

Graduate College

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Dean

Through the faculty, the ASU Graduate College offers programs to meet the educational needs of those who already hold bachelor's degrees. While many students prepare for careers in research, the professions, and the arts, others work for personal enrichment. Both part-time and full-time students are enrolled in 92 master's and 47 doctoral majors encompassing hundreds of concentrations and specialties. Other students explore new areas of interest or prepare for career advancements quite apart from formal degree programs.

The size, strength, and diversity of the graduate community reflect the university's commitment to high quality education. As a major center for graduate education, ASU supports cultural and intellectual activity as well as research in a broad range of arts and sciences and professional disciplines; in addition, the university conducts research addressing Arizona's social, cultural, and economic growth and development.

One distinctive project that magnifies the Graduate College's dedication to graduate students is the Preparing Future Faculty program, funded by the Pew Charitable Trusts and ASU. The program is designed to educate students about faculty roles and prepare doctoral students specifically for faculty positions in colleges and universities across the nation.

The university's funded programs, together with more than 30 ASU research centers and institutes, provide assistantships and training for many graduate students; further, the centers coordinate conferences, colloquia, and special seminars to heighten the learning experience. The Office of the Vice Provost for Research provides seed money to enable faculty and students to work at the frontiers of knowledge. Such activities continually encourage the creative embrace of change and experimentation.

ASU provides numerous choices in student life, for personal enrichment as well as cultural interaction. Many internationally known speakers present lectures here, bringing together faculty, graduate students, and the community to engage in stimulating dialogue.

Intellectual Environment. About 11,000 students from all 50 states and more than 100 nations are enrolled in graduate study at the university. The size and diversity contribute to a cosmopolitan setting that is ideal for intellectual discourse and stimulation. As a balance to this large grouping of students, individual graduate programs conduct small colloquia and seminars where students and faculty discuss their work in an intimate, intellectual environment supportive of student development. The result is a spirited, lively atmosphere in which students and faculty members get to know each other through collaborative research and intellectual exchange.

GRADUATE DEGREES AND MAJORS

The Graduate College enrolls students in programs leading to both professional and research-oriented advanced degrees. The Master of Arts (M.A.), Master of Science (M.S.), and Doctor of Philosophy (Ph.D.) degrees are awarded to students completing programs that culminate in research or creative work. The Ph.D. degree is the highest university award conferred on candidates who have proved their ability as scholars and original researchers.

Professional graduate programs emphasize training that leads to professional practice. In these degree programs, students develop a mastery of a comprehensive body of knowledge and the ability to organize and carry out significant investigations in their professional field. Professional degrees usually are named Master of (professional field) and Doctor of (professional field), although some M.A. and M.S. degree programs have professional tracks. The professional doctoral degree is the highest university award conferred to candidates completing academic preparation for professional practice. Professional degrees offered through the Graduate College are as follows:

- Master of Accountancy
- Master of Architecture
- Master of Business Administration
- Master of Computer Science
- Master of Counseling
- Master of Education
- Master of Engineering
- Master of Environmental Planning
- Master of Fine Arts
- Master of Health Services Administration
- Master of Mass Communication
- Master of Music
- Master of Natural Science
- Master of Physical Education
- Master of Public Administration
- Master of Science in Design
- Master of Science in Engineering
- Master of Science in Technology
- Master of Social Work
- Master of Taxation
- Master of Teaching English as a Second Language
- Master of Technology
- Doctor of Education
- Doctor of Musical Arts
- Doctor of Public Administration

Faculty members offering a specific graduate degree program may be members of a single academic unit (such as a department, school, or college), or they may form an interdisciplinary committee consisting of faculty from various academic units. The Graduate College awards degrees upon the recommendation of the faculty offering the graduate degree program.

Interdisciplinary Graduate Degrees and Majors Overseen by the Graduate College

Major	Degree	Administered by
Creative Writing	M.F.A.	Creative Writing Committee
Curriculum and Instruction Concentrations: curriculum studies, early childhood education, educational media and computers, elementary education, English education, exercise and wellness education, music education, physical education, reading education, science education, special education	Ph.D.	Interdisciplinary Committee on Curriculum and Instruction
Exercise Science Concentrations: biomechanics, motor behavior/sport psychology, physiology of exercise	Ph.D.	Committee on Exercise Science
Justice Studies Concentrations: criminal and juvenile justice; dispute resolution; law, justice, and minority populations; law, policy, and evaluation; women, law, and justice	Ph.D.	Committee on Law and Social Sciences
Public Administration	D.P.A.	Committee on Public Administration
Science and Engineering of Materials Concentrations: high-resolution nanostructure analysis, solid-state device materials design	Ph.D.	Committee on Science and Engineering of Materials
Speech and Hearing Science Concentrations: developmental neurolinguistic disorders, neuroauditory processes, neurogerontologic communication disorders	Ph.D.	Committee on Speech and Hearing Science
Statistics	M.S.	Committee on Statistics

For the lists of graduate degrees offered at ASU Main and ASU East, see “ASU Graduate Degrees” table, page 311. For ASU West graduate degree programs, see the *ASU West Catalog*. For baccalaureate degrees offered at ASU, see “ASU Baccalaureate Degrees,” page 9.

Interdisciplinary Study

Although most graduate programs are administered by academic units, a diverse group of interdisciplinary programs falls directly under the supervision of the Graduate College. Many majors are in fields that are still emerging as recognized academic disciplines and, therefore, do not customarily form the academic basis for departments. Other fields of study are inherently interdisciplinary and do not fit well with conventional disciplines around which departments are formed. Curricula must reflect intrinsically broad disciplinary affinities, and faculty must be drawn from more than one department.

The Graduate College oversees nine interdisciplinary/intercollegiate graduate programs and has joint responsibility with the College of Education for another. These include the following:

- Creative Writing (M.F.A.)
- Curriculum and Instruction (Ph.D.)
(jointly administered with the College of Education)
- Exercise Science (Ph.D.)
- Gerontology (Certificate)
- Justice Studies (Ph.D.)
- Public Administration (D.P.A.)
- Science and Engineering of Materials (Ph.D.)
- Speech and Hearing Science (Ph.D.)
- Statistics (M.S.)
- Transportation Systems (Certificate)

Other interdisciplinary degree programs include History and Theory of Art (jointly offered with the University of Arizona; administered by the School of Art), Communication, Ph.D. (administered by the College of Public Programs), and Humanities, M.A., and Molecular and Cellular Biology, M.S., Ph.D. (both administered by the College of Liberal Arts and Sciences).

Each of these programs uses resources and faculty from more than one discipline. The programs promote cooperative research and instruction among faculty who share common interests but are housed in different academic units. The programs allow students to pursue degrees that are intellectually coherent but that bring together diverse strengths of the university. See the “Interdisciplinary Graduate Degrees and Majors Overseen by the Graduate College” table.

Creative Writing (M.F.A.)

The interdisciplinary Master of Fine Arts degree in Creative Writing (options include fiction, nonfiction, playwrighting, poetry, and screenwriting) is administered by the Creative Writing Committee. This studio/academic program involves the research, creative activity, and teaching interests of faculty of the Departments of English and Theatre to provide students with the opportunity to tailor a course of study to fit individual needs, talents, and goals. Students work under the direction of faculty who are practicing, published writers. For more information, see the *Graduate Catalog*.

Curriculum and Instruction (Ph.D.)

The interdisciplinary Ph.D. degree in Curriculum and Instruction is administered by the Interdisciplinary Committee on Curriculum and Instruction and overseen jointly by the Graduate College and the College of Education. Areas of concentration are available in curriculum studies, early childhood education, educational media and computers, elementary education, English education, exercise and wellness education, music education, physical education, reading education, science education, and special education. For more information, see the *Graduate Catalog*.

Exercise Science (Ph.D.)

The interdisciplinary Ph.D. degree in Exercise Science is administered by the Committee on Exercise Science. This individualized interdisciplinary degree integrates graduate courses from a variety of academic units to provide a sound foundation for research leading to a dissertation with concentrations in biomechanics, motor behavior/sport psychology, or physiology of exercise. For more information, see the *Graduate Catalog*.

Gerontology

An interdisciplinary, 24-semester-hour Certificate in Gerontology, administered by the Committee on Gerontology, may be earned by graduate students who wish to study the biological, psychological, sociological, and policy-related aspects of aging and the economic, health, and social concerns of older people. Students enrolled in the certificate program may simultaneously pursue a major in an academic unit offering a graduate degree or may enter the program as nondegree graduate students. The Certificate in Gerontology provides a broad academic foundation for students who wish to apply the knowledge and skills acquired in their major to a variety of aging-related pursuits. For more information, see the *Graduate Catalog*.

For information on the undergraduate minor in Gerontology, see "Gerontology," page 111.

GERONTOLOGY (GRN)

GRN 494 ST: Undergraduate Special Topics. (3) F, S

GRN 498 PS: Undergraduate Pro-Seminar. (3) S

GRN 499 Undergraduate Independent Study. (3) F, S, SS

GRN 580 Graduate Practicum. (3) F, S

GRN 590 Graduate Reading and Conference. (3) F, S, SS

GRN 591 Graduate Seminar. (3) F, S

Justice Studies (Ph.D.)

The interdisciplinary Doctor of Philosophy degree program with a major in Justice Studies is administered by the Committee on Law and Social Sciences. The degree program integrates historical, legal, and philosophical approaches with social science training. Areas of concentration include criminal and juvenile justice; dispute resolution; law, justice, and minority populations; law, policy, and evaluation; and women, law, and justice. For more information, see the *Graduate Catalog*.

Public Administration (D.P.A.)

The interdisciplinary Doctor of Public Administration degree program is administered by the Committee on Public Administration. The purpose of the degree is to prepare skilled professional public administrators for positions in the public sector and for university teaching. Ethics, modes of decision making, policy analysis, problem-solving skills

in budgeting, program evaluation, public personnel management, theoretical assumptions, and value assessments are some of the areas of study available. For more information, see the *Graduate Catalog*.

Science and Engineering of Materials (Ph.D.)

The interdisciplinary Ph.D. degree in Science and Engineering of Materials is administered by the Committee on Science and Engineering of Materials. Areas of concentration are available in solid-state device materials design and high-resolution nanostructure analysis. Emphasis is placed on the applications of chemical thermodynamics, the mechanics of solids, quantum mechanics and transport theory for investigation of the relationships between microstructure and properties of solids, and the dependence of microstructures on processing. For more information, see the *Graduate Catalog*.

SCIENCE AND ENGINEERING OF MATERIALS (SEM)

See the *Graduate Catalog* for the SEM courses.

Speech and Hearing Science (Ph.D.)

The interdisciplinary Doctor of Philosophy degree program with a major in Speech and Hearing Science is administered by the Committee on Speech and Hearing Science. Areas of concentration are available in developmental neurolinguistic disorders, neuroauditory processes, and neurogerontologic communication disorders. The purpose of the program is to prepare scholars for careers of basic and applied research in academia or in health care delivery environments. The unifying theme of the program is the influence of aging and changes in neurologic condition on human communication and its disorders. For more information, see the *Graduate Catalog*.

Statistics (M.S.)

The interdisciplinary M.S. degree in Statistics is administered by the Committee on Statistics. The program involves faculty and resources from the School of Accountancy and Information Management and the Department of Mathematics. Areas of emphasis include applied statistics, mathematical statistics, statistical computing, statistical modeling, and statistical sampling and survey research. For more information, see the *Graduate Catalog*.

Transportation Systems

The interdisciplinary Certificate in Transportation Systems program is administered by the Committee on Transportation Systems. The objective of this program is to enable existing ASU graduate students and transportation professionals with advanced degrees to examine transportation-related issues from a variety of perspectives and in the context of different travel modes. For more information, see the *Graduate Catalog*.

Certificate Programs

A number of certificate programs are offered by various academic units or programs on campus (see the "Certificates" table, page 111).

Research Programs

ASU continues to advance as a major research institution. The Office of the Vice Provost for Research provides leadership in obtaining external funding and in coordinating and

administering sponsored projects. Many graduate students receive financial support and gain first-hand experience as they participate with faculty members in carrying out these research projects.

Much of this work is associated with campus research centers that help to develop proposals, coordinate activities, and bring together in colloquia and conferences students and faculty with common intellectual interests. Such centers include the Center for Solid-State Science, the Manufacturing Institute, the Institute of Human Origins, the Hispanic Research Center, and the Preventive Intervention Research Center. For further information on centers and institutes, see "Research Centers, Institutes, and Laboratories," page 32.

Research Facilities

The university lends support to research in diverse ways, including extensive facilities for research and instructional programs. Recently built facilities include an architecture building, a fine arts complex, the Goldwater Center for Science and Engineering, an addition to the Life Sciences Center, and the Computing Commons. The Engineering Research Center, built as part of the Engineering Excellence Program, houses advanced facilities such as the Molecular Beam Epitaxy laboratory and a clean room for microelectronic device fabrication. Other facilities supporting research on campus are the Institute for Studies in the Arts, in the College of Fine Arts; the Facility for High Resolution Electron Microscopy, in the College of Liberal Arts and Sciences; and the Southwest Archaeological Collection, in the Department of Anthropology.

Graduate Student Support Services

Providing academic and professional development support to graduate students is an important part of the Graduate College mission. Services include advising, individual mentoring for disadvantaged students, and financial support, as well as orientation sessions, workshops, career seminars, and research conferences.

The Graduate College Student Programs/Services maintains a variety of programs specifically for graduate and nondegree students.

Graduate College Financial Assistance Office. The Graduate College Financial Assistance Office meets the needs of graduate and professional students. Students may receive financial services at Wilson Hall, without having to visit other offices on campus. Students are offered general information about graduate financial assistance at ASU, may turn in documents, or receive status information on their student loans. Students can also apply for emergency short-term loans or pick up forms to report special circumstances. Staff members are available to help students with financial assistance concerns. Refer to "Financial Aid," page 51, for a full description of graduate financial support and services or visit the Web site at www.asu.edu/graduate.

Advising and Career/Professional Development. Many graduate students have questions and concerns about which degree to pursue, how to combine their student roles with parenting, partnering and worker roles, and what to do with their degrees upon graduation. The Graduate College provides the following resources.

Advising. The Graduate College's Academic Advising Office supplies general information about policies, proce-

dures, requirements, and support services. Appointments are available throughout the year.

Students with regular admission status should contact their academic unit for degree program advisement and program of study planning.

Career/Professional Development Seminars. The Graduate College, in conjunction with Counseling & Consultation, offers seminars to groups of graduate students interested in exploring career-related subject matters. Examples of seminar topics are dual career issues, the impact of values on career decision making, and transferable skills.

Career Planning Services for Graduate Students. In conjunction with Career Services and Counseling & Consultation, the Graduate College provides a brochure listing numerous career planning services for graduate student needs. This publication is also available at www.asu.edu/career.

Diversity Programs. The Graduate College's Diversity Programs are designed to increase the number of graduate students from groups underrepresented in their chosen field of study. Students interested in these programs must first go to their respective departments for nomination.

Diversity Assistantship Program (DAP). The purpose of this merit-based program is to support research and creative activities related to a student's field of study. Nominations are made by departments and recipients are supervised by a faculty member.

Academic Support Program (ASP). The purpose of ASP is two-fold: financial assistance and peer mentoring. ASP is available primarily to first-year students; however, departments are asked to provide a student's subsequent funding. The program is based on financial need and the nominations of students by departments. Financial support is provided in the form of federal work-study to support field-related research that is supervised by a faculty member. For additional academic support, a student meets weekly with an assigned peer mentor who is two or more years advanced in the academic program.

The Social and Academic Mentor Program. The Graduate College Social and Academic Mentor (SAM) program is designed to recruit top graduate students from domestic, international, and underrepresented populations. Academic units submit applications to the Graduate College to nominate a first-year student (mentee) and peer mentor match. The mentor, two or more years advanced in the program, promotes the mentee's social and academic integration into graduate school using a structured format. The mentor meets weekly with the mentee and schedules regular monthly meetings with the faculty advisor to discuss the mentee's concerns, progress, accomplishments, or department-related matters.

Orientations. Each semester, the Graduate College hosts orientations for new graduate students and teaching assistants (TAs).

In addition to the General Orientation, teaching assistants have the opportunity to enrich and enhance their teaching through seminars offered each semester. At least two seminars are mandatory for first-time TAs. Among other topics, TAs can attend sessions on teaching lab sciences, human diversity, critical thinking, classroom management, ethical issues, and multimedia applications in the classroom.

Workshops for Undergraduate Students Considering Graduate Education. The Graduate College holds workshops to address the issues that students contemplating graduate study should consider. The purpose of graduate study, the choices among research and professional degrees, the selection of schools to apply to, and the types and sources of financial support are among the topics discussed.

Student Organizations. The Graduate Student Council is part of the Associated Students of Arizona State University (ASASU), the student government for the university. The Graduate Research Support Office represents graduate student interests within ASASU and the Office of Student Life. It assists the Graduate College in planning orientations and other student-related activities and funds with the Graduate College small research grants to support graduate students' thesis and dissertation projects. In addition to the Council, many other special interest organizations are open to graduate students.

Format Office. The thesis, dissertation, or equivalent is the culmination of an important stage of graduate studies. By researching and writing this final work, graduate students are able to show that they have acquired skills essential to a discipline. The Graduate College publishes a Format Manual as a guide in preparing the master's or doctoral document.

Publications Program. The Graduate College publishes a number of brochures, fliers, and other items during the year.

Graduate Council

The Graduate Council establishes general policies for graduate programs and serves as an advisory board to the dean. As part of its duties, the council reviews proposals for new degree programs and concentrations, regularly conducts reviews of established academic programs, and sets policies and general standards for graduate admissions. Sixteen faculty and one student serve on the council, representing a wide variety of degree programs, with at least one member representing each college in the university. An Academic Senate representative is also elected to serve. Council members are appointed by the president of the university.

Offices of the Graduate College

The general offices of the college, including those of the dean, admissions, advising, financial assistance, and operations are located on the first floor of Wilson Hall in the center of campus. Graduate College offices are open from 8:00 A.M. to 6:00 P.M., Monday through Thursday; and 8:00 A.M. to 5:00 P.M., on Friday. The Graduate College may also be contacted by e-mail at asugrad@asu.edu or telephone 480/965-3521. The Web address is www.asu.edu/graduate.

ADMISSION TO THE GRADUATE COLLEGE

Eligibility

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

Graduate College Requirements

Generally, an applicant must have a GPA of 3.00 (scale is 4.00 = A), or the equivalent, in the last two years of work leading to the bachelor's degree. A student who enters a graduate degree program is expected to have undergraduate educational experiences, including general education studies, that are similar to those required for the baccalaureate degree at ASU.

Requirements of the Academic Unit

Academic units, departments or colleges, may have admission requirements in addition to those of the Graduate College. Many graduate programs require scores from a national admissions test such as the Graduate Record Examination (GRE), Graduate Management Admission Test (GMAT), or the Miller Analogies Test (MAT). Some programs require a portfolio, letters of recommendation, or a statement of goals. Applicants should contact the academic unit regarding specific requirements.

Submission of an Application

For admission information and procedures, access the Web site at www.asu.edu/graduate/admission or refer to the *Application for Graduate Admission* booklet. Students may apply electronically.

Application Fee

Each application for entry to ASU graduate programs must be accompanied by a nonrefundable application fee. The fee is \$45 to apply for admission to a degree program and \$15 to apply for nondegree studies. For admission information and procedures, access the Web site at www.asu.edu/graduate/admission, or refer to the *Application for Graduate Admission* booklet.

International Applicants

Applicants who will attend the university while holding F-1 or J-1 visas must meet the regulations of the Immigration and Naturalization Services in addition to the requirements of the Graduate College and the academic units to which they apply.

International applicants must meet the requirements of the Graduate College as well as those of the degree programs to which they apply. Applicants from outside the United States are also required to submit additional materials and should follow the procedures described in the *Application for Graduate Admission* booklet, or access the Web site at www.asu.edu/graduate/admission. International applicants should read this information carefully to become familiar with all the requirements they must meet and should consult it often for the instructions they must follow in submitting materials. The *Graduate Catalog* provides essential information about ASU and its graduate programs, but applicants can also consult ASU's listings in *Peterson's Graduate Education Directory* and in the *Directory of Graduate Programs* (published by the Educational Testing Service).

Among the additional materials required of international students are scores from English language examinations. All applicants whose native language is not English must submit a score from the Test of English as a Foreign Language (TOEFL). All international applicants who do not speak English as a primary language and who wish to apply for teaching assistantships must pass an examination that certifies their skill in speaking English—either the Test of Spo-

ken English (TSE), which may be taken in the student's home country, or SPEAK (an interview test), which is administered at ASU. Some degree programs also require TSE or SPEAK scores of applicants whose native language is not English. For specific information about TSE requirements, contact the head of the academic unit.

As required by the U.S. Immigration and Naturalization Service, international applicants must also verify that they have the financial resources to cover their expenses during graduate study at ASU. The Financial Guarantee form is available in the *Application for Graduate Admission* booklet. It can also be accessed through the Graduate College Web site at www.asu.edu/graduate/admission. International applicants must see that the form with a verification from a bank or sponsoring organization is completed and submitted to Graduate Admissions. The I-20 or the IAP66 (documents needed to obtain a student visa) are issued only after the completed, properly verified Financial Guarantee form has arrived. International students may enroll at ASU only if they have been admitted to a degree program, a certificate program, or the postbaccalaureate teacher education program. They must meet all appropriate immigration standards and requirements.

Applications are processed when they are received. However, international applicants should submit all materials in December or January in order to begin study the following fall semester and in August or September in order to begin study the following spring semester. An application fee of \$45 (in U.S. funds) must accompany the formal application, which otherwise is not processed.

All F-1 or J-1 visa students must have insurance coverage against illness and accident before being permitted to register. Insurance must be maintained throughout the student's enrollment in the university and may be obtained at the time of registration.

Upon arrival on campus, students must report to the advisor in the International Student Office.

Additional Information

The Graduate College does not have deadlines. Applications are processed as they are received. However, many academic units have specific and early deadlines; many units review applications once a year, usually in January or February for fall admission. Applicants are urged to contact the academic units regarding deadlines.

Academic units, which must indicate their willingness to admit applicants, frequently set higher standards than those established by the Graduate College. Many qualified applicants are denied because only a limited number of students are admitted each year.

Notice of Admission Decisions

Only the dean of the Graduate College can make formal offers of admission. The Graduate College notifies all applicants in writing of the admission decision.

All documents received by the university in connection with an application for admission become the property of ASU. If the applicant does not enroll in the university within one year, the admission documents may be destroyed.

The date (month/day/year) on the Graduate College dean's letter of admission is the actual date of admission. If the student is enrolled in courses on the admission date, those courses—if applicable—may be considered part of a

program of study. Courses taken the semester before this date are nondegree hours.

Admission Classifications

Regular Admission. Applicants who fulfill all requirements for admission and are acceptable to both the academic unit and the Graduate College are granted regular admission.

Regular Admission with Deficiencies. A student whose grades and test scores are at an acceptable level but who does not have the undergraduate background expected by the academic unit and the university may be required to complete courses to remedy deficiencies. The letter of admission specifies the deficiencies that must be completed before the student is awarded a graduate degree. Deficiency courses may not be applied toward the minimum hours required for the degree program.

Provisional Admission. A student who does not meet minimum academic standards but has counterbalancing evidence to suggest the potential for success may be admitted on a provisional basis. Provisional admission provides an academic unit with more evidence on which to base its decision. Normally the academic unit reviews the student's status following completion of 12 semester hours of approved graduate study. At that time, the academic unit recommends to the Graduate College a change in status to either regular admission or withdrawal from the program. When students have completed their provisional requirements, they should check with their advisors to make sure that the change of status has been recommended. A provisional student may also be assigned deficiencies.

Nondegree Admission. A student not interested in earning a degree or not yet ready to apply to a particular degree program may enroll as a nondegree student. The application process is streamlined, and does not require submission of transcripts or test scores. For nondegree admission information and procedures, access the Web site at www.asu.edu/graduate/admission or refer to the *Application for Graduate Admission* booklet. Students may apply electronically. A maximum of nine hours taken at ASU while in this category may be applied toward a master's degree if appropriate for the student's program of study.

The six-year maximum time limit applies to nondegree semester hours appearing on a master's program of study. In addition, because of limited class size and resources, certain academic units may limit the enrollment of nondegree students.

Recognition of a Degree

Recognition of a degree is acknowledgment that the program leading to the degree is equivalent to a program offered by ASU or is an acceptable program for the proposed graduate major at ASU. A student who enters a graduate degree program at ASU is expected to have undergraduate educational experiences, including general education studies, that are appropriate for the program.

Definition of a Unit of Credit

The Arizona Board of Regents has defined (May 26, 1979) a unit of credit for the institutions under its jurisdiction. A minimum of 45 hours of work by each student is required for each unit of credit. An hour of work is the equivalent of 50 minutes of class time (often called a "con-

tact hour”) or 60 minutes of independent study work. For lecture-discussion courses, this requirement equates to at least 15 contact hours and a minimum of 30 hours of work outside of the classroom for each unit of credit. Even though the values of 15 and 30 may vary for different modes of instruction, the minimum total of 45 hours of work for each unit of credit is a constant. Since the unit of credit as defined by the Arizona Board of Regents is the cornerstone of academic degree programs at ASU, degrees granted by other institutions that are recognized by ASU should be based on a similar unit of credit.

GRADUATE COLLEGE PROCEDURES

Change in Graduate Degree Program

A change from one graduate degree program to another requires a new application to the Graduate College. The usual admission procedures are followed. For details on matters relating to the application fee, see “Fees, Deposits, and Other Charges,” page 47.

Readmission to the Graduate College

Any graduate student who has not been in attendance at the university for one or more semesters must submit an application for readmission to the Graduate College. The application should be submitted at least one month before the beginning of the semester in which the student plans to re-enter. For details on readmission and other matters relating to the application fee, access the Web site at www.asu.edu/graduate/admission or refer to the *Application for Graduate Admission* booklet.

Determination of Catalog Requirements

The *Graduate Catalog* is published annually. Requirements for an academic unit or college, campus, or the university as a whole, may change and are often upgraded.

A student graduates under the curriculum, course requirements, and regulations for graduation in effect at the time of admission to a graduate degree program at ASU. A student may also choose to graduate under any subsequent catalog issued. In determining graduation requirements, a student may use only one catalog.

Some changes in policies and procedures affect all students regardless of the catalog used by the student. These policies and procedures may appear in the catalog or in other university publications.

Registration

See “Registration,” page 72.

Audit Enrollment

Graduate students may register as auditors in one or more courses with the approval of the supervisory committee chair and the consent of the instructor involved. The student must be registered properly and pay the fees for the course. An audited course is counted in the student’s maximum course load. It does not count for students who must take a minimum number of credits, e.g., teaching assistants or students receiving financial assistance. The mark of “X” is recorded for completion of an audited course, unless the instructor determines that the student’s participation or attendance has been inadequate, in which case a “W” may be recorded.

Enrollment Verification

For general guidelines to enrollment verification, see the “Enrollment Verification Guidelines” table, page 74. These guidelines are used only to verify enrollment for the purpose of loan deferments and eligibility. The registrar is responsible for such verifications.

Course Withdrawal

During the first four weeks of a semester, a student may withdraw with a mark of “W.” From the fifth week to the end of the 10th week of a semester, a student may withdraw with a mark of “W” only from courses in which the instructor certifies the student is passing at the time of withdrawal.

The *Schedule of Classes* lists the procedures for withdrawal. Failure to withdraw officially from a course results in a grade of “E,” which is used in the computation of the GPA.

An instructor may withdraw a student from a class for disruptive classroom behavior with a mark of “W” or a grade of “E.” A student may appeal an instructor-initiated withdrawal to the standards committee of the college in which the course is offered. The decision of the committee is final.

Course Load

The course load is determined by the supervisory committee but is not to exceed 15 semester hours of credit during each of the two semesters, six semester hours during each five-week summer session, or nine semester hours of credit during an eight-week summer session. An audited course is counted in the student’s maximum load.

All teaching and research assistants and associates must enroll for a minimum of six semester hours during each fall and spring semester of their appointment. The six hours cannot include audit enrollment. Enrollment in continuing registration (595, 695, or 795) does not fulfill the six-hour requirement. A half-time (50 percent) teaching and research assistant or associate working 20 clock hours per week may not register for more than 12 hours of course work each semester; a third-time (33 percent) assistant or associate for more than 13 hours; and a quarter-time (25 percent) assistant or associate for more than 15 hours.

All graduate students doing research, working on theses or dissertations, taking comprehensive or final examinations, or using university facilities or faculty time must be registered for a minimum of one hour of credit, not audit, which appears on the program of study or which is an appropriate graduate-level course, such as continuing registration (595, 695, or 795).

For an explanation of summer session semester hour load, see “Registration,” page 72.

Assistantships and Commercial Services

All graduate students who are hired for class/course support or who hold assistantships or associateships for a specific course—including teaching assistants and research assistants—may not take or provide notes for that course to commercial notetaking services or students. An exception may be made by the course instructor(s) on a case-by-case basis as an authorized support service for a disabled student. This policy covers all commercial activities (e.g., notetaking or paid review sessions) that might be associated with a course for which the assistant or associate has assigned

responsibilities. (Refer to the *Graduate Assistant Handbook*.)

GRADUATE COLLEGE DEGREE REQUIREMENTS

Graduate Advising

Advising is much more than technical support; it is an integral part of graduate education. Students' programs of study are generally tailored to meet individual needs, and students should seek advice from faculty or advisors as they plan their course work, examinations, and other degree requirements.

Graduate College Advising Office. The Advising office serves prospective and enrolled students. Information is provided concerning Graduate College admissions, nondegree status, programs of study, and policies and procedures. Academic and professional advisement is available to nondegree students. Advisors assist nondegree or prospective students in contacting appropriate faculty and advisors. Students may call 480/965-3521 for an appointment or stop by the lobby of Wilson Hall.

Grading

The "Grades" table defines grades and gives their values.

Grades

Grade	Definition	Value
A	Excellent	4.00
B	Good	3.00
C	Passing	2.00
D	No graduate credit	1.00
E	Failure	0.00
W ¹	Withdrawal	
I	Incomplete	
X	Audit	
Y	Satisfactory	
Z ²	Course in progress	

¹ This grade is given whenever a student officially withdraws from a class.

² This grade is usually given pending completion of courses.

A grade of "P" (pass) in a 400-level course may not appear on a program of study. Grades on transfer work or ASU law credit are not included in computing GPAs.

Grades of "D" and "E" cannot be used to meet the requirements for a graduate degree, although they are used to compute the GPAs. A student receiving a grade of "D" or "E" must repeat the course in a regularly scheduled (not an independent study) class if it is to be included in the program of study. However, both the "D" or "E" and the new grade are used to compute the GPAs.

Graduate course work (500, 600, or 700 level courses) reported as an "I" (incomplete) must be completed within one calendar year. At the time the "I" grade is given, the student must complete the "Request for Grade of Incomplete" form. The form first serves as a record of the "I" grade and the work required to complete it. When the student has completed the work, the form then serves as a change-of-grade authorization.

If the work specified on the form is not completed within one calendar year, the "I" grade becomes part of the student's permanent transcript. The student is not allowed to

complete the course work as specified on the "Incomplete" form. The student may, however, repeat the course after the "I" has become permanent by reregistering, paying fees, and fulfilling all course requirements. The grade for the repeated course appears on the transcript but does not replace the permanent "I."

Scholarship

To be eligible for a degree in the Graduate College, a student must achieve two GPAs of "B" (3.00) or higher. The first GPA is based on all courses numbered 500 or higher that appear on the transcript. (Courses noted as deficiencies in the original letter of admission are not included.) The second GPA is based on all courses that appear on the program of study.

The designation of honors (*summa cum laude*, *magna cum laude*, and *cum laude*) is reserved for undergraduates. The Graduate College does not use these academic distinctions.

Academic excellence is expected of students doing graduate work. Upon recommendation from the head of the academic unit, the dean of the Graduate College can withdraw a student who is not progressing satisfactorily.

A graduate student who does not enroll for three calendar years is considered withdrawn and must reapply for admission to a degree program.

Graduate Credit Courses

Courses at the 500, 600, and 700 levels are graduate credit courses. Courses at the 400 level apply to graduate degree requirements when appearing on an approved program of study. However, 400-level courses are not graduate courses by definition and cannot be certified as such for purposes of employment or transferring to other institutions.

Reserving of Course Credit by Undergraduates. See "Reserving of Course Credit by Undergraduates," page 71.

Transfer Credit. Transfer of credit is the acceptance of credit from another institution or campus for inclusion in a program of study leading to a degree awarded by ASU. The number of hours transferred from other institutions may not exceed 20 percent of the total minimum semester hours required for a master's degree unless stated otherwise for a specific degree program.

Transfer credit taken before admission to a graduate degree program at ASU is nondegree credit. Nondegree credit taken at ASU combined with nondegree credit taken at another institution may not exceed nine hours on the master's program of study. The date (month/day/year) on the Graduate College dean's letter of admission is the actual date of admission. If the student is enrolled in courses on the admission date, those courses—if applicable—may be considered part of a program of study. Courses taken the semester before this date are nondegree hours. The nine-hour limit does not apply to the doctoral programs.

Transfer credits must be acceptable toward graduate degrees at the institution where the courses were completed. Certain types of graduate credits cannot be transferred to ASU, including the following:

1. credits awarded by postsecondary institutions in the United States that lack candidate status or accreditation by a regional accrediting association;

2. credits awarded by postsecondary institutions for life experience;
3. credits awarded by postsecondary institutions for courses taken at noncollegiate institutions (e.g., government agencies, corporations, and industrial firms);
4. credits awarded by postsecondary institutions for non-credit courses, workshops, and seminars offered by other postsecondary institutions as part of continuing education programs; and
5. credits given for extension courses.

Acceptable academic credits earned at other institutions that are based on a different unit of credit than the ones prescribed by the Arizona Board of Regents are subject to conversion before being transferred to ASU.

Only resident graduate courses with an “A” or “B” grade may be transferred. A course with the grade of pass, credit, or satisfactory may not be transferred.

Official transcripts of any transfer credit to be used on a program of study must be sent directly to the Graduate Admissions office from the office of the registrar at the institution where the credit was earned.

Independent Learning and Extension Courses. Independent learning and extension courses cannot be used to meet the requirements for a graduate degree.

Graduate Supervisory Committees

When the program of study is filed, upon the recommendation of the head of the academic unit, the dean of the Graduate College appoints a graduate student’s supervisory committee, consisting of a chair and other resident faculty members. The number of members serving on this committee depends on the degree program. Academic professionals (e.g., research scientists, research engineers), nontenure-track faculty (e.g., adjunct professors, research professors), and individuals granted affiliated faculty status through established university procedures may serve as cochairs or members or extra members of thesis and dissertation committees upon approval by the Graduate College. Individuals who are recommended by an academic unit as eligible to serve as a cochair must meet the criteria established by the academic unit and be approved by the Graduate College.

Upon the recommendation of the committee chair and head of the academic unit, ASU West tenured (or tenure-track) faculty may serve as committee members for master’s and doctoral committees at ASU Main. ASU West tenured (or tenure-track) faculty may serve as cochairs for theses and dissertations at ASU Main upon the recommendation of the head of the academic unit and approval of the dean of the Graduate College. Cochairs must meet the academic unit’s criteria for chairing theses and dissertations.

Qualified individuals outside the university, upon the recommendation of the head of the academic unit and approval of the Graduate College, may serve as members of thesis and dissertation committees; however, such individuals may not serve as chairs or cochairs (unless they have affiliated faculty status). With the approval of the academic unit and the dean of the Graduate College, former ASU faculty with students completing their degrees may continue to serve as cochairs. At least 50 percent of the committee must be made up of faculty from ASU Main.

Foreign Language Requirements

A graduate degree program may require proficiency in a foreign language. If foreign language proficiency is required, students must demonstrate at least a reading knowledge in the area of study required by the supervisory committee and consistent with the requirements for the graduate degree program. Normally, the language is selected from French, German, Russian, or Spanish, although other languages may be recommended when there is adequate justification.

Students who are required to demonstrate proficiency in a foreign language must pass a foreign language examination specific to their particular graduate programs. The examinations are administered three times each year by the Department of Languages and Literatures, which certifies language competency. Students planning to take the examination must register in the Graduate College by the deadline. The chair of the student’s supervisory committee is responsible for providing the Department of Languages and Literatures with materials from which the examination is prepared. The chair should submit or recommend relevant books and/or journals of approximately 200 pages in length in the desired foreign language.

A student may petition the Graduate College for a re-examination, but must pass the examination in no more than three attempts.

Theses and Dissertations

The master’s thesis or equivalent is an introduction to research writing. All doctoral degree candidates must submit a dissertation, with the exception of certain concentrations in the Doctor of Musical Arts, which requires three recitals and a research paper. The Doctor of Philosophy dissertation should be a valuable educational experience that demonstrates 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 hypotheses. It should be a contribution to knowledge that is worthy of publication by an established press as a book or monograph or as one or more articles in a reputable journal.

For format, the Graduate College must review the final copy of the master’s thesis, doctoral dissertation, and other final documents that are required to be placed in the library. Copies of the *Format Manual* are available in the Graduate College (also available at www.asu.edu/graduate/format-manual). The student is required to submit a complete copy of the thesis or dissertation for format review at least 10 working days before the oral defense (two weeks if there are no holidays during the time period). Doctoral students must submit a completed Survey of Earned Doctorates Awarded in the United States, conducted by the National Research Council.

Graduate students and their supervisory committee chairs jointly select a style guide or journal format representative of the field of study. The Graduate College allows some flexibility in the format of the manuscript, but Graduate College and library guidelines must be followed.

The student must submit two final copies of a thesis or dissertation to the ASU Bookstore for binding. Bound copies are placed in Hayden Library and University Archives. Doctoral candidates should also submit one copy of the title page, approval page, and abstract (which must not exceed 350 words). The student is responsible for the binding fees;

in addition, doctoral students must pay to have their dissertations microfilmed by University Microfilms International (UMI). The fee covers the expense of having the document sent to UMI, where it is microfilmed and cataloged. Information on the dissertation appears in various publications, such as *Dissertation Abstracts International* and the annual supplement of the *Comprehensive Dissertation Index*.

Application for Graduation

Students should apply for graduation no later than the date specified in the “Graduate College Calendar,” found in the *Graduate Catalog*. All fees are payable at that time. Students applying for graduation after the deadline listed in the calendar are required to pay a late fee. At the end of the semester in which they apply for graduation, students are officially notified of any degree requirements they have not yet completed. Students are requested to complete a questionnaire which serves as a graduate exit survey. Students who do not complete all degree requirements by their anticipated graduation date are required to pay a refiling fee.

Withdrawal from the University

See “Withdrawal from the University,” page 75.

A master’s or doctoral degree student who does not enroll for three calendar years is considered withdrawn and must reapply for admission to a degree program.

Summer Sessions

See “Summer Sessions,” page 471.



Augie Fernandez follows tradition by cooling off in the Cady Mall fountain during band practice.

Tim Trumble photo

Dates and Deadlines

The “Graduate College Calendar” in the current *Graduate Catalog* lists deadlines for the submission of theses and dissertations to the Graduate College, the last day to apply for graduation, the last day to hold an oral defense of a thesis or dissertation, and the last day to submit theses and dissertations to the ASU Bookstore for binding.

Student Responsibility

It is the responsibility of the graduate student to know and observe all procedures and requirements of the Graduate College as defined in the *Graduate Catalog*, the *Schedule of Classes*, and the *Format Manual*. Students should also be informed about the requirements concerning their degree programs and any special requirements within their academic units.

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

Misconduct in Scholarly Research and Creative Activities

Students are expected to maintain the highest standards of integrity and truthfulness in scholarly research and creative activities. Misconduct in scholarly research and creative activities includes, but is not limited to, fabrication, falsification or misrepresentation of data, and plagiarism. Misconduct by any student may result in suspension or expulsion from the university and/or other sanctions as specified by the individual colleges. Policies on misconduct are available in the Office of the Senior Vice President and Provost.

Graduate College Policies and Procedures

For more detailed information on Graduate College policies and procedures, refer to the current *Graduate Catalog*.

Policies and Procedures of the Graduate Council Appeals Board

The Graduate Council Appeals Board (GCAB) acts as the appeals body for graduate students seeking redress on academic decisions regarding their graduate program. Before filing an appeal, the graduate student should discuss the situation with the associate dean of the Graduate College to explore resolution of the matter at the unit or college level.

For more detailed information on the Graduate Council appeals policies and procedures, refer to the current *Graduate Catalog*.

ASU Graduate Degrees

Degree/Major	Concentration	Campus
Master of Accountancy Accountancy		Main
Master of Architecture Architecture		Main
Master of Arts Anthropology	Archeology, bioarcheology, linguistics, medical anthropology, museum studies, physical anthropology, social-cultural anthropology	Main
Art	Art education, art history	Main
Communication		Main
Curriculum and Instruction ¹	Bilingual education, communication arts, early childhood education, elementary education, English as a second language, Indian education, mathematics education, multicultural education, ² reading education, science education, secondary education, social studies education	Main
Educational Psychology ¹		Main
English	Comparative literature, English linguistics, literature and language, rhetoric and composition	Main
French	Comparative literature, language and culture, literature	Main
Geography		Main
German	Comparative literature, language and culture, literature	Main
History	Asian history, British history, European history, Latin American history, public history, U.S. history, U.S. western history	Main
Humanities		Main
Learning and Instructional Technology ¹		Main
Mathematics		Main
Music	Ethnomusicology, music history and literature, music theory	Main
Philosophy		Main
Political Science	American politics, comparative politics, international relations, political theory	Main
Religious Studies		Main
Social and Philosophical Foundations of Education		Main
Sociology		Main
Spanish	Comparative literature, language and culture, linguistics, literature	Main
Special Education ¹		Main
Theatre		Main
Master of Business Administration Business Administration		Main West
Master of Computer Science ¹ Computer Science		Main
Master of Counseling Counseling		Main
Master of Education Counselor Education		Main

¹ This major is offered toward more than one degree at the same level.

² Applications are not being accepted at this time.

³ This major has formalized concentration(s); other areas of study are available.

⁴ This collaborative program is offered by the three state universities. Refer to the 1999–2000 *Graduate Catalog* for more information.

⁵ Students apply to this degree program through the Graduate College.

⁶ This program is administered jointly by the College of Education and the Graduate College.

⁷ This major is jointly offered with the University of Arizona.

⁸ Students apply to this degree program through the College of Law, not the Graduate College.

ASU Graduate Degrees (continued)

Degree/Major	Concentration	Campus
Master of Education (continued)		
Curriculum and Instruction ¹	Bilingual education, communication arts, early childhood education, elementary education, English as a second language, Indian education, mathematics education, multicultural education, ² reading education, science education, secondary education, social studies education	Main
Educational Administration and Supervision ¹		Main West
Educational Media and Computers ^{2,3}	Business education	Main
Educational Psychology ¹		Main
Elementary Education	Bilingual education, educational media and computers, ESL education, reading	West
Higher and Postsecondary Education Learning and Instructional Technology ¹	Higher education	Main Main
Secondary Education		West
Special Education ¹	Gifted, mildly handicapped, multicultural exceptional, severely/multiply handicapped	Main
Master of Engineering⁴		
Engineering		Main
Master of Environmental Planning		
Environmental Planning	Urban planning	Main
Master of Fine Arts		
Art	Ceramics, drawing, fibers, intermedia, metals, painting, photographic studies, photography, printmaking, sculpture, wood	Main
Creative Writing ⁵		Main
Dance		Main
Theatre	Performance, scenography, theatre for youth	Main
Master of Health Services Administration		
Health Services Administration		Main
Master of Mass Communication		
Mass Communication		Main
Master of Music		
Composition		Main
Music Education	Choral music, general music, instrumental music, jazz studies	Main
Performance	Music theatre musical direction, music theatre performance, performance pedagogy, piano accompanying, solo performance (instrumental, keyboard, voice)	Main
Master of Natural Science		
Natural Science	Biology, chemistry, geology, mathematics, microbiology, physics, plant biology	Main
Master of Physical Education		
Physical Education		Main
Master of Public Administration		
Public Administration	Public information management, public management, public policy analysis and evaluation, urban management and planning	Main
Master of Science		
Aerospace Engineering ¹		Main
Agribusiness	Agribusiness management and marketing, food quality assurance	East
Bioengineering		Main
Biology ³	Ecology	Main
Building Design	Computer-aided design, energy performance and climate-responsive architecture, facilities development and management	Main

ASU Graduate Degrees (continued)

Degree/Major	Concentration	Campus
Master of Science (continued)		
Chemical Engineering ¹	Biomedical and clinical engineering, chemical process engineering, chemical reactor engineering, energy and materials conversion, environmental control, solid-state processing, transport phenomenon	Main
Chemistry	Analytical chemistry, biochemistry, geochemistry, inorganic chemistry, organic chemistry, physical chemistry, solid-state chemistry	Main
Civil Engineering ¹		Main
Communication Disorders		Main
Computer Science ¹		Main
Construction	Construction science, facilities, management	Main
Economics		Main
Electrical Engineering ¹		Main
Engineering Science ¹		Main
Environmental Resources		Main
Exercise Science/Physical Education		Main
Family Resources and Human Development	Family studies, general family resources and human development	Main
Geology		Main
Industrial Engineering ¹		Main
Information Management		Main
Justice Studies		Main
Mechanical Engineering ¹		Main
Microbiology		Main
Molecular and Cellular Biology		Main
Nursing	Adult health nursing, community health nursing, community mental health/psychiatric nursing, family health nursing, nursing administration, parent-child nursing, women's health	Main
Physics		Main
Plant Biology ³	Ecology, photosynthesis	Main
Recreation	Outdoor recreation, recreation administration, social/psychological aspects of leisure, tourism and commercial recreation	Main
Statistics ⁵		Main
Master of Science in Design		
Design	Graphic design, industrial design, interior design	Main
Master of Science in Engineering		
Aerospace Engineering ¹		Main
Chemical Engineering ¹	Biomedical and clinical engineering, chemical process engineering, chemical reactor engineering, energy and materials conversion, environmental control, solid-state processing, transport phenomena	Main
Civil Engineering ¹		Main
Electrical Engineering ¹		Main
Engineering Science ¹		Main
Industrial Engineering ¹		Main
Mechanical Engineering ¹		Main
Master of Social Work		
Social Work		Main

¹ This major is offered toward more than one degree at the same level.

² Applications are not being accepted at this time.

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ASU Graduate Degrees (continued)

Degree/Major	Concentration	Campus
Master of Taxation Taxation		Main
Master of Teaching English as a Second Language Teaching English as a Second Language		Main
Master of Science in Technology Technology	Aeronautical engineering technology, aviation human factors, aviation management, computer systems, electronic systems, environmental technology, information technology, instrumentation and measurement technology, management of technology, manufacturing engineering technology, mechanical engineering technology, microelectronics, security engineering technology	East
Doctor of Education Curriculum and Instruction ¹	Bilingual education, communication arts, curriculum studies, early childhood education, elementary education, English as a second language, Indian education, mathematics education, multicultural education, ² reading education, science education, secondary education, social studies education	Main
Educational Administration and Supervision		Main
Higher and Postsecondary Education	Higher education	Main
Doctor of Musical Arts Music	Choral conducting, music composition, music education, solo performance (instrumental, keyboard, voice)	Main
Doctor of Philosophy Aerospace Engineering		Main
Anthropology	Archaeology, physical anthropology, social-cultural anthropology	Main
Bioengineering		Main
Biology ³	Ecology	Main
Business Administration	Accountancy, finance, health services research, ² information management, management, marketing, supply chain management	Main
Chemical Engineering	Biomedical and clinical engineering, chemical process engineering, chemical reactor engineering, energy and materials conversion, environmental control, solid-state processing, transport phenomena	Main
Chemistry	Analytical chemistry, biochemistry, geochemistry, inorganic chemistry, organic chemistry, physical chemistry, solid-state chemistry	Main
Civil Engineering		Main
Communication	Communicative development, intercultural communication, organizational communication	Main
Computer Science		Main
Counseling Psychology		Main
Curriculum and Instruction ^{1,6}	Curriculum studies, early childhood education, educational media and computers, ² elementary education, English education, exercise and wellness education, music education, physical education, reading education, science education, special education	Main
Economics		Main
Educational Leadership and Policy Studies		Main
Educational Psychology	Lifespan developmental psychology; measurement, statistics, and methodological studies; school psychology	Main
Electrical Engineering		Main
Engineering Science		Main
English	Literature, rhetoric/composition and linguistics	Main
Environmental Design and Planning	Design; history, theory, and criticism; planning	Main
Exercise Science ⁵	Biomechanics, motor behavior/sport psychology, physiology of exercise	Main
Family Science ³	Marriage and family therapy	Main

ASU Graduate Degrees (continued)

Degree/Major	Concentration	Campus
Doctor of Philosophy (continued)		
Geography		Main
Geology		Main
History	Asian history, British history, European history, Latin American history, U.S. history	Main
History and Theory of Art ⁷		Main
Industrial Engineering		Main
Justice Studies ³	Criminal and juvenile justice; dispute resolution; law, justice, and minority population; law, policy, and evaluation; women, law, and justice	Main
Learning and Instructional Technology	Instructional technology, learning	Main
Mathematics		Main
Mechanical Engineering		Main
Microbiology		Main
Molecular and Cellular Biology		Main
Physics		Main
Plant Biology ³	Ecology, photosynthesis	Main
Political Science	American politics, comparative politics, international relations, political theory	Main
Psychology	Behavioral neuroscience, clinical psychology, cognitive/behavioral systems, developmental psychology, environmental psychology, quantitative research methods, social psychology	Main
Science and Engineering of Materials	High-resolution nanostructure analysis, solid-state device materials design	Main
Social Work		Main
Sociology		Main
Spanish		Main
Speech and Hearing Science	Developmental neurolinguistic disorders, neuroauditory processes, neurogerontologic communication disorders	Main
Theatre	Theatre for youth	Main
Doctor of Public Administration		
Public Administration		Main
Juris Doctor⁸		
		Main

¹ This major is offered toward more than one degree at the same level.

² Applications are not being accepted at this time.

³ This major has formalized concentration(s); other areas of study are available.

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