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 127.

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

A student wishing to pursue a specific minor should consult an academic advisor in the unit offering that minor to ensure that an appropriate set of courses is taken. The student should also consult with an academic advisor in the college or department of his or her major to make sure the college or department of the major allows the recognition of the minor.

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

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 129; "ASU Postbaccalaureate Certificates" table, page 131; and "ASU Graduate Certificates" table, page 131. 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, see "School of Interdisciplinary Studies," page 139, or "Interdisciplinary Studies—BIS," page 214.

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 Design, for those pursuing the Master of Architecture degree or the Master of Science degree in Building Design.

Environmental Studies. The Global Institute of Sustainability, established originally in 1974 as the Center for Environmental Studies, encourages and coordinates interdisciplinary environment-related activities in the natural and social sciences within the university. The institute 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 "Global Institute of Sustainability," page 51.

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 686, call 602/543-6642, or access www.west.asu.edu/chs/grn on the Web.

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 people. The program helps students find rewarding internships in community programs for older adults.

BIS Concentration. A concentration in gerontology is available under the Bachelor of Interdisciplinary Studies (BIS) 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

ASU Minors

Minor	Administered By	Campus	Page
African and African American Studies	African and African American Studies Program	Tempe	519
American Indian Studies	American Indian Studies Program	Tempe	523
American Studies	Department of Language, Cultures, and History	West	654
Anthropology	School of Human Evolution and Social Change	Tempe	569
Applied Biological Sciences	East College	Polytechnic	219
Applied Psychology	East College	Polytechnic	225
Architectural Studies	School of Architecture and Landscape Architecture	Tempe	322
Art History	School of Art	Tempe	444
Asian Languages (Chinese/Japanese)	Department of Languages and Literatures	Tempe	582
Astronomy	Department of Physics and Astronomy	Tempe	625
Biochemistry	Department of Chemistry and Biochemistry	Tempe	529
Biological Sciences	School of Life Sciences	Tempe	602
Business ¹	W. P. Carey School of Business	Tempe	289
Chemistry	Department of Chemistry and Biochemistry	Tempe	529
Chicana and Chicano Studies	Department of Chicana and Chicano Studies	Tempe	533
Communication	Hugh Downs School of Human Communication	Tempe	564
Communication Studies	Department of Communication Studies	West	654
Computational Mathematical Sciences	Department of Mathematics and Statistics	Tempe	615
Dance	Department of Dance	Tempe	466
Design Studies	College of Design	Tempe	327 332
Early Childhood Education	Division of Curriculum and Instruction	Tempe	363
Economics for Students Planning a Career in Law	Department of Economics	Tempe	536
English	Department of Language, Cultures, and History	West	654
English with a Concentration in Linguistics	Department of English	Tempe	538
English with a Concentration in Literature	Department of English	Tempe	538
Ethnic Studies	New College of Interdisciplinary Arts and Sciences	West	654
Family and Human Development	Department of Family and Human Development	Tempe	544
Film and Video Studies	Department of Interdisciplinary Arts and Performance	West	710
Food and Nutrition Management	Department of Nutrition	Polytechnic	242
French	Department of Languages and Literatures	Tempe	583
General Economics	Department of Economics	Tempe	535
Geography	Department of Geography	Tempe	549
Geological Sciences	Department of Geological Sciences	Tempe	554
German	Department of Languages and Literatures	Tempe	583
Gerontology ²	Gerontology Program	West	654
History	Department of History Department of Language, Cultures, and History	Tempe West	558 654
Human Nutrition	Department of Nutrition	Polytechnic	
Interdisciplinary Arts and Performance	Department of Interdisciplinary Arts and Performance	West	654
Interdisciplinary Organizational Studies	Department of Interdisciplinary Arts and Performance Department of Social and Behavioral Sciences	West	654
Interior Design History	Department of Social and Benavioral Sciences Department of Interior Design		332
	Department of Interior Design Department of Languages and Literatures	Tempe	
Italian		Tempe	583
Justice Studies	School of Justice and Social Inquiry	Tempe	573

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

ASU Minors (continued)

Minor	Administered By	Campus	Page
Kinesiology	Department of Kinesiology	Tempe	578
Landscape Studies	School of Architecture and Landscape Architecture	Tempe	322
Life Sciences	Department of Integrated Natural Sciences	West	654
Mass Communication	Walter Cronkite School of Journalism and Mass Communication	Tempe	493
Mathematics	Department of Integrative Studies Department of Mathematics and Statistics	West Tempe	654 615
Music	School of Music	Tempe	478
Philosophy	Department of Integrative Studies Department of Philosophy	West Tempe	654 622
Physics	Department of Physics and Astronomy	Tempe	625
Political Science	Department of Political Science Department of Social and Behavioral Sciences	Tempe West	630 654
Prelaw	College of Human Services	West	654
Psychology	Department of Psychology Department of Social and Behavioral Sciences	Tempe West	636 654
Public Relations and Strategic Communications	Department of Communication Studies	West	654
Recreation Management	Department of Recreation and Tourism Management School of Community Resources and Development	West Downtown	689 190
Religious Studies	Department of Religious Studies New College of Interdisciplinary Arts and Sciences	Tempe West	639 654
Russian	Department of Languages and Literatures	Tempe	583
Small Business	East College	Polytechnic	226
Social and Behavioral Sciences	Department of Social and Behavioral Sciences	West	654
Social Welfare	School of Social Work	Downtown	196
Sociocultural Anthropology	Department of Social and Behavioral Sciences	West	654
Sociology	Department of Social and Behavioral Sciences Department of Sociology	West Tempe	654 643
Spanish	Department of Language, Cultures, and History Department of Languages and Literatures	West Tempe	654 583
Special Events Management	Department of Recreation and Tourism Management	West	654
Speech and Hearing Science	Department of Speech and Hearing Science	Tempe	646
Statistics	Department of Mathematics and Statistics	Tempe	615
Theatre	School of Theatre and Film	Tempe	486
Tourism	School of Community Resources and Development	Downtown	190
Tourism Management	Department of Recreation and Tourism Management	West	654
Urban Planning	School of Planning	Tempe	337
Wellness Foundations	Department of Exercise and Wellness	Polytechnic	234
Women and Gender Studies	Women and Gender Studies Program	Tempe	649
Women's Studies	Women's Studies Program	West	654
Youth Services Leadership	Department of Recreation and Tourism Management	West	690

¹ This minor is for nonbusiness majors only.

² This university-wide minor is administered by West campus.

ASU Undergraduate Certificates

Certificate	Administered By	Campus	Page
Accelerated Financial Planner ¹	School of Extended Education	_	136
African and African American Studies Certificate	African and African American Studies Program	Tempe	519
American Indian Studies Certificate	American Indian Studies Program	Tempe	523
Asian Pacific American Studies Certificate	Asian Pacific American Studies Program	Tempe	524
Asian Studies Certificate	Center for Asian Studies	Tempe	509
ASU Skill Certificate	School of Extended Education	_	136
Automotive Entrepreneurs and Leaders, Certificate for ²	W. P. Carey School of Business	Tempe	294
Business English Certificate ¹	School of Extended Education	_	136
Certified Management Accountant ¹	School of Extended Education	_	137
Civic Education Certificate	Department of Political Science	Tempe	629
Classical Studies Certificate	Department of Languages and Literatures	Tempe	509
College of Liberal Arts and Sciences Enriched Certificate	College of Liberal Arts and Sciences	Tempe	509
Early Intervention Certificate	Department of Family and Human Development and School of Social Work	Tempe	196
East Asian Studies Certificate	Center for Asian Studies	Tempe	509
Ethics Certificate	Department of Philosophy	Tempe	622
Ethnic Studies, Certificate in	New College of Interdisciplinary Arts and Sciences	West	698
Film and Video Studies, Certificate in	Department of Interdisciplinary Arts and Performance	West	711
Fire Service Management Certificate ³	Department of Technology Management	Polytechnic	267
Geographic Information Science Certificate	Department of Geography	Tempe	511
Hazardous Materials and Waste Management Certificate	Department of Information and Management Technology	Polytechnic	265
Healthcare Organizations and Society, Certificate in	School of Life Sciences and the W. P. Carey School of Business	Tempe	511 295
History and Philosophy of Science Certificate	School of Life Sciences	Tempe	512
International Business Studies, Certificate in	W. P. Carey School of Business	Tempe	299
International Studies Certificate	Department of Political Science	Tempe	630
Islamic Studies Certificate	Department of Religious Studies	Tempe	512
Jewish Studies Certificate	Jewish Studies Committee	Tempe	512
Latin American Studies Certificate	Latin American Studies Center	Tempe	512
Leadership and Ethics	School of Public Affairs	Downtown	192
Lesbian, Gay, Bisexual, and Transgender Studies	College of Public Programs	Downtown	187
Medieval and Renaissance Studies Certificate	Arizona Center for Medieval and Renaissance Studies	Tempe	513
Multimedia Writing and Technical Communication Certificate	East College	Polytechnic	239
Nonprofit Youth and Human Service Leadership and Management: American Humanics Certificate	School of Community Resources and Development	Downtown	190
Public Administration and Public Management Certificate	School of Public Affairs	Downtown	192
Quality Analysis Certificate	W. P. Carey School of Business	Tempe	294
Russian and East European Studies Certificate	Russian and East European Studies Center	Tempe	513
Scandinavian Studies Certificate	Department of Languages and Literatures	Tempe	513

¹ This certificate is not for academic credit.

This certificate is only for students in the W. P. Carey School of Business.
 This program is also offered through the School of Extended Education.

ASU Undergraduate Certificates (continued)

Certificate	Administered By	Campus	Page
Small Business and Entrepreneurship Certificate ²	W. P. Carey School of Business	Tempe	294
Southeast Asian Studies Certificate	Program for Southeast Asian Studies	Tempe	514
Spa Management	Department of Exercise and Wellness	Polytechnic	235
Supervisory and Management Skills Certificate ¹	School of Extended Education	_	137
Symbolic Systems, Certificate in	Department of Philosophy	Tempe	514
Technology Entrepreneurship	Ira A. Fulton School of Engineering	Tempe	378
Translation Certificate	Department of Languages and Literatures	Tempe	583
Women and Gender Studies, Certificate in	Women and Gender Studies Program	Tempe	649
Women's Studies, Certificate in	Women's Studies Program	West	655
Writing, Certificate in	Department of Language, Cultures, and History Department of English	West Tempe	655 538

¹ This certificate is not for academic credit.

double concentration) and an interdisciplinary core, students in the BIS program take active roles in creating their educational plans and defining their career goals. For more information, see "School of Interdisciplinary Studies," page 139.

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 515, and "Department of Military Science," page 620, for more information.

Defense Activity for Nontraditional Education Support. ASU is a participating institution with Defense Activity for Nontraditional Education Support (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 the military services and (2) to facilitate the accessibility of high-quality independent institutions to 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 Western Interstate Commission for Higher Education (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 Western Undergraduate Exchange (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 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 169, and the *Graduate Catalog*.

This certificate is only for students in the W. P. Carey School of Business.

³ This program is also offered through the School of Extended Education.

ASU Postbaccalaureate Certificates

Certificate	Administered By	Campus	Page
Accountancy, Postbaccalaureate Certificate in	Department of Accounting	West	655
Communication and Human Relations, Postbaccalaureate Certificate in	Department of Communication Studies	West	655
Multimedia Writing and Technical Communication, Postbaccalaureate Certificate in*	East College	Polytechnic	239
Professional Accountancy, Postbaccalaureate Certificate in	Department of Accounting	West	655

^{*} This program is also offered through the School of Extended Education.

ASU Graduate Certificates

Certificate	Administered By	Campus	Page
African and African Diaspora Studies, Graduate Certificate in ¹	African and African American Studies Program	Tempe	_
Asian Studies, Graduate Certificate in ^{1, 2}	Center for Asian Studies	Tempe	_
Atmospheric Science, Graduate Certificate in ¹	College of Liberal Arts and Sciences and Ira A. Fulton School of Engineering	Tempe	_
Epidemiology and Biostatistics, Graduate Certificate in ¹	School of Health Management and Policy	Tempe	_
Evidence-Based Practice in Nursing and Healthcare, Graduate Certificate in	College of Nursing	Downtown	178
Geographic Information Science, Interdisciplinary Certificate in ¹	College of Liberal Arts and Sciences and the Division of Graduate Studies	Tempe	_
Gerontology, Certificate in ^{2, 3}	Gerontology Program	West	686
Health Industry Leadership Graduate Certificate ¹	W. P. Carey School of Business	Tempe	_
Indian Law Certificate ¹	College of Law	Tempe	_
Institutional Research, Graduate Certificate in 1,4	College of Education	Tempe	_
Law, Science, and Technology, Certificate in ¹	College of Law	Tempe	_
Linguistics, Graduate Certificate in ¹	Committee on Linguistics	Tempe	_
Medieval Studies Certificate ¹	Arizona Center for Medieval and Renaissance Studies (ACMRS)	Tempe	_
Museum Studies Certificate ¹	School of Human Evolution and Social Change	Tempe	_
Nonprofit Leadership and Management Certificate	College of Public Programs	Downtown	187
Nurse Education in Academic and Practice Settings, Graduate Certificate in	College of Nursing	Downtown	178
Post-Bachelor's Artist Diploma ¹	School of Music	Tempe	_
Public Art, Graduate Certificate in ¹	Katherine K. Herberger College of Fine Arts	Tempe	_
Renaissance Studies Certificate ¹	ACMRS	Tempe	_
Scholarly Publishing Certificate ¹	Department of History	Tempe	_
Statistics, Certificate in ¹	Committee on Statistics and the Division of Graduate Studies	Tempe	_
Transportation Systems, Interdisciplinary Graduate Certificate in ²	Committee on the Interdisciplinary Graduate Certificate in Transportation Systems and the Division of Graduate Studies	Tempe	162

¹ For more information, see the *Graduate Catalog*.

This program is also offered through the School of Extended Education.
 This university-wide certificate program is administered by the West campus.

⁴ Applications for this program are not being accepted at this time.