# Minors, Certificates, and Interdisciplinary Studies

Interdisciplinary studies are available to students through an interdisciplinary degree, such as the Bachelor of Interdisciplinary Studies, or an extensive choice of minors or certificates that may be taken in conjunction with other majors. Since interdisciplinary studies provide skills that support employment in a rapidly changing workplace, students are encouraged to consider these options. Consult the academic advisor in the appropriate major about the impact of enrolling in a minor or certificate program.

#### MINORS

A minor is an approved, coherent concentration of academic study in a single discipline, involving substantially fewer hours of credit than a corresponding major. Most ASU colleges offer undergraduate minors in addition to majors; see the "ASU Minors" table, page 117.

Students in most majors may pursue one or more minors and, upon successful completion of the prescribed course work, have that accomplishment officially recognized on the ASU transcript at graduation if (1) the college/department of the minor officially certifies, through established verification procedures, that all requirements for the minor have been met and (2) the college (and, in certain colleges, the department) of the student's major allows the official recognition of the minor.

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken.

*Note:* Certain major and minor combinations may be deemed inappropriate either by the college or department of the major or minor. Inappropriate combinations include (but are not limited to) ones in which an excessive number of courses in the minor are simultaneously being used to fulfill requirements of the student's major.

#### CERTIFICATES

Students may pursue some certificate programs along with a major and other certificate programs independently. Graduate certificates and postbaccalaureate certificates are available to students who already hold a bachelor's degree. For more information, see the "ASU Undergraduate Certificates" table, page 119; "ASU Postbaccalaureate Certificates" table, page 121; and "ASU Graduate Certificates" table, page 121. Graduate certificates constitute graduate work; postbaccalaureate certificates are distinct from graduate certificates and are an extension of the undergraduate curriculum.

### INTERDISCIPLINARY STUDIES

Bachelor of Interdisciplinary Studies. For information about the Bachelor of Interdisciplinary Studies at ASU Main or ASU East, see "Bachelor of Interdisciplinary Studies," page 123, or "Interdisciplinary Studies—B.I.S.," page 615.

**Energy Studies.** An opportunity for instructional and research involvement in energy matters exists through at least two curricular paths: (1) general studies, which emphasize energy as an elective beyond the scope of a chosen major (for more information, call the coordinator of interdisciplinary studies in energy, at 480/965-4548); and (2) specific studies in the College of Architecture and Environmental Design, for those pursuing the Master of Architecture degree or the Master of Science degree in Building Design.

**Environmental Studies.** The Center for Environmental Studies encourages and coordinates interdisciplinary environment-related activities in the natural and social sciences within the university. The center sponsors special courses, conferences, and workshops on environmental topics. Drawing from faculty and students throughout the university, the center participates in research and community programs relating to environmental problem areas. It does not formally offer courses or a degree program. For more information, see "Center for Environmental Studies," page 43.

**Film Studies.** The Film Studies Program exists not only to provide information and experience but also to serve as a means of creative expression for the student and as a useful subject and tool in teaching. The program is not designed to produce professional filmmakers, but it may provide practical preparation for students desiring further film study at other institutions.

For more information, call the Film Studies coordinator at 480/965-7644.

**Gerontology.** The university-wide Gerontology Program brings together faculty from three campuses and several disciplines to teach courses related to adult development and aging, to collaborate on gerontological research, and to participate in projects of service to older adults. Courses related to aging are taught throughout the university by faculty who are active contributors to research, theory, and public policy and practice. For more information, see "Gerontology," page 677, call 602/543-6642, or access www.west.asu.edu/ chs/grn on the Web. See also "Gerontology," page 695.

A graduate certificate and an undergraduate minor are available in Gerontology. The certificate consists of 21 semester hours—nine hours of required course work and 12 hours of electives. The minor consists of 18 semester hours—six hours of required course work and 12 hours of electives.

In addition, gerontology provides students with opportunities to gain practical experience in working with elderly

# MINORS, CERTIFICATES, AND INTERDISCIPLINARY STUDIES

Minor	Administered By	Campus	Page
African American Studies	African American Studies Program	Main	333
American Indian Studies	American Indian Studies Program	Main	466
American Studies	Department of American Studies	West	673
Anthropology	Department of Anthropology	Main	337
Applied Biological Sciences	East College	East	614
Applied Psychology	East College	East	622
Architectural Studies	School of Architecture	Main	133
Art History	School of Art	Main	273
Asian Languages (Chinese/Japanese)	Department of Languages and Literatures	Main	385
Astronomy	Department of Physics and Astronomy	Main	427
Biochemistry	Department of Chemistry and Biochemistry	Main	344
Biology	School of Life Sciences	Main	404
Business <sup>1</sup>	W. P. Carey School of Business	Main	165
Chemistry	Department of Chemistry and Biochemistry	Main	344
Chicana and Chicano Studies	Department of Chicana and Chicano Studies	Main	348
Communication	Hugh Downs School of Human Communication	Main	470
Communication Studies	Department of Communication Studies	West	675
Computational Mathematical Sciences	Department of Mathematics and Statistics	Main	417
Dance	Department of Dance	Main	289
Design Studies	School of Design	Main	144
Early Childhood Education	Division of Curriculum and Instruction	Main	_
Economics for Students Planning a Career in Law	Department of Economics	Main	351
English	Department of American Studies	West	675
English with a Concentration in Linguistics	Department of English	Main	353
English with a Concentration in Literature	Department of English	Main	353
Ethnic Studies	College of Arts and Sciences	West	675
Family and Human Development	Department of Family and Human Development	Main	359
Film and Video Studies	Department of Interdisciplinary Arts and Performance	West	675
Food and Nutrition Management	Department of Nutrition	East	636
French	Department of Languages and Literatures	Main	385
General Economics	Department of Economics	Main	351
Geography	Department of Geography	Main	363
Geological Sciences	Department of Geological Sciences	Main	367
German	Department of Languages and Literatures	Main	385
Gerontology <sup>2</sup>	Gerontology Program	West	678
History	Department of American Studies Department of History	West Main	675 371
Human Nutrition	Department of Nutrition	East	636
Humanities	Interdisciplinary Humanities Program	Main	377
Interdisciplinary Arts and Performance	Department of Interdisciplinary Arts and Performance	West	675
Interdisciplinary Organizational Studies	Department of Social and Behavioral Sciences	West	675
Interior Design History	School of Design	Main	133
Italian	Department of Languages and Literatures	Main	385
Justice Studies	School of Justice Studies	Main	478

This minor is for nonbusiness majors only.
 This university-wide minor is administered by ASU West.

## MINORS, CERTIFICATES, AND INTERDISCIPLINARY STUDIES

Minor	ASU Minors (continued) Administered By	Campus	Page
Kinesiology	Department of Kinesiology	Main	380
Landscape Studies	School of Planning and Landscape Architecture	Main	154
Life Sciences	Department of Life Sciences	West	675
Mass Communication	Walter Cronkite School of Journalism and Mass Communication	Main	475
Mathematics	Department of Integrative Studies Department of Mathematics and Statistics	West Main	675 417
Microbiology	School of Life Sciences	Main	402
Music	School of Music	Main	299
Philosophy	Department of Integrative Studies Department of Philosophy	West Main	675 424
Physics	Department of Physics and Astronomy	Main	428
Plant Biology	School of Life Sciences	Main	403
Political Science	Department of Political Science Department of Social and Behavioral Sciences	Main West	434 675
Prelaw	College of Human Services	West	675
Psychology	Department of Psychology Department of Social and Behavioral Sciences	Main West	438 675
Public Relations and Strategic Communications	Department of Communication Studies	West	675
Recreation Management	Department of Recreation Management and Tourism	Main	483
Religious Studies	College of Arts and Sciences Department of Religious Studies	West Main	675 441
Russian	Department of Languages and Literatures	Main	386
Small Business	East College	East	623
Social and Behavioral Sciences	Department of Social and Behavioral Sciences	West	675
Sociocultural Anthropology	Department of Social and Behavioral Sciences	West	675
Sociology	Department of Social and Behavioral Sciences Department of Sociology	West Main	675 436
Spanish	Department of American Studies Department of Languages and Literatures	West Main	675 386
Special Events Management	Department of Recreation and Tourism Management	West	675
Speech and Hearing Science	Department of Speech and Hearing Science	Main	448
Statistics	Department of Mathematics and Statistics	Main	414
Theatre	Department of Theatre	Main	307
Tourism	Department of Recreation Management and Tourism	Main	483
Tourism Management	Department of Recreation and Tourism Management	West	675
Urban Planning	School of Planning and Landscape Architecture	Main	155
Wellness Foundations	Department of Exercise and Wellness	East	629
Women's Studies	Women's Studies Program	Main West	451 675

## ASU Minors (continued)

<sup>1</sup> This minor is for nonbusiness majors only.

<sup>2</sup> This university-wide minor is administered by ASU West.

people. A practicum, held at the Veterans Administration Hospital, is available to students who have completed some gerontology course work. Gerontology also helps students find rewarding internships in community programs for older adults. *B.I.S. Concentration.* A concentration in gerontology is available under the Bachelor of Interdisciplinary Studies (B.I.S.) degree, a program intended for the student who has academic interests that might not be satisfied with existing majors. Building on two academic concentrations (or one double concentration) and an interdisciplinary core,

## MINORS, CERTIFICATES, AND INTERDISCIPLINARY STUDIES

Certificate	Administered By	Campus	Page
African American Studies Certificate	African American Studies Program	Main	333
American Indian Studies Certificate	American Indian Studies Program	Main	467
American Public Policy Certificate	Department of Political Science	Main	432
Asian Pacific American Studies Certificate	Asian Pacific American Studies Program	Main	468
Asian Studies	Center for Asian Studies	Main	326
Business English Certificate <sup>1</sup>	College of Extended Education	Extended	696
Civic Education Certificate	Department of Political Science	Main	432
Classical Studies Certificate	Department of Languages and Literatures and Interdisciplinary Humanities Program	Main	326
College of Liberal Arts and Sciences Enriched Certificate	College of Liberal Arts and Sciences	Main	326
Dealership Management, Certificate in <sup>2</sup>	W. P. Carey School of Business	Main	170
East Asian Studies Certificate	Center for Asian Studies	Main	326
Ethics Certificate	Department of Philosophy	Main	424
Ethnic Studies, Certificate in	College of Arts and Sciences	West	675
Film and Video Studies, Certificate in	Department of Interdisciplinary Arts and Performance	West	675
Geographic Information Science Certificate	Department of Geography	Main	327
Hazardous Materials and Waste Management Certificate	Department of Information and Management Technology	East	654
Health Physics Certificate	Pre-Health Professions Office	Main	327
History and Philosophy of Science Certificate	School of Life Sciences	Main	327
Human Performance Improvement Certificate <sup>1</sup>	College of Extended Education and the American Society of Training and Development	Extended	696
International Business Studies Certificate	W. P. Carey School of Business	Main	181
International Studies Certificate	Department of Political Science	Main	433
Islamic Studies Certificate	Department of Religious Studies	Main	441
Jewish Studies Certificate	Jewish Studies Committee	Main	327
Latin American Studies Certificate	Latin American Studies Center	Main	328
Maintenance Management Certificate <sup>1</sup>	College of Extended Education	Extended	696
Medieval and Renaissance Studies Certificate	Arizona Center for Medieval and Renaissance Studies	Main	328
Multimedia Writing and Technical Communication Certificate	East College	East	633
Nonprofit Youth and Human Service Leadership and Management: American Humanics Certificate	Department of Recreation Management and Tourism	Main	483
Professional Purchasing Certificate <sup>1</sup>	College of Extended Education	Extended	696
Public Administration and Public Management Certificate	School of Public Affairs	Main	481
Quality Analysis Certificate	W. P. Carey School of Business	Main	170
Russian and East European Studies Certificate	Russian and East European Studies Center	Main	328
Scandinavian Studies Certificate	Department of Languages and Literatures	Main	329
Small Business and Entrepreneurship Certificate <sup>2</sup>	W. P. Carey School of Business	Main	170
Southeast Asian Studies Certificate	Program for Southeast Asian Studies	Main	329
Supervisory and Management Skills Certificate <sup>1</sup>	College of Extended Education	Extended	
Symbolic Systems, Certificate in	Department of Philosophy	Main	329

## **ASU Undergraduate Certificates**

<sup>1</sup> This certificate is not for academic credit.
 <sup>2</sup> This certificate is only for students in the WPCSB.

Certificate	Administered By	Campus	Page
Translation Certificate	Department of Languages and Literatures	Main	386
Women's Studies, Certificate in	Women's Studies Program	Main West	330 675
Writing, Certificate in	Department of American Studies Department of English	West Main	675 353

ASU Undergraduate Certificates (continued)

<sup>1</sup> This certificate is not for academic credit.

<sup>2</sup> This certificate is only for students in the WPCSB.

students in the B.I.S. program take active roles in creating their educational plans and defining their career goals. For more information, see "Bachelor of Interdisciplinary Studies," page 123.



Bioengineering research is a key element in the future of ASU. The first of three buildings housing the Arizona Biodesign Institute is slated to open fall 2004.

## MILITARY OFFICER TRAINING

U.S. Air Force and U.S. Army ROTC units are active on the ASU campus. See "Department of Aerospace Studies," page 330, and "Department of Military Science," page 422, for more information.

**Defense Activity for Nontraditional Education Support.** ASU is a participating institution with DANTES and is listed in the DANTES Directory of Independent Study. DANTES is an executive agency of the Department of Defense that provides educational support for the voluntary education programs of all services. The primary missions of DANTES are (1) to provide nationally recognized examination and certification programs as part of the voluntary education programs of military services and (2) to facilitate the availability of high-quality independent institutions for service men and women.

# WESTERN INTERSTATE COMMISSION FOR HIGHER EDUCATION

Professional Student Exchange Program. Arizona residents who wish to attend professional schools of dentistry, occupational therapy, optometry, osteopathy, physician assistance, and veterinary medicine may enroll in professional programs in other states or at in-state private institutions since these programs are not available at Arizona's public universities. Through the exchange, the student receives preference in admission and pays only the resident tuition fee at a public institution, or the difference between the WICHE support fee and standard tuition at a private school. Applicants must be legal residents of Arizona for a minimum of five years before the commencement of training, and be U.S. citizens, and must have maintained at least average grades to be eligible to be certified for support through the WICHE program. Recipients are required to practice in Arizona one year for each year of support or repay 50 percent of the funds expended on their behalf plus interest.

For an application and more information, call the Arizona Board of Regents at 602/229-2500, or access the WICHE Web site at www.wiche.edu.

Western Undergraduate Exchange. Arizona residents may enroll in designated two-year and four-year public institutions and programs in other participating states at a reduced tuition level. Tuition for WUE studies is the regular in-state tuition plus 50 percent of that amount. In all programs, the cost to WUE students is substantially less than

Certificate	Administered By	Campus	Page
Accountancy, Postbaccalaureate Certificate in*	Department of Accounting and Information Systems Management	West	675
Communication and Human Relations, Postbaccalaureate Certificate in*	Department of Communication Studies	West	675
Multimedia Writing and Technical Communication, Postbaccalaureate Certificate in	East College	East Extended	633 696
Professional Accountancy, Postbaccalaureate Certificate in*	Department of Accounting and Information Systems Management	West	675

## ASU Postbaccalaureate Certificates

\* For more information, see the ASU West Catalog.

Certificate	Administered By	Campus	Page
African and African Diaspora Studies, Graduate Certificate in <sup>1</sup>	African American Studies Program		
Asian Studies, Graduate Certificate in <sup>1</sup>	Center for Asian Studies	Main Extended	— 695
Atmospheric Science, Graduate Certificate in <sup>1</sup>	College of Liberal Arts and Sciences and Ira A. Fulton School of Engineering	Main	—
Geographic Information Science, Interdisciplinary Certificate in <sup>1</sup>	College of Liberal Arts and Sciences and the Graduate College	Main	—
Gerontology, Certificate in <sup>2</sup>	Gerontology Program	West Extended	678 695
Indian Law Certificate <sup>1</sup>	College of Law	Main	—
Institutional Research, Graduate Certificate in <sup>1</sup>	College of Education	Main	_
Law, Science, and Technology, Certificate in <sup>1</sup>	College of Law	Main	—
Linguistics, Graduate Certificate in <sup>1</sup>	Committee on Linguistics	Main	_
Medieval Studies Certificate <sup>1</sup>	Arizona Center for Medieval and Renaissance Studies (ACMRS)	Main	—
Museum Studies Certificate <sup>1</sup>	Department of Anthropology	Main	_
Nonprofit Leadership and Management Certificate	College of Public Programs	Main	466
Post-Bachelor's Artist Diploma <sup>1</sup>	School of Music	Main	_
Post-Master's Nurse Practitioner Certificate <sup>1</sup>	College of Nursing	Main	—
Renaissance Studies Certificate <sup>1</sup>	ACMRS	Main	_
Scholarly Publishing Certificate <sup>1</sup>	Department of History	Main	
Statistics, Certificate in <sup>1</sup>	Committee on Statistics and the Graduate College	Main	
Transportation Systems Certificate	Committee on Transportation Systems and the Graduate College	Main Extended	494 696

**ASU Graduate Certificates** 

<sup>1</sup> For more information, see the *Graduate Catalog*.

<sup>2</sup> This university-wide certificate program is administered by ASU West.

nonresident tuition. Students do not need to demonstrate financial need to receive the WUE tuition benefit. WUE participating states are Alaska, Arizona, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington, and Wyoming.

Check the WICHE Web site at www.wiche.edu for a list of participating institutions and programs.

### **CONCURRENT AND DUAL DEGREES**

Graduate students have the opportunity to pursue more than one degree at the same time as part of an organized program. For more information, see the "Concurrent and Dual Degrees" table, page 508, and the *Graduate Catalog*.