tempe, AZ 85287-1003

Contact Information:
Public Programs, College of
School of Public Affairs
http://spa.asu.edu/new/mpp/default.htm
spa@asu.edu
UCENT 400
602/496-0450

Recreation and Tourism Studies, MS (PPRECDTMS)
Online Degree Search Title: Recreation and Tourism Studies (MS)

Program Description: The faculty in the School of Community Resources and Development and the faculty in the Department of Recreation and Tourism Management jointly offer a program leading to the M.S. in recreation and tourism studies. The M.S. program prepares students to analyze and understand critical topics and issues pertinent to the field of recreation, parks, and tourism planning, development and management.

Students choose between two academic options: the thesis or the professional option.

Degree Requirements: 30 credit hours and a Thesis, or 36 credit hours and a Practicum

Completion of the M.S. in recreation and tourism studies on the average requires two years of study. Students may select a thesis or professional option. The thesis option is a research-oriented degree and is recommended for students planning to continue graduate studies beyond the master's degree. The professional option is intended for students seeking additional knowledge and expertise relevant to professional career development. Advising and direction in both options are under the direct supervision of an assigned faculty member.

Program Requirements: Thesis Option
The thesis option consists of a minimum of 30 credit hours, including six hours of thesis (REC 599), which must be defended in an oral examination before a supervisory committee of at least three faculty members, one of whom resides in another department.

- REC 500 Research Methods (3)
- REC 502 Statistical and Data Analysis (3)
- REC 552 Critical Issues in Recreation and Tourism (3)
- REC 555 Social Scientific Perspectives in Recreation and Tourism (3)
- Advanced inquiry skills (3)
- Electives (9)
- Thesis (6)

Program Requirements: Professional Option

The professional option consists of 36 credit hours, including six hours of practicum (REC 580). A signed affiliation agreement is required to be on file with the graduate coordinator before registration. The purpose of the 300-hour practicum is to provide graduate students with in-depth, agency-based professional experiences. The student committee consists of two school faculty members and one community/agency professional. At the end of the practicum, the student is required to submit a written description and analysis of the project and to present the results to the committee.
REC 500 Research Methods (3)
REC 502 Statistical and Data Analysis (3)
REC 530 Recreation and Tourism Service Management (3)
REC 552 Critical Issues in Recreation and Tourism (3)
REC 555 Social Scientific Perspectives in Recreation and Tourism (3)
REC 580 Practicum (6)
Electives (15)

Admission Requirements: Students applying to the M.S. program must have achieved a GPA of 3.00 or the equivalent in the last two years of work leading to the bachelor's degree. Applicants should submit to the Graduate College by March 1 to be considered for fall admission:

1. An online Graduate College application.
2. Application fee.
3. All undergraduate transcripts.
4. GRE (or Miller's Analogy Test) scores.
5. A statement of professional and academic goals.
6. Three letters of recommendation.

Students should submit to the Graduate Program Coordinator by March 1:

1. A current resume.
2. A statement of professional and academic goals.
3. Three letters of recommendation.

Only complete application files are reviewed or considered for admission. Students without undergraduate academic work in the recreation/tourism disciplines are required to take six credit hours of deficiency course work in addition to the M.S. requirements. Deficiency course work may be taken in conjunction with M.S. classes.

Contact Information:
Public Programs, College of
School of Community Resources and Development
http://scrd.asu.edu
scrd@asu.edu
UCENT 550
602/496-0500

Social Work, MSW (PPSWDMSW)
Online Degree Search Title: Tucson / Downtown Phoenix - Social Work - Standard Program (MSW)

Program Description: The professional program leading to the M.S.W. prepares social workers for advanced direct practice, planning, administration and community practice or advanced generalist 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.

Degree Requirements: 45 credit hours and a Portfolio, or
45 credit hours and a Thesis, or
45 credit hours including a Capstone Course (SWG 621), or
60 credit hours and a Portfolio (MSW/MPA dual degree), or
60 credit hours and a Thesis (MSW/MPA dual degree), or
60 credit hours and an Applied Project, or
60 credit hours including a Capstone Course (SWG 621) (MSW/MPA dual degree)

Students begin the standard M.S.W. program in the fall and it may be completed within four semesters (full-time) or six semesters (part-time). It is a 60 credit hour program, including both classroom and field instruction. It is divided into a
foundation year (30 credit hours core curriculum) taken by all students and a concentration (30 credit hours). The foundation year includes basic courses in clinical practice, organizational and community change, social policy, human behavior, and research. Students are required to complete two internships (one in their foundation year and one in their concentration year. All students are required to complete a foundation field placement (480 hours) and a concentration field placement (480 hours) in a different setting. In the concentration year students select one of the following concentrations:

1. Advanced Direct Practice.
2. Advanced Generalist Practice.
3. Planning, Administration and Community Practice.

The advanced generalist concentration is not available in Tucson. Some of the required planning, administration and community practice courses are only available at the Downtown Phoenix campus. Students who select the advanced direct practice concentration also select one of the following three specializations:


All specializations may not be available in Tucson. Arizona State University requires a culminating experience for graduation in all professional master’s programs. All student in the advanced direct practice concentration must successfully complete a capstone course; all students in the planning, administration and community practice concentration must successfully complete a portfolio. All students in the advanced generalist concentration must successfully complete an applied project. Students who enter the MSW program with a bachelor’s degree in social work may be awarded advanced placement and be exempted from a maximum of 15 hours of coursework. More detailed information regarding required courses is courses is available on the school Web site.

**Admission Requirements:** 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. 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.
4. Three letters of reference. A combination of academic and professional references is desirable.

In addition, all applicants must apply to the Graduate College. Test scores from either the GRE or the Miller Analogies test are required only if the applicant's junior/senior GPA was below a 3.00 (on a 4.00 scale). 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 (CSWE) accredited school of social work.
3. Another undergraduate degree, with 30 credit hours in liberal arts courses at the undergraduate or graduate level.

All students are required to successfully complete a course in human biology before enrollment in the graduate program and a course in statistics either by Dec. 31 or before registering for SWG 519.

**Part-time Program**

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. Transfer work must have been completed within three years of the semester and year of admission to the M.S.W. program at ASU with a grade of "B" (3.00) or better.

Exemption and Waiver Examinations

The number of hours required to complete the Standard M.S.W. ranges from 45 to 60 credit hours. In addition to transferring in credit, admitted students may meet requirements of up to 15 hours of credit toward the degree by 1) exempting up to 15 hours of foundation course work without examination, or 2) successfully completing examinations in SWG 501, 502 or 519. Only students from B.S.W. programs accredited by the CSWE can be considered for exemptions.

Contact Information:
Public Programs, College of
School of Social Work
http://ssw.asu.edu/
social.work@asu.edu
UCENT 800
602/496-0800

Social Work, PHD (PPSW2PHD)
Online Degree Search Title: Downtown Phoenix - Social Work (PhD)

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.

Degree Requirements: 84 credit hours, a Dissertation and a Written Comprehensive Exam

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 Information:
Public Programs, College of
School of Social Work
http://ssw.asu.edu/
social.work@asu.edu
UCENT 800
602/496-0800

Social Work - Advanced Standing, MSW (PPASWMSW)
Online Degree Search Title: Downtown Phoenix - Social Work - Advanced Generalist (MSW)

Program Description: The professional program leading to the M.S.W. prepares social workers with the knowledge, skills and values to practice as Advanced Generalists. 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.

Degree Requirements: 37 credit hours and an Applied Project, or 39 credit hours and an Applied Project

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 remainder of the program can be completed within two semesters (full time) or four semesters (part time). Students also complete one internship and an applied project.

Summer Session Course Work
D SWG 598 ST: Advanced Standing Bridge Seminar (3)
D SWG 598 ST: Advanced Standing Bridge Seminar (3)

Advanced Generalist Course Work
SWG 598 Advanced Social Work Practice & Ethics (3)
SWG 610 Advanced Generalist SW Practice III (3)
SWG 614 Advanced Generalist SW Practice IV (3)
SWG 632 Social Policy/Services II (3)
SWG 645 Professional Experience III (3)
SWG 646 Professional Experience IV (3)
SWG 692 Research (3)
SWG 693 Applied Project (3)
Electives (6) must be from the approved list of electives

Admission Requirements: Applicants must apply to both the School of Social Work and the Graduate College. Advanced Standing Program applicants must have a B.S.W. degree from a Council on Social Work Education accredited program with at least a 3.00 GPA (on a 4.00 scale) in the last two years of work leading to the B.S.W. (junior/senior GPA). Applicants must have received B.S.W. no more than six years prior to the date of admission to the M.S.W. program. All applicants are required to have completed a course in human biology and a course in statistics prior to enrollment in the Advanced Standing Program. 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. A MSW advanced standing application.
3. A statement of educational and career goals.
4. A professional resume that includes volunteer and paid work experience.
5. 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.

In addition, all applicants must submit the following to the Graduate College:

1. Application for admission to the Graduate College.
2. Application fee.
3. An official transcript of all academic work completed or in progress.

Contact Information:
Public Programs, College of
School of Social Work
http://ssw.asu.edu
social_work@asu.edu
UCENT 800
602/496-0800

Social Work (Advanced Direct Practice), MSW (PPAPDTMSW)
Online Degree Search Title: Downtown Phoenix - Social Work - Advanced Direct Practice (MSW)

Program Description: The professional program leading to the M.S.W. program prepares social workers for advanced direct 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.

Degree Requirements: 36 credit hours and a Thesis, or 39 credit hours and a Thesis, or 39 credit hours including a Capstone Course (SWG 621)

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. The remainder of the program can be completed within two semesters (full time) or four semesters (part time). 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 capstone course.

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 approved by the Child Welfare Training Project

Admission Requirements: Applicants must apply to both the School of Social Work and the Graduate College. Advanced Standing Program applicants must have a B.S.W. from a Council on Social Work Education accredited program with at least a 3.00 GPA (on a 4.00 scale) in the last two years of work leading to the B.S.W. (junior/senior GPA). Applicants must have received their B.S.W. no more than six years prior to the date of admission to the M.S.W. program. All applicants are required to have completed a course in human biology and a course in statistics prior to enrollment in the Advanced Standing Program. 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 MSW advanced standing application.
3. A statement of educational and career goals.
4. A professional resume that includes volunteer and paid work experience.
5. 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.

In addition, all applicants must submit the following to the Graduate College:

1. Application for admission to the Graduate College.
2. Application fee.
3. An official transcript of all academic work completed or in progress.

Contact Information:
Public Programs, College of
School of Social Work
http://ssw.asu.edu/
social.work@asu.edu
UCENT 800
602/496-0800

Social Work (Planning, Administration and Community Practice), MSW (PPCPDTMSW)
Online Degree Search Title: Downtown Phoenix - Social Work - Adv Standing-Plan, Admin & Comm Practice (MSW)

Program Description: The professional program leading to the M.S.W. prepares social workers for 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. Some of the required courses are only available at the Downtown Phoenix campus.

Degree Requirements: 36 credit hours and a Portfolio, or 36 credit hours and a Thesis

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. The remainder of the program can be completed within two semesters (full time) or four semesters (part time). Students also complete one internship. The culminating experience is a portfolio or thesis.

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 apply to both the School of Social Work and the Graduate College. Advanced Standing Program applicants must have a B.S.W. from a Council on Social Work Education accredited program with at least a 3.00 GPA (on a 4.00 scale) in the last two years of work leading to the B.S.W. (junior/senior GPA). Applicants must have received their B.S.W. no more than six years prior to the date of admission to the M.S.W. program. All applicants are required to have completed a course in human biology and a course in statistics prior to enrollment in the Advanced Standing Program. 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. A 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. 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.

In addition, all applicants must submit the following to the Graduate College:

1. Application for admission to the Graduate College.
2. Application fee.
3. An official transcript of all academic work completed or in progress.

Contact Information:
Public Programs, College of
School of Social Work
http://ssw.asu.edu/
social.work@asu.edu
UCENT 800
602/496-0800

Trauma and Bereavement (certificate), CERT (HSCTBGRCT)
Online Degree Search Title: Trauma and Bereavement (Grad 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.

Degree Requirements: 18 credit hours including a Capstone Course (SWG 584/SWG 641/SWG 642/SWG 645/SWG 646/SWG 693)

The certificate requires:

1. Fifteen credit hours of graduate course work.
2. Three credit hours for an applied project.

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 two to four page, doubled-spaced, personal statement (guidelines are listed on the application).
5. Transcripts from all institutions granting you an undergraduate or graduate degree.

Contact Information:
Public Programs, College of
School of Social Work
http://ssw.asu.edu/portal/academic/certificates
social.work@asu.edu
UCENT 800
602/496-0800
Sustainability, School of

Sustainability, MA (SUSUSTMA)
Online Degree Search Title: Sustainability (MA)

Program Description: The M.A. 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 and 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.A. program is best suited to students inclined toward social sciences, humanities, planning or related fields.

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.A. students will be able to:

1. Understand the concepts and methods of environmental economics, sociology, anthropology, environmental politics, ethics, design and human geography relevant to the sustainability of environmental resources and social institutions.
2. Lead others in applying these concepts and methods to the development of sustainable institutions for water, land, air and urban management at the local and global level.
3. Apply appropriate metrics and indicators to evaluate the sustainability of environmental institutions, legal frameworks, property rights and culture.
4. Research particular problems in the sustainability of social institutions.

Degree Requirements: 33 credit hours and a Portfolio (MIP), or 33 credit hours and a Thesis, or 33 credit hours and an Applied Project

Each student will formulate a plan of study in consultation with their supervisory committee. The master's programs are divided into the following five areas:

1. Core courses.
2. Problem-focused seminars.
3. Applied workshops.
4. Required research (for the thesis option) or an applied project (for non-thesis option).
5. 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 GPA of 3.25 or higher. The Graduate College policies and procedures 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:

1. A 3.25 GPA in the last sixty credit hours of undergraduate work.
2. GRE scores.
3. Three letters of recommendation.
4. 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 Information:**
Sustainability, School of
http://schoolofsustainability.asu.edu/
schoolofsustainability@asu.edu
GIOSS 108
480/727-6963

**Sustainability, MS (SUSUSTMS)**
Online Degree Search Title: Sustainability (MS)

**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, economics, 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.

**Degree Requirements:** 33 credit hours and a Portfolio (MIP), or 33 credit hours and a Thesis, or 33 credit hours and an Applied Project

Each student will formulate a program of study in consultation with their supervisory committee. The master's programs are divided into the following five areas:

1. Core courses.
2. Problem-focused seminars.
3. Applied workshops.
4. Required research (for the thesis option)/Applied project (for non-thesis option).
5. 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 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:

1. A 3.25 GPA in the last sixty credit hours of undergraduate work.
2. GRE scores.
3. Three letters of recommendation.
4. 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 Information:**
Sustainability, School of
http://schoolofsustainability.asu.edu/
schoolofsustainability@asu.edu
GIOS 108
480/727-6963

**Sustainability, PHD (SUSUSTPHD)**
Online Degree Search Title: Sustainability (PhD)

**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.

**Degree Requirements:** 84 credit hours, a Dissertation and a Written Comprehensive Exam

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 five areas:

1. Core courses.
2. Problem-focused seminars.
3. Applied workshops.
4. Required research.
5. 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 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:

1. A 3.25 GPA in the last sixty credit hours of undergraduate work.
2. GRE scores.
3. Three letters of recommendation.
4. 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 Information:
Sustainability, School of
http://schoolofsustainability.asu.edu/
schoolofsustainability@asu.edu
GIOS 108
480/727-6963

Teachers College, Mary Lou Fulton

An Overview of Autism Spectrum Disorders (certificate), CERT (EDSPEGRCA)
Online Degree Search Title: An Overview of Autism Spectrum Disorders (Grad 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.

Degree Requirements: 15 credit hours

The autism spectrum disorders 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.

- 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 Information:
Teachers College, Mary Lou Fulton
http://teach.asu.edu/
educationadvising@asu.edu
EDB 302
602/543-6358
**Curriculum and Instruction (Accomplished Teaching), MA (EDACCTCMA)**

Online Degree Search Title: Curr & Inst (Accomplished Teaching) (MA)

**Program Description:** The concentration provides a focused body of course work and experiential opportunities aligned with personalized professional needs, interests and requirements for advancing within the teaching profession, including an option for participation in the National Board Teacher certification process. It also includes experience in the development of professional learning communities, inquiry and applied experiences designed to increase advanced professional knowledge, research and practice. The concentration enhances a developmental trajectory within a teacher’s professional growth on a continuum toward accomplished teaching and teacher leadership. A teacher completing this degree will have a foundation in teaching and leadership, and a choice of a customized concentration in- or a broader knowledge base across – varying disciplines related to education. This choice is deliberate and inherent in this concentration. The ultimate outcome is a highly competent and qualified teacher leader who has the knowledge and advanced skills to make a positive impact in the educational communities in which they serve.

Our goal is to produce more accomplished teachers. One way to both accomplish this goal and to recruit students is to promote the National Board Certification (NBC) process. This program espouses the principles and concepts of the NBC process and will tap into the pool of teachers interested in National Board Certification.

**Degree Requirements:** 30 credit hours and a Thesis, or 30 credit hours and an Applied Project

Courses for this program are divided as follows:

 Required Courses (9)

- EDA 534 Learned Centered Leadership
- DCI 611 Introduction to Professional Learning
- DCI 610 Introduction to Accomplished Teaching

 Elective Courses

- Thesis Option (12)
- Non-thesis option (15)

 Research/Action Course (3)

- DCI 510 or DCI 591 or COE 501

 Culminating Experience

- Thesis option: thesis (6)
- Non-thesis option: applied project (3)

**Admission Requirements:** All applicants must meet Graduate College admission standards and submit the Graduate College online application.

Potential applicants who hold a bachelor’s degree from a regionally accredited institution in a related field are eligible to apply to the program. Ideally, applicants will be teachers; however, people working in educational settings other than K-12 districts may apply to this program as well.

**Contact Information:**

Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
EDB 302
602/543-6358

**Curriculum and Instruction (Art Education), PHD (EDARTEDPHD)**

Online Degree Search Title: Art Education (PHD)

**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:

- Art education in art museums.

Academic Catalog Archive 2010-2011  468
• Developmental graphic stages of children.
• International issues in art education.
• Multicultural issues.
• Multiple methodologies in research.
• Qualitative research.
• Research on effective art instruction.
• Visual culture and virtual worlds.
• Visual culture studies.

**Degree Requirements:** 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

**Core Requirements (6)**

DCI 701 Curriculum Theory and Practice  
DCI 702 Interdisciplinary Research Seminar in Curriculum and Instruction Professional

**Inquiry and Analysis (15): 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)**

**Internships (6)**

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)**

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 (15): 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 Information:**
Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
EDB 301
602/543-6358

**Curriculum and Instruction (Bilingual Education), MA (EDBILINMA)**

**Online Degree Search Title:** Bilingual Education (MA)

**Program Description:** The M.A. in curriculum and instruction offers students opportunities to develop expertise in contemporary issues and pedagogical and research methods related to curriculum and instruction. Students also investigate applied and theoretical issues in their area of concentration. This degree may be designed as either a terminal degree or as preparation for doctoral work in curriculum and instruction. The 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 that may be used in the design and implementation of the culminating project. 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.

**Degree Requirements:** 30 credit hours and a Thesis, or 30 credit hours and a Written Comprehensive Exam, or 30 credit hours, an Applied Project and including a Capstone (DCI 593)

Each candidate will complete a culminating project under the direction of his or her advisor. Curriculum and instruction M.A. students are assigned a faculty advisor at the time of their admission. For students completing a thesis as their culminating project, the advisor will assist in selecting the graduate committee and serve as the chair. The graduate program committee must be formed prior to the student completing 12 hours of credit in the program.

**Admission Requirements:** The following are required:

1. Application to the Graduate College.
2. Transcripts.
4. Resume or curriculum vitae.
5. 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.

**Contact Information:**
Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
EDB 302
602/543-6358

**Curriculum and Instruction (Curriculum Studies), PHD (EDCURSTPHD)**

**Online Degree Search Title:** Curriculum Studies (PhD)

**Program Description:** The curriculum studies concentration area prepares advanced students to impact critically important education issues spanning a wide range of educational contexts. Curriculum studies is an interdisciplinary field within education, influenced by scholarship from the humanities, literary studies, sociology, visual and performance arts, history and cultural studies. We study how learners and teachers understand and experience curricula broadly defined to include experiences taking place both within schools and outside them in mass media, internet communication, popular culture and the everyday life spaces of public pedagogy.

**Degree Requirements:** 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

Core Course Requirements (6)
- DCI 701 Curriculum Theory and Practice
- DCI 702 Interdisciplinary Research Seminar in Curriculum and Instruction Professional

Inquiry and Analysis in approaches to education research (15) 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)
- 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.

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. Students are not required to seek out a mentor on their own.

**Contact Information:**
Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
EDB 302
602/543-6358

**Curriculum and Instruction (Early Childhood Education), MEd (TEECDMED)**

**Online Degree Search Title:** Early Childhood Education - Certification/Endorsement (MED)

**Program Description:** The M.Ed. in early childhood education is administered by the Mary Lou Fulton Teachers College 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.

**Degree Requirements:** 30 credit hours and an Applied Project

Each student is assigned a graduate advisor to design the plan of study. Students in this program will complete an applied project within their plan of study 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 Information:**
Teachers College, Mary Lou Fulton
http://teach.asu.edu/programs/graduate
educationadvising@asu.edu
FABS236
602/543-6358

**Curriculum and Instruction (Early Childhood Education), PHD (EDCHILDPHD)**

**Online Degree Search Title:** Early Childhood Education (PhD)
**Program Description:** Early childhood education focuses on the learning experiences in and out of school of young children birth through age eight. Our program prepares graduates for positions in a range of settings, including research universities, teacher preparation programs, government and policy organizations and ECE program administration. The faculty in this program have a wide range of backgrounds and research interests, including policy, play, cultural dimensions of child development, international/comparative perspectives, sociological and cultural constructions of early childhood, immigration and indigenous education. The Ph.D. concentration in early childhood education is located within the interdisciplinary Ph.D. in curriculum and instruction.

**Degree Requirements:** 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

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 courses that provide 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 Information:**
Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
EDB 302
602/543-6358
Curriculum and Instruction (Engineering Education), PHD (EDEGREDPHD)

Online Degree Search Title: Engineering Education (PhD)

Program Description: The concentration in engineering education within the Ph.D. in curriculum and instruction provides opportunities for interdisciplinary research in the teaching and learning of engineering, pre-K to college, by integrating research methods in learning theory, curriculum development, assessment, evaluation and education with a particular understanding of engineering content and practice in a variety of contexts. Program mentors for this concentration will hail from the Mary Lou Fulton Teachers College and the Ira A. Fulton Schools of Engineering. An engineering education committee drawn from these colleges will oversees administration of the interdisciplinary engineering education concentration.

The goals of the proposed concentration are to prepare students to critically analyze and conduct research in engineering education and to explore the art and science of learning engineering in pre-K to college. The concentration prepares students to take competitive positions in top-tier research institutions as exemplary scholars and teachers, and as leaders in engineering education in K-12 and higher-education settings in formal and informal learning contexts (e.g., school districts, schools, science centers, museums).

Degree Requirements: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

Similar to the other concentrations in the Ph.D. in curriculum and instruction, the engineering education concentration will comprise the following:

1. Curriculum and instruction core.
   - Six credit hours of interdisciplinary research seminars in curriculum and instruction and curriculum theory and practice).

2. Area of concentration (30 credit hours).
   - Fifteen credit hours of required engineering education core.
   - Fifteen credit hours pertaining to engineering education, engineering, technology and related fields of science education, mathematics education and educational technology.

3. Cognate study.
   - Twelve 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 from across the university's multiple disciplines.

4. Inquiry and analysis.
   - Fifteen credit hours of advanced research design and data analysis in qualitative and quantitative research methods.

5. Internships.
   - Six credit hours of research and teaching internships to broaden experience and preparation in the field of engineering education.

6. Dissertation and independent research (15 credit hours).
   - Three credit hours of independent research.
   - Twelve credit hours of dissertation research leading to the completion of an approved dissertation.

Admission Requirements: All applicants are required to submit the Graduate College online application, meet all Graduate College admission criteria, and take the general GRE; a subject-specific GRE is not required. Other requirements are as follows:

1. A minimum GPA of 3.00 (4.00 scale) for graduates of regionally accredited U.S. institutions. ASU's Graduate College is responsible for international grade point average interpretation.
2. Students whose native language is not English are required to achieve minimum English language proficiency as specified by the Graduate College.

3. Three letters of recommendation, using the format specified by Curriculum and Instruction. Letters of recommendation should address the applicant’s professional experiences and potential for doctoral study.

4. A statement of academic and career objectives and address the desire to pursue an engineering education concentration in the Ph.D. in curriculum and instruction (letter of Intent).

5. A curriculum vitae.

6. A writing sample.

Contact Information:
Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
EDB 302
602/543-6358

Curriculum and Instruction (English as a Second Language), MA (EDESLMA)
Online Degree Search Title: English as a Second Language - Tempe Campus (MA)

Program Description: The M.A. in curriculum and instruction offers students opportunities to develop expertise in contemporary issues and pedagogical and research methods related to curriculum and instruction. Students also investigate applied and theoretical issues in their area of concentration. This degree may be designed as either a terminal degree or as preparation for doctoral work in curriculum and instruction. The M.A. in curriculum and instruction with 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 culminating project. Note: This degree is not the same as the Master of Teaching English to Speakers of Other Languages (MTESOL) offered through the English department.

Degree Requirements: 30 credit hours and a Thesis, or 30 credit hours and a Written Comprehensive Exam, or 30 credit hours, an Applied Project and including a Capstone (DCI 593)

Each candidate will also complete a culminating project under the direction of his or her advisor. Curriculum and Instruction M.A. students are assigned a faculty advisor at the time of their admission. For students completing a thesis as their culminating project, the advisor will assist in selecting the graduate committee and serve as the chair. The graduate program committee must be formed prior to the student completing 12 hours of credit in the program.

Admission Requirements: The following are required:

1. Application to the Graduate College.
2. Transcripts.
4. Curriculum vitae (resume).
5. 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 Information:
Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
EDB 302  
602/543-6358

Curriculum and Instruction (English Education), PHD (EDENGLPHD)

Online Degree Search Title: English Education (PhD)

Program Description: The interdisciplinary Ph.D. in curriculum and instruction with a concentration in English education offers classes in both the Mary Lou Fulton Teachers College 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.

Degree Requirements: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

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. Note: With the approval of the student's advisory committee, specific classes may be counted as fulfilling more than one of these listed requirements as long as the student's total ASU classes taken after admission to the program come to at least 54 credit hours, without counting the master's degree.

Mandatory: Curriculum and Instruction Core Requirements (6)

- DCI 701 Curriculum Theory and Development
- DCI 702 Curriculum Theory and Practice

Mandatory: Three Internships (three credits hours each) of ENG 784, for a total of nine credits. 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)
• 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)

• 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 research) taken with your committee chair for 3 hours credit to prepare for the comprehensive exam and writing the dissertation proposal.

Mandatory: Dissertation: a minimum of 12 credit hours of ENG 799 (dissertation) leading to completion of an approved dissertation. 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 Information:
Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
EDB 301
602/543-6358

Curriculum and Instruction (Language and Literacy), MA (EDLANGMA)
Online Degree Search Title: Language and Literacy (MA)

Program Description: The M.A. in curriculum and instruction offers students opportunities to develop expertise in contemporary issues and pedagogical and research methods related to curriculum and instruction. Students also investigate applied and theoretical issues in their area of concentration. This degree may be designed as either a terminal degree or as preparation for doctoral work in curriculum and instruction. The M.A. 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 and literacy, teaching and research, such as
children's literature, content literacy, digital literacy and gender. Students also investigate applied and theoretical issues in language and literacy.

**Degree Requirements:** 30 credit hours and a Thesis, or 30 credit hours and a Written Comprehensive Exam, or 30 credit hours, an Applied Project and including a Capstone (DCI 593)

Each candidate will also complete a culminating project under the direction of his or her advisor. Curriculum and instruction M.A. students are assigned a faculty advisor at the time of their admission. For students completing a thesis as their culminating project, the advisor will assist in selecting the graduate committee and serve as the chair. The graduate program committee must be formed prior to the student completing 12 hours of credit in the program.

**Admission Requirements:** The following are required:

1. Application to the Graduate College.
2. Transcripts.
4. Curriculum vitae (resume).
5. 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 Information:**
Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
EDB 302
602/543-6358

**Curriculum and Instruction (Language and Literacy), PHD (EDLANGPHD)**

Online Degree Search Title: Language and Literacy (PhD)

**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.
The language and literacy Ph.D. concentration is designed to develop scholars in language and literacy education.

**Degree Requirements:** 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

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 course work: 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 Information:**
Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
EDB 302
602/543-6358

**Curriculum and Instruction (Mathematics Education), MA (EDMATHMA)**

Online Degree Search Title: Mathematics Education (MA)

**Program Description:** The M.A. in curriculum and instruction offers students opportunities to develop expertise in contemporary issues and pedagogical and research methods related to curriculum and instruction. Students also
investigate applied and theoretical issues in their area of concentration. This degree may be designed as either a
terminal degree or as preparation for doctoral work in curriculum and instruction. 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.

**Degree Requirements:** 30 credit hours and a Thesis, or 30 credit hours and a Written Comprehensive Exam, or 30 credit
hours, an Applied Project and including a Capstone (DCI 593)

Each candidate will also complete a culminating project under the direction of his or her advisor. Curriculum and
instruction M.A. students are assigned a faculty advisor at the time of their admission. For students completing a thesis
as their culminating project, the advisor will assist in selecting the graduate committee and serve as the chair. The
graduate program committee must be formed prior to the student completing 12 hours of credit in the program.

**Admission Requirements:** The following are required:

1. Application to the Graduate College.
2. Transcripts.
4. Curriculum vitae (resume).
5. 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 Information:**
Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
EDB 302
602/543-6358

**Curriculum and Instruction (Mathematics Education), PHD (EDMATHPHD)**

Online Degree Search Title: Mathematics Education (PhD) (Curriculum and Instruction - Grades K-12)

**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 Teachers
College and the School of Mathematical and Statistical Sciences in the College of Liberal Arts and Sciences.

**Degree Requirements:** 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive
Exam

The following six domains comprise the mathematics education Ph.D. program:

Mathematics Education Concentration (30)

- Twelve credit hours of the mathematics education seminar series.
- Eighteen credit hours pertaining to mathematics education, mathematics and statistics.

Inquiry and Analysis (15)

Advanced design and data analysis in quantitative and/or qualitative research methods.

Core Requirements (6)

Interdisciplinary research seminar in curriculum and instruction and curriculum theory and practice.
Cognate Study (12)

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)

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 Information:**

Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
EDB 302
602/543-6358

**Curriculum and Instruction (Physical Education), PHD (EDPHYEDPHD)**

Online Degree Search Title: Physical Education (PhD)

**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 pedagogy over the past four decades. Sports pedagogy is comprised of three areas:

1. Research on curriculum.
2. Research on teaching.

It involves the empirical study of teaching and learning processes in various physical activity settings. Physical activity settings can include school and community settings, as well as youth, interscholastic, collegiate or elite-level (e.g., Olympic) sport programs.

**Degree Requirements:** 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

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. 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 Information:**
Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
EDB 301
602/543-6358

**Curriculum and Instruction (Science Education), MA (EDSCIMA)**

Online Degree Search Title: Science Education (MA)

**Program Description:** The M.A. in Curriculum and Instruction offers students opportunities to develop expertise in contemporary issues and pedagogical and research methods related to Curriculum and Instruction. Students also investigate applied and theoretical issues in their area of concentration. This degree may be designed as either a terminal degree or as preparation for doctoral work in curriculum and instruction. The M.A. in curriculum and instruction with a concentration in science education 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.

**Degree Requirements:** 30 credit hours and a Thesis, or 30 credit hours and a Written Comprehensive Exam, or 30 credit hours, an Applied Project and including a Capstone (DCI 593)
Each candidate will also complete a culminating project under the direction of his or her advisor. Curriculum and Instruction M.A. students are assigned a faculty advisor at the time of their admission. For students completing a thesis as their culminating project, the advisor will assist in selecting the graduate committee and serve as the chair. The graduate program committee must be formed prior to the student completing 12 hours of credit in the program.

Admission Requirements: The following are required:

1. Application to the Graduate College.
2. Transcripts.
4. Curriculum vitae (resume).
5. 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 Information:
Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
EDB 302
602/543-6358

Curriculum and Instruction (Science Education), PHD (EDSCIPHD)
Online Degree Search Title: Science Education (PhD)

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 elementary, middle, high school science, and in higher education settings. Candidates may concentrate in the study of students' science thinking, the professional development of teachers, 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 Teachers College and from the departments and schools of chemistry and biochemistry, earth and space exploration, life sciences and physics. Students should have 30 content hours of science, a major in a science content area or plan to enroll in science courses during their graduate work.

Degree Requirements: 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

The Ph.D. in curriculum and instruction with a concentration in science education requires:

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. 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 Information:
Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
EDB 301
602/543-6358

Curriculum and Instruction (Special Education), PHD (EDSPECPHD)
Online Degree Search Title: Special Education (PhD)

Program Description: Graduates of this doctoral program receive an interdisciplinary Ph.D. in curriculum and instruction with an emphasis in special education. Students can expect a rigorous program providing ample opportunity to participate in course work that includes special education, applied linguistics and educational leadership as well as programs in trans-border studies and social justice. Faculty consists of professors with a wide rage of expertise including special education, educational anthropology, research and evaluation, Native American Indigenous studies, critical race theory, applied linguistics and English language learners. We seek applicants interested in researching the intersections of equity, special education and learning in schools using multiple methods. A faculty strong in research methodology offers courses as varied as hierarchical linear modeling and video ethnography as well as single subject design and advanced research design. Students apprentice as researchers in the Equity Alliance at ASU which offers multiple opportunities to design, collect, and publish research studies and enables students to develop expertise in research, professional learning, leadership for school-wide equity related to RTI and racial disproportionality in special education, and skills for leadership positions in higher education and state or local agencies.

Mentoring
Each student has a faculty advisor/mentor and a doctoral program/dissertation committee with faculty that assist in developing an individualized program based on the student's prior training and career goals. 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:

1. Produce research scholars who can add to the knowledge base underlying special education.
2. Provide experts in design, implementation, and evaluation of special education personnel preparation programs at the preservice and inservice levels.
3. Provide students with comprehensive training that meets professionally recognized standards for the preparation of leadership personnel in special education and a related discipline.
4. Provide students with the skills necessary to meet the research, teaching, and service activities associated with faculty positions at a full range of institutions of higher education or other professional roles.
**Degree Requirements:** 84 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam

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.
3. Inquiry foundations.
4. Core requirements in Policy, Leadership, and Curriculum.
5. Internships 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: Special Education Domain.** Our special education program requirement consists of 30 credit hours focusing on coursework pertaining to theoretical and conceptual issues in special education as well as research, policy, and practice issues that are applicable to the field of special education but may transcend specific disciplines.

**Domain 2: Interdisciplinary Domain.** 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: Research and Inquiry Domain.** Our research 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.
   - Graphical and exploratory data analysis.
   - Advanced qualitative analysis.

**Domain 4: Policy, Leadership, and Curriculum Domain.** The policy, leadership, and curriculum core requirement consists of at least six credit hours.

**Domain 5: Internship and Integrative/Professional Development Domain.** 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 Domain. 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:** A promising candidate must be committed to the field of special education, committed to enhance educational opportunities for culturally and linguistically diverse students, and provide an outstanding application portfolio and interview. Special attention is given to students who are most likely to enter the professoriate or pursue a leadership position in SEA or LEA. The following are required:

1. Application to the Graduate College.
2. Transcripts.
4. Curriculum vitae (resume).
5. Statement of research interests.
6. Two writing samples.
7. Two years of teaching experience or the equivalent.
8. GRE scores.
9. 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 Information:**
Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
EDB 302
602/543-6358

**Educational Administration and Supervision, EdD (EDSUPVEDD)**
Online Degree Search Title: Educational Administration & Supervision (EdD)

**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 certification 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.

**Degree Requirements:** 90 credit hours, a Dissertation and a Written Comprehensive Exam.

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 a preproposal/research prospectus including a review of literature at the end of the second year (this requirement satisfies the written comprehensive examination).
3. Successful completion of a dissertation research proposal with committee approval at the end of the second year/beginning of the third year.

All classes are taken with the cohort and no other course work can be substituted.

**Admission 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 résumé 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 materials may all be submitted online.

**Contact Information:**
Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
EDB 120
602/543-6358

**Educational Administration and Supervision, MEd (EDSUPVMED)**
Online Degree Search Title: Educational Administration & Supervision (MEd)

**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.

**Degree Requirements:** 30 credit hours including a Capstone Course (EDA 691)

Thirty hours must be in the area of educational administration. The remaining six hours are foundational core requirements.

**Admission Requirements:** Application deadlines are:

1. February 1 for cohort groups starting during the summer sessions.
2. April 1 for cohort groups starting during the fall semester.
3. October 1 for cohort groups starting during the spring semester.

To be considered, student must submit the following information to the Graduate College:

1. The online application.
2. Application fee.

Students must upload the following documents when applying online at http://www.graduate.asu.edu/.

1. Professional statement.
2. Resume.
3. Three letters of recommendation.

GRE scores are not required; however, applicants must have completed three years of successful teaching and the state required SEI hours before applying.

**Contact Information:**
Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
EDB 120
602/543-6358
Educational Administration and Supervision (Principalship), MEd (TEPRINMED)

Program Description: The M.Ed. in educational administration and supervision with a concentration in principalship is designed to lead towards the Arizona Principal Certificate Pre-kindergarten to grade 12. The program is based on the Interstate School Leaders Licensure Consortium 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.

Degree Requirements: 36 credit hours and a Portfolio

Students in the M.Ed. in educational administration and supervision program complete:

1. Core requirements. (9)
2. Program requirements. (6)
3. Concentration requirements. (21)
4. A portfolio demonstrating mastery of program standards.

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 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 Information:
Teachers College, Mary Lou Fulton
http://teach.asu.edu/programs/graduate
educationadvising@asu.edu
FAB S236
602/543-6358

Educational Leadership and Policy Studies, PHD (EDLDRSHPHD)

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.

**Degree Requirements:** 84 credit hours, a Dissertation and a Written Comprehensive Exam

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. Resume or curriculum vitae
5. A personal statement describing the candidate's research and career goals, work and academic experiences.
6. 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 the program begins through the Graduate College, using their online application at http://www.graduate.asu.edu/.

**Contact Information:**
Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
EDB 120
602/543-6358

**Educational Psychology, MA (EDPSYCHMA)**
Online Degree Search Title: Educational Psychology (MA)

**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.

**Degree Requirements:** 30 credit hours, a Thesis and a Written Comprehensive Exam, or 30 credit hours, a Thesis and a Written Comprehensive Exam (MIP)

Requirements for this program include:

1. Core courses. (12)
2. Focus studies. (9)
3. Electives. (9)

**Admission Requirements:** Applicants must complete a Graduate College application. See additional requirements for area of specialization on the Web site.
Contact Information:
Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
EDB 301
602/543-6358

Educational Psychology, MEd (EDPSYCHMED)
Online Degree Search Title: Educational Psychology (MEd)

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.

Degree Requirements: 36 credit hours and a Written Comprehensive Exam

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 Information:
Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
EDB 301
602/543-6358

Educational Psychology, PHD (EDPSYCHPHD)
Online Degree Search Title: Educational Psychology PHD

Program Description: The program offers a plan of study that reflects the field's increasingly interdisciplinary nature. The focus is on the application of scholarship in understanding real-world challenges and the cultural nature of development. The target populations studied include children and adults within the contexts of families and schools. An applied developmental science model is followed, with the aim of using research to inform policies and programs that further the positive development of individuals. Graduates of the program find work at universities and community colleges, state and local departments of education, K-12 schools and various community agencies.
**Degree Requirements:** 84 credit hours, a Dissertation and a Written Comprehensive Exam

Requirements for the Ph.D. consist of:

1. A minimum of 84 credit hours of course work specified in a student's program of study.
2. Comprehensive examinations.

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 30 credit hours of graduate course work will be expected to earn a total of 84 credit hours past the bachelor's including the transferred master's credit 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 allowed to be carried forward.

**Admission Requirements:** The graduate degree application is to be submitted online to the Graduate College. The deadlines are October 15 for spring admission and February 15 for fall admission.

**Contact Information:**
Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
EDB 301
602/543-6358

**Educational Psychology (School Psychology), PHD (EDPSYSPPHD)**

Online Degree Search Title: Educational Psychology (School Psychology) (PhD)

**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 and the Mary Lou Fulton Teachers College support 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 work week.

**Degree Requirements:** 84 credit hours, a Dissertation and a Written Comprehensive Exam

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.

**Contact Information:**
Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
EDB 301
602/543-6358

**Educational Technology, MEd (EDTECHMED)**

Online Degree Search Title: Educational Technology (MEd)

**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.

**Degree Requirements:** 30 credit hours and a Written Comprehensive Exam

Each student develops a plan of study in consultation with a faculty advisor.

**Required Courses (18)**

- 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. A statement of professional goals.

5. Two professional references.

6. A resume.

Contact Information:
Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
EDB 301
602/543-6358

Educational Technology, PHD (EDTECHPHD)
Online Degree Search Title: Educational Technology (PhD)

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.

Degree Requirements: 84 credit hours, a Dissertation and a Written Comprehensive Exam

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.
5. A statement of professional goals.
6. Two professional references.
7. A resume.

Contact Information:
Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
EDB 301
602/543-6358

Educational Technology (Arts, Media and Engineering), PHD (EDAMEPHD)
Online Degree Search Title: Educational Technology (Art, Media & Engr)(PhD)

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/.

Degree Requirements: 84 credit hours, a Dissertation and a Written Comprehensive Exam

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 Information:
Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
EDB 301
602/543-6358

Educational Technology (certificate), CERT (EDEDTGRCT)
Online Degree Search Title: Educational Technology (Grad 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.

Degree Requirements: 15 credit hours including a Capstone (EDT 504)

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 Information:
Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
EDB 301
602/543-6358

Elementary Education, MEd (TEELEMMED)
Online Degree Search Title: Elementary Education (General) (MEd)
Program Description: The master's degree in elementary education with a general specialization 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 program emphasizes practical classroom applications are based on the latest theory, research, and best current practice. A general program is designed with the assistance of a faculty advisor to meet the needs of a student's professional and career goals.

Degree Requirements: 33 credit hours and a Written Comprehensive Exam

Students must complete a total of 33 credit hours including 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 Information:
Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
FAB S236
602/543-6358

Elementary Education (Educational Technology), MEd (TEEDTECMED)

Online Degree Search Title: Elementary Ed (Ed Technology) (MED)

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. Some classes are delivered online.

Degree Requirements: 33 credit hours and a Portfolio

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:

1. Undergraduate and/or graduate GPAs.
2. Letters of recommendation.
3. Personal statement.
4. Work and academic experience.
5. 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 OR have two years of teaching experience.

Contact Information:
Teachers College, Mary Lou Fulton
Elementary Education (Reading), MEd (TERDGMED)
Online Degree Search Title: Elementary Ed (Reading) (MEd)

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 and to serve as literacy resources for other teachers. 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.

Degree Requirements: 33 credit hours and a Written Comprehensive Exam
Students must complete a total of 33 credit hours, including 21 credits in their concentration and a culminating experience in the form of a portfolio.

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:
1. Undergraduate and/or graduate GPAs.
2. Letters of recommendation.
3. Personal statement.
4. Work and academic experience.
5. 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 OR have two years of teaching experience.

Contact Information:
Teachers College, Mary Lou Fulton
http://teach.asu.edu/programs/graduate
educationadvising@asu.edu
FABS236
602/543-6358

Elementary Education (Teacher Certification Accelerated), MEd (TEEEACLMED)
Online Degree Search Title: Elementary Education (Teacher Certification Accelerated) (MEd)

Program Description: The master's degree in elementary education with teacher certification M.Ed. in is administered by the Mary Lou Fulton Teachers College 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.

Degree Requirements: 33 credit hours and an Applied Project
Each student is assigned a graduate advisor to design the plan of study. Students in this program will complete an applied project as part of their plan of study.

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 Information:
Teachers College, Mary Lou Fulton
http://teach.asu.edu/programs/graduate
educationadvising@asu.edu
Higher and Postsecondary Education, MEd (EDPOSTMED)

Online Degree Search Title: Higher and Postsecondary Education (MEd)

**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.

**Degree Requirements:** 30 credit hours and an Applied Project

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 Higher and Postsecondary Education Program 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 (must be uploaded online at http://www.graduate.asu.edu).
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 Information:**
Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
EDB 120
602/543-6358

Leadership and Innovation (Policy and Administration), EdD (TEINNPAEDD)

Online Degree Search Title: Educational Ldrship and Innovation - Policy/Admin (EdD)

**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.
**Degree Requirements:** 90 credit hours, a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam (including a Master's degree and 60 credit hours post-Masters)

1. Professional core. (12)
2. Research core. (9)
3. Electives. (18)
4. Participation in leader scholar communities (directed field-based studies). (9)
5. Comprehensive examination.
6. Dissertation. (12)

**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 resume.
5. A sample of your professional writing.

**Contact Information:**
Teachers College, Mary Lou Fulton
http://teach.asu.edu/programs/graduate
educationadvising@asu.edu
FAB S236
602/543-6358

**Leadership and Innovation (Teaching), EdD (TEINNTEDD)**
Online Degree Search Title: Educational Ldrship and Innovation - Teaching (EdD)

**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.

**Degree Requirements:** 90 credit hours (including a Master's degree and 60 credit hours post-Masters), a Dissertation, a Written Comprehensive Exam and an Oral Comprehensive Exam.

1. Professional core. (12)
2. Research core. (9)
3. Electives. (18)
4. Participation in leader scholar communities (directed field-based studies). (9)
5. Comprehensive examination. (12)

**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 resume.
5. A sample of your professional writing.
Online Teaching for Grades K-12 (certificate), CERT (TEEDTGRCT)

Online Degree Search Title: Online Teaching for Grades K-12 (Grad Certificate)

Program Description: The online teaching for grades K-12 graduate certificate consists of online courses centered on preparing K-12 educators for online teaching along three major domains, which include technological, pedagogical and content-related areas. The goal of this program is to prepare current K-12 teachers to teach in an online environment and to become leaders in the development, implementation and evaluation of online programs. This includes helping students understand how various topics within subject areas are effectively represented using technology and pedagogical strategies required to teach these concepts online. This is accomplished through offering course work that addresses all three domains along with field experience opportunities. Through these experiences, students would be prepared to teach in online and blended educational environments.

Degree Requirements: 15 credit hours including a Capstone (EDT 580)

The certificate requires five courses, each consisting of three credit hours. The culminating experiences for this certificate program is an electronic portfolio that will be completed in EDT 580 Practicum in Online Teaching.

Admission Requirements: All applicants must hold a bachelor’s degree from a regionally accredited institution or have an equivalent credential as determined by the Graduate College. Applicants must submit the Graduate College online application and meet all Graduate College requirements.

Contact Information:
Teachers College, Mary Lou Fulton
http://teach.asu.edu/programs/graduate
educationadvising@asu.edu
FAB 5236
602/543-6358

Physical Education, MPE (ECPHYEDMPE)

Online Degree Search Title: Physical Education - Polytechnic Campus (MPE)

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.

Degree Requirements: 33 credit hours, a Written Comprehensive Exam and an Applied Project (PPE 593)

The program includes:

1. An applied project which is included in the course hours noted below.
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)
2. Education cognate courses. (6)
3. Electives. (6)

Physical education pedagogy track:
1. Core studies. (21)
2. Education cognate courses. (6)
3. Electives. (6)

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 resume.
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 Information:
Teachers College, Mary Lou Fulton
http://teach.asu.edu/programs/graduate
educationadvising@asu.edu
SANCA 331
602/543-6358

Secondary Education, MEd (TESECEDMED)
Online Degree Search Title: Secondary Education (Tailored) (MEd)

Program Description: This program is 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.

Degree Requirements: 33 credit hours and a Written Comprehensive Exam, or 33 credit hours and an Applied Project

This program is composed of:
1. Fifteen credit hours of core requirements.
2. Fifteen credit hours in a concentration.
3. Three credit hours of 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 Information:
Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
Secondary Education (Educational Technology), MEd (TESEDTCMED)
Online Degree Search Title: Secondary Ed (ED Technology) (MEd)

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.

Degree Requirements: 33 credit hours and an Applied Project

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 OR have two years of teaching experience.

Contact Information:
Teachers College, Mary Lou Fulton
http://teach.asu.edu/node/784
educationadvising@asu.edu
FABS236
602/543-6358

Secondary Education (Reading), MEd (TESERDGMED)
Online Degree Search Title: Secondary Education (Reading) (MEd)

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.

Degree Requirements: 33 credit hours and a Written Comprehensive Exam

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:

1. Undergraduate and/or graduate GPAs.
2. Letters of recommendation.
3. Personal statement.
4. Work and academic experience.
5. The availability of faculty to supervise academic areas of interest.
6. 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 Information:
Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
FABS236
602/543-6358

Secondary Education (Teacher Certification), MEd (TESCERTMED)
Online Degree Search Title: Secondary Ed (Teacher Certification) (MEd)

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 seven to 12 in a specific content area.

Degree Requirements: 33 credit hours and an Applied Project
The M.Ed. in secondary education requires an applied project which is included in the student's plan of study. If the student wishes to receive teacher certification for Arizona, they must complete an additional 15 credit hours beyond the M.Ed. plan of study.

Admission Requirements: All applicants must submit the Graduate College online application and meet Graduate College Admission Requirements.

Contact Information:
Teachers College, Mary Lou Fulton
http://teach.asu.edu/programs/graduatecert
educationadvising@asu.edu
FAB S237
602/543-6358

Social and Philosophical Foundations of Education, MA (EDSPFMA)
Online Degree Search Title: Social and Philosophical Foundations of Education (MA)

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 course work 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.
**Degree Requirements:** 30 credit hours and a Written Comprehensive Exam (MIP), or 30 credit hours and an Oral Comprehensive Exam (MIP), or 30 credit hours, a Thesis and a Written Comprehensive Exam, or 30 credit hours, a Written Comprehensive Exam and an Oral Comprehensive Exam (MIP)

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. The online application.
2. Application fee.

Students must upload the following documents when applying online at http://www.graduate.asu.edu/.

1. Professional statement.
2. Resume.
3. Three letters of recommendation.

This program is on a rolling admission basis. GRE scores are not required. Application are reviewed as soon as files are complete.

**Contact Information:**
Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
EDB 120
602/543-6358

**Special Education, MA (EDSPEDMA)**

Online Degree Search Title: Special Education (MA)

**Program Description:** The M.A. in special education program is designed to support practicing professionals who want to assume teacher leadership roles in P-12, higher education and community settings. Our focus on inclusive communities and schools offers many opportunities to develop research-based perspectives on policy, practice and leadership for change. In this program, internationally known faculty have created a program that challenges traditional assumptions about the nature of disability, explores cutting edge interventions designed to prevent disproportionality, improves student learning outcomes for ALL students, and engages communities of practice in supporting differences. The program offers the opportunity to engage in research and inquiry, learn in interdisciplinary ways, and develop deep understandings around the intersections of race, culture, ability and language through sociocultural and psychological lenses. Students can complete most of their program online. The teacher leadership emphasis requires a year long residency in a professional learning school.

By addressing critical education equity issues through research, policy and school practices, students are immersed in inquiry and research from the beginning of their program. Master's graduates become lead special educators, work in disability service centers at colleges and universities, provide service and support to adults with disabilities, as well as pursue doctoral work that may lead to becoming a researcher, university faculty member, or educational leader in a number of local, state, regional, national or international contexts. Our program is tailored to your experiences and histories as well as your life aspirations.

**Degree Requirements:** 36 credit hours and a Thesis, or 36 credit hours and a Thesis (MIP), or 36 credit hours and an Applied Project, or 36 credit hours, a Written Comprehensive Exam and an Oral Comprehensive Exam
Each candidate will also complete a culminating project under the direction of his or her advisor. Curriculum and instruction M.A. students are assigned a faculty advisor at the time of their admission. For students completing a thesis as their culminating project, the advisor will assist in selecting the graduate committee and serve as the chair. The graduate program committee must be formed prior to the student completing 12 hours of credit in the program.

**Admission Requirements:** The following are required:

1. Application to the Graduate College.
2. Transcripts.
3. Letter of intent/statement of purpose including research interests.
4. Curriculum vitae (resume).
5. 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 Information:**
Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
EDB 302
602/543-6358

**Special Education (Consultation and Collaboration), MEd (TESECCMED)**

**Online Degree Search Title:** Special Education (Consultation and Collaboration) (MEd)

**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 currently is delivered only in online format with a focus on autism spectrum disorders.

**Degree Requirements:** 33 credit hours and a Portfolio, or 33 credit hours and a Written Comprehensive Exam

The program of study consists of 10 classes and a practicum customized to meet and be consistent with the student’s interests and abilities.

**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 Information:**
Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
FAB S237
602/543-6358
**Special Education (Teacher Certification), MEd (TESECRTMED)**

Online Degree Search Title: Special Ed (Teacher Certification) (MEd)

**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.

**Degree Requirements:** 33 credit hours and an Applied Project

Students must complete:

1. Fifteen credit hours of core course work.
2. Fifteen credit hours of elective course work.
3. Three credit hours of an applied project.

If students also want to add state certification, they must complete an additional 19 hours of required course work.

**Admission Requirements:** Applicants must submit a Graduate College online application. Admission to a degree program is based on undergraduate and/or graduate GPA. A prerequisite course in introductory special education must also be met: SPE 222, SPE 311 and SPE 511.

**Contact Information:**
Teachers College, Mary Lou Fulton
http://teach.asu.edu/programs/graduatecert
educationadvising@asu.edu
FAB S237
602/543-6358

**Technology for Teaching and Learning (certificate), CERT (EDEDTTGRCT)**

Online Degree Search Title: Technology for Teaching and Learning (Grad 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.

**Degree Requirements:** 15 credit hours including a Capstone Course (EDT 591)

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.

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 Information:**
Teachers College, Mary Lou Fulton
http://teach.asu.edu
educationadvising@asu.edu
Technology and Innovation, College of

Applied Biological Sciences, MS (TSAPBIOSMS)
Online Degree Search Title: Applied Biological Sciences (MS)

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.

Degree Requirements: 30 credit hours and a Thesis

Plan of Study: All students are required to complete two seminars: ABS 591 in the spring semester and ABS 691 in the fall semester. 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 which constitutes six credit hours, of the total 30 hours, is required.

Final Examinations: A final oral examination covering the thesis and related subject matter is required.

Admission Requirements: All applicants must submit an online application to the Graduate College and must meet the minimum requirements for admission. 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:

Graduate College Admissions
Arizona State University
Interdisciplinary B #170
PO Box 871003
Tempe, AZ 85287-1003

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 Information:**
Technology and Innovation, College of
Department of Applied Biological Sciences
http://technology.asu.edu/dasm
appliedbiologicalscience@asu.edu
WANER 340
480/727-1444

**Applied Psychology, MS (ECAPSYCHMS)**
Online Degree Search Title: Applied Psychology (Polytechnic Campus) (MS)

**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.

**Degree Requirements:** 30 credit hours and a Thesis, or 30 credit hours and an Applied Project.

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.

**Admission Requirements:** 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.

**Contact Information:**
Technology and Innovation, College of
Faculty of Applied Technology
http://technology.asu.edu/appliedpsych
russ.branaghan@asu.edu
SANCA 150
480/727-5157

**Computing Studies, MCSt (TSCOMPNCST)**
Online Degree Search Title: Computing Studies - Polytechnic Campus (MCST)

**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.

**Degree Requirements:** 33 credit hours and a Thesis, or 33 credit hours and an Applied Project

The plan of study must contain 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)**

- 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)**

- 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 complete 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, including a Graduate College online application. It is recommended that applicants have completed 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 Information:**
Technology and Innovation, College of
Department of Engineering
http://technology.asu.edu/engineering/
gr@asu.edu
SANTN 230
480/727-2727
Technology (Alternative Energy Technologies), MSTech (TSATMSTTECH)

Online Degree Search Title: Alternative Energy Technologies (MSTech)

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.

Degree Requirements: 33 credit hours and a Thesis, or 33 credit hours and an Applied Project.

Thesis Option (33)

Concentration (15-16)
Supporting Area (8-9)
Research methods courses:
   EST 500 Research/Writing (2)
   EST 591 Graduate Seminar (1)
   EST 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 EST 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)

Concentration (15-18)
Supporting Area (9-12)
Research Methods Courses:
   EST 500 Research/Writing (2)
   EST 591 Graduate Seminar (1)
   EST 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 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.
Technology (Aviation Management and Human Factors), MSTech (TSHFMSTECH)

Online Degree Search Title: Aviation Mgmt/Human Factors (MSTech)

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.

Degree Requirements: 33 credit hours and a Thesis, or 33 credit hours and an Applied Project

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. Course selection must include the following with others as approved by the committee.

- AMT 593 Applied Project (3) or AMT 599
- AMT 549 Applied Human Factors Research
- PSY 530 Intermediate Statistics

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 541 Aviation Physiology
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, including the online Graduate College application. 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 Information:**
Technology and Innovation, College of
Dept of Tech Entrepreneurship and Innovation Mgmt
http://technology.asu.edu/aviation
aerotech@asu.edu
SIM BLDG
480/727-1021

**Technology (Electronic Systems Engineering Technology), MSTech (TSSYMISTECH)**

**Online Degree Search Title:** Electronics Engineering Technology (MSTech)

**Program Description:** The M.S.Tech. program promotes greater depth of understanding in electronics and its applications at a system level. 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.

**Degree Requirements:** 33 credit hours and a Thesis, or 33 credit hours and an Applied Project

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)**

Concentration (15-16)
Supporting Area (8-9)
Research Methods Courses:
EST 500 Research/Writing (2)
EST 591 Graduate Seminar (1)
EST 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)
Concentration (15-18)
Supporting Area (9-12)
Research Methods Courses:
EST 500 Research/Writing (2)
EST 591 Graduate Seminar (1)
EST 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 EST 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 Information:
Technology and Innovation, College of
Department of Engineering Technology
http://technology.asu.edu/engrtech
engrtech@asu.edu
TECH 101
480/727-1584

Technology (Environmental Technology Management), MSTech (TSMGMSTECH)
Online Degree Search Title: Environmental Tech Mgmt (Polytechnic Campus) (MSTech)

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.

Degree Requirements: 33 credit hours and a Thesis, or 33 credit hours and an Applied Project

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, including the online Graduate College application. 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 Information:
Technology and Innovation, College of
Dept of Tech Entrepreneurship and Innovation Mgmt
http://etmonline.asu.edu/
dtm@asu.edu
TECH 102
480/727-1781

Technology (Global Technology and Development), MSTech (TSGTMSTECH)
Online Degree Search Title: Global Technology and Development (MSTech)

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.

Degree Requirements: 33 credit hours and a Thesis, or 33 credit hours and an Applied Project, or 33 credit hours, a Written Comprehensive Exam and an Oral Comprehensive Exam

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 Information:
Technology and Innovation, College of
Dept of Tech Entrepreneurship and Innovation Mgmt
http://technology.asu.edu/dtm/
grossman@asu.edu
TECH 102
480/727-1533

Technology (Graphic Information Technology), MSTech (TSGIMSTECH)
Online Degree Search Title: Graphic Information Technology (MSTech)
**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.

**Degree Requirements:** 33 credit hours and a Thesis, or 33 credit hours and an Applied Project

All candidates for the M.S.Tech. program are required to complete a minimum of 33 credit hours of graduate coursework. 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)**

- Technical area of emphasis (18)
- Supporting area (9)
- Thesis (6)

**Applied Project Option (33)**

- 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, including the Graduate College online application. 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 Information:**
Technology and Innovation, College of
Department of Tech Entrepreneurship and Innovation Mgmt
http://technology.asu.edu/git
dtm@asu.edu
TECH 102
480/727-1781

**Technology (Integrated Electronic Systems), MSTech (TSEMSMSTECH)**

Online Degree Search Title: Integrated Electronic Systems (MSTECH)

**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.

**Degree Requirements:** 33 credit hours and a Thesis, or 33 credit hours and an Applied Project

**Thesis Option (33)**

Concentration (15-16)  
Supporting Area (8-9)  
Research Methods Courses:

EST 500 Research/Writing (2)  
EST 591 Graduate Seminar (1)  
EST 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 EST 599 Thesis, write a thesis and hold 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)**

Concentration (15-18)  
Supporting Area (9-12)  
Research Methods Courses:

EST 500 Research/Writing (2)  
EST 591 Graduate Seminar (1)  
ST 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 Information:
Technology and Innovation, College of
Department of Engineering Technology
http://technology.asu.edu/engrtech
engrtech@asu.edu
TECH
480/727-1584

Technology (Management of Technology), MSTech (TSMRMSTECH)
Online Degree Search Title: Management of Technology (MSTech)

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.

Degree Requirements: 33 credit hours and a Thesis, or 33 credit hours and an Applied Project

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 resume.

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 Information:
Technology and Innovation, College of
Dept of Tech Entrepreneurship and Innovation Mgmt
http://technology.asu.edu/omt
dtm@asu.edu
TECH 102
480/727-1781

Technology (Manufacturing Engineering Technology), MSTech (TSMFMSTECH)
Online Degree Search Title: Manufacturing Engineering Technology (MSTech)

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.

Degree Requirements: 33 credit hours and a Thesis, or 33 credit hours and an Applied Project

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. A maximum of six credits of 400 level coursework may be included in the student's plan of study. 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 plan 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)
Technical concentration area (18)
Supporting area (6)
Research methods courses:
- EST 591 Research Seminar (1)
- EST 500 Research Writing (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)
- Technical concentration area (18)
- Supporting area (9)
- Research methods courses:
  - EST 591 Research Seminar (1)
  - EST 500 Research Writing (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 online application and materials required by the Graduate College, applicants are required to provide a resume 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 Information:**
Technology and Innovation, College of Department of Engineering Technology
http://technology.asu.edu/engrtech
engrtech@asu.edu
SIM 295
480/727-1584

**Technology (Mechanical Engineering Technology), MSTech (TSMHMSTECH)**

**Online Degree Search Title:** Mechanical Engineering Technology (MSTech)

**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.

**Degree Requirements:** 33 credit hours and a Thesis, or 33 credit hours and an Applied Project

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. A maximum of six credit hours of 400 level coursework may be included on the student's plan of study. 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 plan 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)**

- Technical concentration area (18)
- Supporting area (6)
- Research methods courses:
  - EST 591 Research Seminar (1)
  - EST 500 Research Writing (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)**
Technical concentration area (18)
Supporting area (9)
Research methods courses:

EST 591 Research Seminar (1)
EST 500 Research Writing (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 Information:
Technology and Innovation, College of
Department of Engineering Technology
http://technology.asu.edu/engrtech
engrtech@asu.edu
SIM 295
480/727-1584