Penn State Schuylkill

Penn State Schuylkill, a 70-acre campus near the towns of Schuylkill Haven and Pottsville in east-central Pennsylvania, is in a residential setting and has a high number of commuting students. The campus is near major interstate highways and close to natural areas such as Hawk Mountain Sanctuary.

The campus serves a diverse population of students, both traditional and adult, who are from Pennsylvania, the United States, and other countries. Students can participate in sports teams for varsity, intramural, and club sports. Extracurricular clubs and organizations are available to serve the interests of students. The campus also has strong ties with the surrounding communities.

Penn State Schuylkill offers baccalaureate and associate degree programs, as well as the first two years of more than 160 Penn State baccalaureate programs. Students can begin their education at Schuylkill and move on to the University Park campus or other appropriate Penn State campus in order to complete their degree. Penn State Schuylkill also offers a master’s degree program in conjunction with Penn State Harrisburg. Check the links along the side for available academic programs.

RECOMMENDED ACADEMIC PLANS

Recommended Academic Plans provide, in table form, the courses students might schedule semester by semester as they pursue a specific undergraduate degree. Each college or campus maintains Recommended Academic Plans for its own majors/degree programs. Links to these plans are on the Division of Undergraduate Studies website at: http://www.dus.psu.edu/semplans.htm. Questions concerning the Recommended Academic Plans should be directed to the college or campus involved or the Division of Undergraduate Studies.

Baccalaureate Degrees

Administration of Justice

University College (AJACC): Penn State DuBois, Penn State Fayette, Penn State Greater Allegheny, Penn State Hazleton, Penn State Schuylkill, Penn State Wilkes-Barre

The Bachelor of Arts degree in Administration of Justice provides students with a broadly based liberal education focused on the understanding and analysis of justice systems. Having grappled with the many dilemmas and controversies presented by the problems of administering justice in a complex society, graduates of this program are given the background to be educated, thoughtful, and intelligent citizens.

For the B.A. degree in Administration of Justice, a minimum of 120 credits is required.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)
GENERAL EDUCATION: 45 credits
(4-7 credits of these 45 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education in this bulletin.)

FIRST-YEAR SEMINAR:
(Included in ELECTIVES or GENERAL EDUCATION course selection)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in ELECTIVES, GENERAL EDUCATION course selection, or REQUIREMENTS FOR THE MAJOR)

WRITING ACROSS THE CURRICULUM:
(Included in ELECTIVES, GENERAL EDUCATION course selection, or REQUIREMENTS FOR THE MAJOR)

ELECTIVES: 11-15 credits

BACHELOR OF ARTS DEGREE REQUIREMENTS: 24 credits
(3 of these 24 credits are included in the REQUIREMENTS FOR THE MAJOR, GENERAL EDUCATION, or
ELECTIVES and 0-12 credits are included in ELECTIVES if foreign language proficiency is demonstrated by
examination.)
(See description of Bachelor of Arts Degree Requirements in this bulletin.)

REQUIREMENTS FOR THE MAJOR: 43-44 credits[1]
(This includes 4-7 credits of General Education courses; 0-3 credits of GH courses; 4 credits of GQ courses.)

PRESCRIBED COURSES (13 credits)
CRIMJ 012 GS(3), CRIMJ 100(3), CRIMJ 221(3), STAT 200 GQ(4) (Sem: 3-4)

ADDITIONAL COURSES (24-25 credits)
Select 3-4 credits in values and ethics from BA 243(4), or BA 241(2) and BA 242(2), CRIMJ 465(3), PHIL 003
GH(3), PHIL 103 GH(3), PHIL 105 GH(3), PHIL 106 GH(3), or PHIL/STS 107 GH(3), STS 100 GH(3), STS 101
GH(3) or STS/PHIL 107 GH(3) (Sem: 5-6)
Select 3 credits from CRIM J 451 US(3) or CRIM J 453 US(3) (Sem: 5-8)
Select 18 credits in CRIMJ, with at least 9 credits in the 400 level from: CRIMJ 013 GS(3), CRIMJ 083 GS(3),
241(3), CRIMJ 296(1-18), CRIMJ 297(1-9), CRIMJ 300(3), CRIMJ 301(3), CRIMJ 302(3), CRIMJ 304(3), CRIMJ
CRIMJ 412(3), CRIMJ 413(3), CRIMJ 414(3), CRIMJ 415(3), CRIMJ 420(3), CRIMJ 421(3), CRIMJ 422(3), CRIMJ
CRIMJ 439(3), CRIMJ 441(3), CRIMJ 450(3), CRIMJ 460(3), CRIMJ 462(3), CRIMJ 467(3), CRIMJ 469(3), CRIMJ
471(3), CRIMJ 473(3), CRIMJ 482(3), CRIMJ 489(3), CRIMJ 497(3), CRIMJ 497A(3) (Sem: 5-8)

SUPPORTING COURSES AND RELATED AREAS (6 credits)
Select 6 credits, in consultation with adviser, from University-wide offerings according to student's career
plan (Sem: 5-8)

[1]A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Revised by the Department: Fall Semester 2011
Blue Sheet Item #: 40-04-099
Review Date: 01/10/2012
UCA Revision #2: 7/26/07

Administration of Justice

*University College (AJSCC): Penn State Beaver, Penn State DuBois, Penn State Fayette, Penn State Greater Allegheny, Penn State Hazleton, Penn State New Kensington, Penn State Schuylkill, Penn State Shenango, Penn State Wilkes-Barre*

The Bachelor of Science degree is intended to prepare students for careers in the administration of justice. Two emphases are provided: (1) for students interested in entry-level employment in justice agencies; (2) for students interested in academic or research positions and who may seek graduate education before beginning employment.

For the B.S. degree in Administration of Justice, a minimum of 120 credits is required.

*Scheduling Recommendation by Semester Standing given like (Sem: 1-2)*
GENERAL EDUCATION: 45 credits
(4-7 of these 45 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education in this bulletin.)

FIRST-YEAR SEMINAR:
(Included in ELECTIVES or GENERAL EDUCATION course selection)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in ELECTIVES, GENERAL EDUCATION course selection, or REQUIREMENTS FOR THE MAJOR)

WRITING ACROSS THE CURRICULUM:
(Included in ELECTIVES, GENERAL EDUCATION course selection, or REQUIREMENTS FOR THE MAJOR)

ELECTIVES: 14-18 credits

REQUIREMENTS FOR THE MAJOR: 64-65 credits[1]
(This includes 4-7 credits of General Education courses; 0-3 credits of GH courses; 4 credits of GQ courses.)

PRESCRIBED COURSES (13 credits)
CRIMJ 012 GS(3), CRIMJ 100(3), CRIMJ 221(3), STAT 200 GQ(4) (Sem: 3-4)

ADDITIONAL COURSES (39-40 credits)
(Some of the courses in this category may have prerequisites that are not included in the major.)
Select 3-4 credits in values and ethics from BA 243(4) or BA 241(2) and BA 242(2), CRIMJ 465(3), PHIL 003 GH(3), PHIL 103 GH(3), PHIL 105 GH(3), PHIL 106 GH(3), or PHIL/STS 107 GH(3), STS 100 GH(3), STS 101 GH(3) or STS/PHIL 107 GH(3) (Sem: 5-6)
Select 3 credits from CRIMJ 451 US(3) or CRIMJ 453 US(3) (Sem: 5-8)
Select 15 credits -- emphasis a or b:
  a. Field Research emphasis: CRIMJ 240(4), CRIMJ 290(1-3), CRIMJ 494(5), CRIMJ 495(5) (Sem: 5-8)
  b. Research and Policy Analysis emphasis: Select 15 credits, at least 6 at the 400 level from: AMST 491W(3-6), CRIMJ 424W(3), any CMPSC (3), ECON 104 GS(3), LER 100 GS(3), LST 370(3), PLSC 002(3), PLSC 419 US(3), PLSC 490(3), SOC 409 US(3), SOC 419(3), SOC 422(3), or SOC 423(3) (Sem: 5-8)

SUPPORTING COURSES AND RELATED AREAS (12 credits)
Select 12 credits, in consultation with adviser, from University-wide offerings according to student's career plan (Sem: 5-8)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Revised by the Department: Fall Semester 2011

Blue Sheet Item #: 40-04-100
Review Date: 01/10/2012
UCA Revision #2: 7/26/07

Biology

Abington College (BIOAB)
Altoona College (BIOAL)
Berks College (BIOBL)
Capital College (BIOCA)
University Park, Eberly College of Science (BIOL)
University College, Penn State Beaver, Penn State Brandywine, Penn State Schuylkill, Penn State Worthington Scranton, Penn State York (BIOCC)

Not all options are available at every campus. Contact the campus you are interested in attending to determine which options are offered.

Carla Hass, Person-In-Charge

The curriculum in Biology is planned for preparation for professions requiring competence in biological
science or for gaining an understanding of the world of living things. The professional group includes students who intend to secure advanced degrees through graduate study, students who are interested in work with various governmental agencies or industries having biological responsibilities, and students who want to prepare for careers in medicine or other health-related professions. Students whose interests are not professional select the curriculum because its broad approach can result in an educated view of the structure and function of living things. Achievement of these goals, including a special interest in a particular area of biology, can be met by selecting one of five options offered by the Department of Biology that will lead to the B.S. degree in Biology. The options and their key areas are 1) Plant Biology--morphology, systematics, and physiology of plants and fungi; 2) Ecology--behavior, and population and community biology of plants and animals; 3) General Biology--all aspects of modern biology; 4) Genetics and Developmental Biology--genetics, genetic engineering, and plant and animal development; 5) Neuroscience--development, biochemistry, physiology and aging of the central and peripheral nervous system; 6) Vertebrate Physiology--pre-medicine, pre-dentistry, pharmacology, and animal physiology.

In order to be eligible for entrance to the Biology major, a student must have: 1) attained at least a 2.00 cumulative grade point average; 2) completed BIOL 110 GN(4), CHEM 110 GN(3), MATH 140 GQ(4), and earned a grade of C or better in each of these courses; and 3) completed at least one of the following courses with a grade of C or better: BIOL 220W GN(4), BIOL 230W GN(4), or BIOL 240W GN(4).

TO VIEW THE Biology Minor (BIOL)

For the B.S. degree in Biology, a minimum of 124 credits is required.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits
(15 of these 45 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education in this bulletin.)

FIRST-YEAR SEMINAR:
(Included in GENERAL EDUCATION course selection)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in GENERAL EDUCATION course selection)

WRITING ACROSS THE CURRICULUM:
(Included in REQUIREMENTS FOR THE MAJOR)

REQUIREMENTS FOR THE MAJOR: 94 credits
(This includes 15 credits of General Education courses: 9 credits of GN courses; 6 credits of GQ courses.)

COMMON REQUIREMENTS FOR MAJOR (ALL OPTIONS): 40-44 credits

PRESCRIBED COURSES (32 credits)
CHEM 110 GN(3)[1], CHEM 111 GN(1), CHEM 112 GN(3)[1], CHEM 113 GN(1), MATH 140 GQ(4)[1], MATH 141 GQ(4) (Sem: 1-2)
BIOL 110 GN(4)[1], BIOL 220W GN(4)[1], BIOL 230W GN(4)[1], BIOL 240W GN(4)[1] (Sem: 1-4)

ADDITIONAL COURSES (8-12 credits)
PHYS 250 GN(4), PHYS 251 GN(4); or PHYS 211 GN(4), PHYS 212 GN(4), PHYS 213 GN(2), PHYS 214 GN(2) (Sem: 5-6)

REQUIREMENTS FOR THE OPTION: 50-54 credits

ECOLOGY OPTION: (50-54 credits)

ADDITIONAL COURSES (30-33 credits)
CHEM 202(3), CHEM 203(3); or CHEM 210(3), CHEM 212(3), CHEM 213(2) (Sem: 3-4)
Select 3-4 credits from STAT 200 GQ(4) or STAT 240 GQ(3) or STAT 250 GQ(3) (Sem: 3-4)
Select 3 credits from STAT 462(3) or STAT 464(3) (Sem: 7-8)

Select a minimum of 18 credits of 400-level biology courses, with at least 3 credits from each of the following groups (courses in Group IV--except BIOL 496, SC 295, SC 395, SC 495--may be used to satisfy requirements in other groups) (Sem: 5-8)

Group I: BIOL 412(3), BIOL 419(3), BIOL 435(3), BIOL 436(3), BIOL 444(3), BIOL 450W(3-5), BIOL 463(3), BIOL 482(3-4), BIOL 499A IL(3)

Group II: BIOL 414(3), BIOL 427(3), BIOL 428(3), BIOL 429(3), BIOL 448(3), BIOL 464(3), BIOL 474(3)
Group III: BIOL 406(3), BIOL 415(3), BIOL 417(4), BIOL 446(3), PPEM 425(4)

Group IV: BIOL 414(3), BIOL 417(4), BIOL 419(3), BIOL 444(3), BIOL 448(3), BIOL 450W(3-5), BIOL 482(3-4), BIOL 496(3), BIOL 499A IL(3), PPEM 425(4), SC 295(1-3), SC 395(1-3), SC 495(1-3) (A maximum of 3 credits of BIOL 496 or 4 credits of SC 295, SC 395, SC 495 may be used to fulfill the 18-credit minimum in the 400-level biology course requirement.)

SUPPORTING COURSES AND RELATED AREAS (17-24 credits)
Select 17-24 credits from department list (Sem: 1-8)

GENERAL BIOLOGY OPTION: (50-54 credits)

ADDITIONAL COURSES (24-27 credits)
CHEM 202(3), CHEM 203(3); or CHEM 210(3), CHEM 212(3), CHEM 213(2) (Sem: 3-4)
Select 3-4 credits from STAT 200 GQ(4), STAT 240 GQ(3), or STAT 250 GQ(3) (Sem: 3-4)

Select a minimum of 18 credits of 400-level biology courses, with at least 3 credits from each of the following groups (each course may be used to satisfy a requirement in only one group) (Sem: 5-8)


SUPPORTING COURSES AND RELATED AREAS (23-30 credits)
Select 23-30 credits from department list (Sem: 1-8)

GENETICS AND DEVELOPMENTAL BIOLOGY OPTION: (50-54 credits)

PRESCRIBED COURSES (19 credits)
CHEM 210(3), CHEM 212(3), CHEM 213(2) (Sem: 3-4)
BIOL 322(3), BIOL 430(3) (Sem: 5-6)
B M B 401(2), B M B 402(3) (Sem: 5-8)

ADDITIONAL COURSES (17-21 credits)
Select 2-5 credits from MATH 220 GQ(2-3), MATH 231(2), MICRB 201(3), MICRB 202(2) (Sem: 3-6)
Select 3-4 credits from STAT 200 GQ(4), STAT 240 GQ(3), STAT 250 GQ(3), or STAT 319(3) (Sem: 5-6)

Select a minimum of 12 credits of 400-level courses, with at least 6 credits from Group I, 3 credits from Group II, and 3 credits from Group III (Sem: 5-8)


Group III -- BIOL 400(1-3), BIOL 407(3), BIOL 444(3), BIOL 448(3), BIOL 461(3), BIOL 469(3), BIOL 470(3), PPEM 425(4), SC 295(1-3), SC 395(1-3), SC 495(1-3)

SUPPORTING COURSES AND RELATED AREAS (10-18 credits)
Select 10-18 credits from department list (Sem: 1-8)

**NEUROSCIENCE OPTION:** (50-54 credits)

**PRESCRIBED COURSES** (19 credits)

B M B 401(2), B M B 402(3) (Sem: 5-8)
BIOL 469(3), BIOL 470(3) (Sem: 5-8)
CHEM 210(3), CHEM 212(3), CHEM 213(2) (Sem: 3-4)

**ADDITIONAL COURSES** (15-16 credits)

Select 3-4 credits from STAT 200 GQ(4), STAT 240 GQ(3), or STAT 250 GQ(3) (Sem: 3-4)

Select a minimum of 12 credits of 400-level biology courses, with at least 6 credits from Group I, 3 credits from Group II, and 3 credits from Group III (Sem: 5-8)

Group I -- B M B 400(2-3), BIOL 404(3), BIOL 409(3), BIOL 411(3), BIOL 413(3), BIOL 421(4), BIOL 426(3), BIOL 430(3), BIOL 437(4), BIOL 443(3), BIOL 460(3), BIOL 471(3), BIOL 472(3), BIOL 473(2), BIOL 479(3) (may select up to 6 credits from department list)


**SUPPORTING COURSES AND RELATED AREAS** (15-20 credits)

Select 15-20 credits from department list (Sem: 1-8)

**PLANT BIOLOGY OPTION:** (50-54 credits)

**PRESCRIBED COURSES** (22 credits)

CHEM 210(3), CHEM 212(3), CHEM 213(2) (Sem: 3-4)
B M B 401(2), B M B 402(3), BIOL 407(3), BIOL 414(3), BIOL 441(3) (Sem: 5-8)

**ADDITIONAL COURSES** (12-13 credits)

Select 3-4 credits from STAT 200 GQ(4), STAT 240 GQ(3), STAT 250 GQ(3), or an advanced statistics course (Sem: 3-4)

Select a minimum of 9 credits of 400-level biology courses, with at least 6 credits from Group I and 3 credits from Group II (Sem: 5-8)


Group II -- BIOL 400(1-3), BIOL 414(3), BIOL 419(3), BIOL 439(3), BIOL 444(3), BIOL 448(3), BIOL 450W(3-5), BIOL 461(3), BIOL 496(1-3), BIOL 499A IL(3), SC 295(1-3), SC 395(1-3), SC 495(1-3)

**SUPPORTING COURSES AND RELATED AREAS** (15-20 credits)

Select 15-20 credits from department list (Sem: 1-8)

**VERTEBRATE PHYSIOLOGY OPTION:** (50-54 credits)

**PRESCRIBED COURSES** (18 credits)

CHEM 210(3), CHEM 212(3), CHEM 213(2) (Sem: 3-4)
B M B 401(2), B M B 402(3), BIOL 472(3), BIOL 473(2) (Sem: 5-8)

**ADDITIONAL COURSES** (15-16 credits)

Select 3-4 credits from STAT 200 GQ(4), STAT 240 GQ(3), or STAT 250 GQ(3) (Sem: 5-8)

Select a minimum of 12 credits of 400-level courses, with at least 6 credits from Group I, 3 credits from Group II, and 3 credits from Group III (Sem: 5-8)

Group I -- BIOL 404(3), BIOL 406(3), BIOL 409(3), BIOL 411(3), BIOL 412(3), BIOL 413(3), BIOL 416(3), BIOL 421(4), BIOL 426(3), BIOL 430(3), BIOL 432(3), BIOL 437(4), BIOL 443(3), BIOL 446(3), BIOL 460(3), BIOL 469(3), BIOL 470(3), BIOL 471(3), BIOL 479(3) (may select up to 6 credits from department list)


**SUPPORTING COURSES AND RELATED AREAS** (16-21 credits)
Select 16-21 credits from department list (Sem: 1-8)

### Integrated B.S. in Biology/M.Ed. in Curriculum and Instruction

This Integrated Undergraduate/Graduate (IUG) degree program combines the Bachelor of Science in Biology with the Master of Education in Curriculum and Instruction, Science Education emphasis. The program is designed to be completed in five years. The program enables highly qualified and motivated students to delve deeply into a scientific content area and to pursue graduate level preparation in the theory and practice of teaching. Most students in this option intend to seek Pennsylvania teacher certification, and a semester of student teaching comprises part of their final year of studies. The IUG may also be suitable for a student who does not need to become certified, because they intend to teach in a private secondary school or a non-formal educational setting; in such cases, the second graduate semester will be a program of studies determined through consultation with the graduate advisor and customized for the student’s specific needs.

For specific instructions on applying to the program, please consult the “Application Process” section of the IUG description for the Biology B.S. degree in the Undergraduate Bulletin. Application materials to be submitted include an undergraduate transcript, statement of purpose, draft plan of study, two letters of recommendation, and concurrent submission of an application for master’s study to the graduate program in Curriculum and Instruction, Science Education emphasis area. Additional details about the graduate application procedure can be found above in the section, “Admissions Requirements.”

IUG students fulfill all degree requirements for a B.S. in the Eberly College of Science. If a student chooses to leave the program without completing M.Ed. requirements, he or she may still receive the relevant B.S. degree, after all B.S. requirements are completed.

For the M.Ed. degree, students must earn at least 30 credits at the 400/500 level, at least 18 of them at the 500 level. One graduate semester is usually devoted to full time student teaching. Additional graduate coursework is completed in a second semester. Courses required for the M.Ed. degree include a course in learning theory (e.g., SCIED 552(3)), a course in research methods (e.g., SCIED 558(3)), a course in curriculum (e.g., SCIED 550), and a course in research ethics (C I 590(1)).

Students pursuing teacher certification (the usual option) additionally complete a 500-level EDTHP course (3), C I 595(6), and C I 496(6). SCIED 558(3), C I 496(6), and C I 595(6) comprise the student-teaching semester course load. Students who are not pursuing teacher certification substitute 15 credits of other 400 or 500-level coursework for the student-teaching semester; those courses are selected in consultation with their advisors, in order to address the students’ specific career aspirations.

124 credits are required for the B.S. degree and 30 credits for the M.Ed. degree. The following courses may be double-counted toward both the B.S. and the M.Ed. degrees, up to a limit of 12 credits: EDTHP 500-level courses (3), SCIED 411(3) & SCIED 412(3), and SCIED 500-level courses. Note that at least 50% of credits proposed for double-counting must be at the 500 level.

There are a number of other requirements for Pennsylvania teacher certification, including state-required tests and clearances, as well as coursework that can be completed at either the undergraduate or graduate level. Some courses, not enumerated above, that are usually required to satisfy teacher certification requirements include C I 280(3), SPLED 400(3), and C I 495C(3). Please note that changes in Pennsylvania certification requirements are common; students should check the Certification FAQ page at the Penn State Science Education website for updates and clarification about the specific requirements that affect them, based on their admission date to the IUG program option. Note also that students in the IUG program option are not required to complete all Penn State teacher certification requirements in order to receive their B.S. and M.Ed. degrees, as long as they have completed the requirements for those degrees, as described in the undergraduate and graduate Bulletins. For example, a student who has completed all degree requirements but has not yet received a score for the Pennsylvania-required Biology PRAXIS exam may be awarded both of his or her earned degrees.

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Revised by the Department: Fall Semester 2016

Blue Sheet Item #: 45-01-132

Review Date: 8/23/16

UCA Revision #1: 8/2/06
UCA Revision #2: 7/26/07
The Bachelor of Science in Business (B.S.B.) is a professionally oriented business degree program that combines the theoretical underpinnings of core business disciplines, notably management, marketing, finance, and supply chain management, with applied study in a practical setting. Through the choice of an 18-credit option, students specialize in a key business sector. Students also develop written and oral communication skills throughout the program, acquire contemporary technology skills, and engage in active and collaborative learning. The degree allows students to become familiar with the unique business environments of their local communities, a design that sets the degree apart from other business degrees offered within the University and throughout the Commonwealth.

Not all options are available at every campus. Contact the campus you are interested in attending to determine which options are offered.

**ACCOUNTING OPTION:** This option prepares students to pursue careers in business with an emphasis on the areas of financial and managerial accounting, systems and controls, auditing, and taxation.

**ENTREPRENEURSHIP OPTION:** This option prepares students to pursue entrepreneurial careers with emphasis on idea generation, opportunity analysis, new product creation, and business plan development.

**FINANCIAL SERVICES OPTION:** This option prepares students to pursue careers in financial organizations with emphasis on wealth management, tax planning, risk management, and financial analysis.

**HEALTH SERVICES OPTION:** This option prepares students to pursue careers in the health services sector with emphasis on the financial and administrative aspects of health care enterprises.

**INDIVIDUALIZED BUSINESS OPTION:** This option provides the opportunity for students to pursue an approved business-focused interdisciplinary program of study.

**MANAGEMENT AND MARKETING OPTION:** This option prepares students to pursue careers in business organizations with an emphasis on the skills and knowledge necessary for the business professional to function in community and regional centers of commerce.

**Entrance Requirement:** Completion of MATH 022 or MATH 040, 041, 110, 140.

For the B.S. degree in Business, a minimum of 120 credits is required, 15 of which must be at the 400 level.

**Scheduling Recommendation by Semester Standing given like (Sem: 1-2)**

**GENERAL EDUCATION:** 45 credits
(12 of these 45 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education in front of Bulletin.)

**FIRST-YEAR SEMINAR:**
(Included in ELECTIVES or GENERAL EDUCATION course selection)

**UNITED STATES CULTURES AND INTERNATIONAL CULTURES:**
(Included in ELECTIVES or GENERAL EDUCATION course selection)

**WRITING ACROSS THE CURRICULUM:**
(Included in REQUIREMENTS FOR THE MAJOR)

**ELECTIVES:** 10 credits

**REQUIREMENTS FOR THE MAJOR:** 77 credits
(This includes 12 credits of General Education courses: 6 credits of GQ courses; 6 credits of GS courses.)

**COMMON REQUIREMENTS FOR THE MAJOR (ALL OPTIONS):** 59 credits
PRESCRIBED COURSES (41 credits)
ECON 102 GS(3) (Sem: 1-4)
ACCTG 211(4), ECON 104 GS(3), MIS 204(3) (Sem: 3-4)
BA 321(3)[1], BA 322(3)[1], BA 420(1)[1], FIN 301(3)[1], MGMT 301(3)[1], MKTG 301(3)[1], SCM 301(3)[1] (Sem: 5-6)
IB 303 IL(3)[1] (Sem: 5-8)
BA 421(3)[1], BA 422(3)[1] (Sem: 7-8)

ADDITIONAL COURSES (15-18 credits)
MATH 110 GQ(4) or MATH 140 GQ(4) (Sem: 1-4)
SCM 200 GQ(4) or STAT 200 GQ(4) (Sem: 1-4)
BA 243(4) or BA 241(2) and BA 242(2) (Sem: 3-4)
Select 3 or 6 credits from BA 495A(3 or 6)[1], BA 495B(3 or 6)[1] (Sem: 7-8)

SUPPORTING COURSES AND RELATED AREAS (0-3 credits)
Select 0-3 credits from 400-level business courses from: ACCTG, BA, ECON, ENTR, FIN, FINSV, HPA, IB, MGMT, MIS, MKTG, RM, or SCM [1] (Sem: 7-8)

REQUIREMENTS FOR THE OPTION: 18 credits [1]
ACCOUNTING OPTION: (18 credits)
PRESCRIBED COURSES (9 credits)
ACCTG 404(3), ACCTG 471(3), ACCTG 472(3) (Sem: 5-6)
ADDITIONAL COURSES (6 credits)
ACCTG 403(3) or 403W(3) (Sem: 7-8)
ACCTG 405(3) or FINSV 411(3) (Sem: 7-8)
SUPPORTING COURSES AND RELATED AREAS (3 credits)
Select 3 credits of 400-level courses from: ACCTG, BA, ECON, ENTR, FIN, FINSV, HPA, IB, MGMT, MIS, MKTG, RM, or SCM (Sem: 7-8)

ENTREPRENEURSHIP OPTION: (18 credits)
PRESCRIBED COURSES (9 credits)
ENTR 300(3), ENTR 320(3) (Sem: 5-6)
ENTR 400(3) (Sem: 7-8)
ADDITIONAL COURSES (0-3 credits)
Select 0-3 credits in CAS 352(3) or ENGL 419(3) (Sem: 7-8)
SUPPORTING COURSES AND RELATED AREAS (6-9 credits)
Select 6 to 9 credits of 400-level ENTR courses in consultation with your advisor (Sem: 5-8)

FINANCIAL SERVICES OPTION: (18 credits)
PRESCRIBED COURSES (3 credits)
FIN 420(3) (Sem: 5-8)
ADDITIONAL COURSES (3 credits)
Select 3 credits from ACCTG 405 or FINSV 411 (Sem: 5-8)
SUPPORTING COURSES AND RELATED AREAS (12 credits)
Select 12 credits in 300 or 400-level (with at least 3 credits at the 400-level) from ACCTG, FIN, FINSV or RM (Sem: 5-8)

HEALTH SERVICES OPTION: (18 credits)
(Minimum 6 credits at the 400-level)
PRESCRIBED COURSES (6 credits)
HPA 101(3) (Sem: 5-6)
HPA 332(3) (Sem: 5-8)
ADDITIONAL COURSES (0-3 credits)
Select 0-3 credits from BBH 302(3), CAS 352(3), CAS 404(3), ENGL 416(3), ENGL 419(3), LER 424(3), LER 472(3), PSYCH 281 GS(3), PSYCH 484(3), or PSYCH 485(3) (Sem: 5-8)
SUPPORTING COURSES AND RELATED AREAS (9-12 credits)
Select 3-9 credits from 300 or 400-level HPA courses (Sem: 5-8)
Select 0-6 credits of 300-400-level courses from ACCTG, BA, ECON, ENTR, FIN, FINSV, HPA, IB, MGMT, MKTG, MIS, RM or SCM (Sem: 6-8)
INDIVIDUALIZED BUSINESS OPTION: (18 credits)
Select 18 credits of study (with at least 3 credits at the 400-level) as submitted by the student and approved by the campus BSB Program Coordinator (Sem: 5-8)

MANAGEMENT AND MARKETING OPTION: (18 credits)

ADDITIONAL COURSES (0-6 credits)
Select 0-6 credits from the following: BA 250(3), ENGL 419(3), MKTG 220(3) or one of the following, CAS 250(3), CAS 252(3), CAS 352(3), CAS 404(3) (Sem: 5-8)

SUPPORTING COURSES AND RELATED AREAS (12-18 credits)
A minimum of 3 credits of supporting courses must be selected at the 400-level.
Select 3 credits from 300 or 400-level MGMT courses (Sem: 5-8)
Select 3 credits from 300 or 400-level MKTG courses (Sem: 5-8)
Select 6-12 additional credits in 300 or 400-level courses from MGMT or MKTG courses (Sem: 6-8)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Revised by the Department: Fall Semester 2013
Blue Sheet Item #: 42-04-065
Review Date: 01/14/2014
UCA Revision #1: 8/3/06

Comments

Corporate Communication

Abington College (CCBA)
University College: Penn State Fayette, Penn State Hazleton, Penn State Lehigh Valley, Penn State Schuylkill, Penn State Wilkes-Barre, Penn State Worthington Scranton (CCCC)

PROFESSOR Roy Robson, Head, Division of Arts and Humanities

The Penn State Corporate Communication Bachelor of Arts (CCBA) program prepares students for various strategic communication roles inside and outside organizations. Graduates of the program hold titles such as public relations professional, social media strategist, speech and copywriter, political aide, marketing communication manager, organizational learning and development specialist, corporate recruiter, and event planner. Graduates have earned advanced degrees in areas such as Business, Law, and Corporate Communication.

The CCBA program is interdisciplinary. While providing depth of study in Corporate Communication, it also includes mandatory Business courses and courses focusing on web based competencies such as writing for the web and digital design. With its overall emphasis on the human and design aspects of contemporary organizations, the program is particularly well-suited to individuals seeking to develop and apply their analytical, verbal, and creative talents. Such talents foster aptitudes in strategic counseling and integrative praxis that, in part, make a Corporate Communication degree unique and highly sought after in the marketplace.

For the B. A. degree in Corporate Communication, a minimum of 120 credits is required.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits
(3-9 of these 45 credits are included in REQUIREMENTS FOR THE MAJOR)
(See description of General Education in this bulletin)

FIRST-YEAR SEMINAR:
(Included in ELECTIVES or GENERAL EDUCATION course selection)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in ELECTIVES or GENERAL EDUCATION courses)

WRITING ACROSS THE CURRICULUM:
(Included in REQUIREMENTS FOR THE MAJOR)

ELECTIVES: 5-9 credits
BACHELOR OF ARTS DEGREE REQUIREMENTS: 24 credits
(3 of these 24 credits are included in the REQUIREMENTS FOR THE MAJOR, GENERAL EDUCATION, or ELECTIVES and 0-12 credits are included in ELECTIVES if foreign language proficiency is demonstrated by examination.)
(See description of Bachelor of Arts Degree Requirements in this bulletin.)

REQUIREMENTS FOR THE MAJOR: 51-52 credits[1]
(This includes 3-9 credits of General Education courses: 3-6 credits of GS courses; 0-3 credits of GH courses.)

PRESCRIBED COURSES (27 credits)
CAS 204(3), CC 200(3), COMM 100 GS(3) (Sem: 1-4)
MGMT 301(3) (Sem: 3-4)
MKTG 301(3) (Sem: 3-4)
CC 401(3), CC 402(3), CC 490W(3), CC 495A(3) (Sem: 7-8)

ADDITIONAL COURSES (24-25 credits)
Select 3 credits from: ECON 102 GS(3); ECON 104 GS(3) (Sem: 1-4)
Select 3-4 credits from: B A 243(4); PHIL 103 GH(3); PHIL 106 GH(3); PHIL 123 GH(3) (Sem: 1-4)
Select 3 credits from: ART 201(3); COMM 241(3); IST 110 GS(3) (Sem: 1-4)
Select 3 credits from: CAS 250(3); CAS 252(3); CAS 352(3); ENGL 211(3) (Sem: 3-7)
Select 3 credits from: CC 406(3); ENGL 420(3); ENGL 480(3) (Sem: 5-8)
Select 6 credits from: CAS 403(3); CAS 404(3); CAS 455/WMNST 455 US(3); CAS 471 US;IL(3); MGMT 433(3);
MKTG 310(3) (Sem: 5-8)
Select 3 credits from: CC 404(3); CC 405(3); COMM 472(3) (Sem: 5-8)
[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Revised by the Department: Spring Semester 2016
Blue Sheet Item #: 44-06-000A
Review Date: 04/5/2016
Publications update of division head: 09/15/06
UCA Revision #1: 8/3/06
AB

Information Sciences and Technology

Abington College (ISSAB)
Berks College (ISSBL)
Capital College (ISSCA)
University College: Penn State Beaver, Penn State Brandywine, Penn State Greater Allegheny, Penn State Hazleton, Penn State New Kensington, Penn State Lehigh Valley, Penn State Mont Alto, Penn State Schuylkill, Penn State Wilkes-Barre, Penn State Worthington Scranton, Penn State York (ISSCC)
World Campus (ISSWC_BS)

University Park, College of Information Sciences and Technology (ISTBS)

Mary Beth Rosson, Associate Dean for Graduate and Undergraduate Studies, College of IST

Not all options are available at every campus. Contact the campus you are interested in attending to determine which options are offered.

This major is structured to provide students with the theoretical frameworks and skill sets necessary to compete and be productive in the information technology-intensive global context that defines the new "Information Age." Specifically, the degree will be focused on a program that will build an understanding of core information technologies and related areas of study; will prepare students for the practical application of various information sciences and related technologies; and engage students in sharpening their abilities to think critically and to work in teams. All this will be done with considerable interdisciplinary integration in order to expose students to the cognitive, social, institutional, and global environments of IST. Team projects in most courses, a required internship, and a senior capstone experience provide additional, focused venues for involving students in the cutting-edge issues and technologies of the field.
INFORMATION CONTEXT: PEOPLE, ORGANIZATIONS, AND SOCIETY OPTION: This option focuses on how information technology affects social change and the delivery of information to the consumer. This includes the human-machine interface; organization and retrieval of information; digital libraries; information and telecommunications services; information and media industry structures; software services and intermediaries; telecommunications and information law and policy; sociological aspects of technology change; multimedia; and art, design, and aesthetics.

INFORMATION SYSTEMS: DESIGN & DEVELOPMENT OPTION: This option is focused on expanding the skills needed to develop advanced information technology systems using state-of-the-art tools and techniques. The emphasis is on providing the student with both knowledge in the design, implementation, testing and evolution of complex software systems as well as a set of project-oriented, team-programming experiences.

INFORMATION TECHNOLOGY: INTEGRATION & APPLICATION OPTION: This option is designed to prepare students to use information technology to realize a variety of system-based goals (e.g., reliability, accessibility, efficiency, etc.). It is focused on developing a theoretical foundation and the skill set needed for integrating information technology into different systems for the purpose of enhancing system performance. The emphasis is on providing the student with both the theoretical frameworks needed to use information technology as a system attribute as well as a set of application-oriented experiences and skills.

Entrance Requirements: To be eligible for entrance to the Information Sciences and Technology (ISTBS) major, students must:

1. have completed the following entrance-to-major requirements with a grade of C or better in each: IST 110(3); IST 140(3) (or equivalent CMPSC 101 GQ(3) or CMPSC 121 GQ(3)), IST 210(3), and IST 220(3).
2. have achieved a minimum cumulative grade point average of 2.00 prior to and through the end of the semester during which the entrance-to-major procedure is carried out.

The Integrated Undergraduate Graduate (IUG) program is available for strong undergraduate students who wish to pursue a bachelor’s and master’s degree in a shorter period of time than would be necessary if the degrees were pursued separately. Information Sciences and Technology undergraduates may apply for admission to the ISTBS/ISTMS IUG program as early as the end of their sophomore year but no later than the end of their junior year after completing a minimum of 60 credits, if they meet the following admission requirements:

1. Must be enrolled in the ISTBS undergraduate degree program.
2. Must have completed 60 credits of an ISTBS undergraduate degree program.
3. Must apply to the IUG program by the end of their junior year.
4. Must apply to and be accepted without reservation into the Graduate School and M.S. program in IST. Students must complete the Graduate School application.
5. Must have an overall GPA of 3.5 (on a 4.0 scale) in undergraduate coursework and a minimum GPA of 3.5 in all coursework completed for the major.
6. Must present an approved plan of study. The plan should cover the entire time period of the integrated program, and it should be reviewed periodically with an adviser.
7. Must present two letters of recommendation from faculty members. (Note: For Schreyer Honors College students, these can be the same two letters required by the Schreyer Honors College.)
8. Must meet with both the Director of Undergraduate Academic Affairs and the Graduate Program Coordinator to declare interest and receive information about the IUG program.

For Schreyer Honors College students, students admitted to the IUG program may double-count a maximum of 12 credits toward their graduate and undergraduate degrees in Information Sciences and Technology. Thesis or scholarly paper credits may not double-count.

For the B.S. degree in Information Sciences and Technology, a minimum of 125 credits is required.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 45 credits
(12 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education in front of the Bulletin.)

FIRST-YEAR SEMINAR:
(Included in ELECTIVES or GENERAL EDUCATION course selection)

UNITED STATES CULTURES AND INTERNATIONAL CULTURES:
(Included in REQUIREMENTS FOR THE MAJOR)

WRITING ACROSS THE CURRICULUM:
(Included in REQUIREMENTS FOR THE MAJOR)
ELECTIVES: 8 credits

REQUIREMENTS FOR THE MAJOR: 84 credits
(This includes 12 credits of General Education courses: 6 credits of GQ courses; 3 credits of GS courses; and 3 credits of GWS courses.)

COMMON REQUIREMENTS FOR THE MAJOR (ALL OPTIONS): 60 credits

PRESCRIBED COURSES (26 credits)
IST 110 GS[1], IST 210[1], IST 220[1], IST 230[1] (Sem: 1-4)
STAT 200 GQ(4) (Sem: 3-6)
IST 495[1] (Sem: 3-8)
IST 301[1], IST 331[1] (Sem: 5-8)
IST 440[1] (Sem: 7-8)

ADDITIONAL COURSES (13 credits)
CMPSC 101 GQ[1], CMPSC 121 GQ(3)[1], or IST 140[1] (Sem: 1-4)
ECON 14 GS(3), ECON 102 GS(3), or ECON 104 GS(3) (Sem: 1-4)
ENGL 202C GWS(3) or ENGL 202D GWS(3) (Sem: 1-4)
MATH 110 GQ(4) or MATH 140 GQ(4) (Sem: 1-4)

SUPPORTING COURSES AND RELATED AREAS (21 credits)
Attainment of third-level proficiency in a single foreign language (12 credits). Proficiency must be demonstrated by either examination or course work. See the admission section of the general information in this Bulletin for the placement policy for Penn State foreign language courses. (Sem: 1-4)
Select 6 credits of international courses in foreign culture from College-approved list (Sem: 5-8)
Select 3 credits[1] at the 400 level in emerging issues and technologies from College-approved list (Sem: 5-8)

REQUIREMENTS FOR THE OPTION: 24 credits

INFORMATION CONTEXT: PEOPLE, ORGANIZATIONS, AND SOCIETY OPTION: 24 credits

PRESCRIBED COURSES (6 credits)[1]
IST 431(3) and IST 432(3) (Sem: 5-8)

ADDITIONAL COURSES (6 credits)[1]
IST 240(3) or IST 242(3) (Sem: 1-4)
IST 302(3) or IST 413(3) (Sem: 1-4)

SUPPORTING COURSES AND RELATED AREAS (12 credits)
Select 12 credits from College-approved list (at least 3 credits at the 400-level and no more than 6 credits below the 200-level.) (Sem: 5-8)

INFORMATION SYSTEMS: DESIGN & DEVELOPMENT OPTION: 24 credits

PRESCRIBED COURSES (6 credits)[1]
IST 242(3) (Sem: 1-4)
IST 311(3) (Sem: 5-8)

ADDITIONAL COURSES (9 credits)[1]
Select 3 credits from IST 261(3) or IST 361(3) (Sem: 5-8)
Select 6 credits from IST 411(3), IST 412(3), or IST 413(3) (Sem: 5-8)

SUPPORTING COURSES AND RELATED AREAS (9 credits)
Select 9 credits from College-approved list (at least 3 credits must be at the 400-level.) (Sem: 5-8)

INFORMATION TECHNOLOGY: INTEGRATION & APPLICATION OPTION: 24 credits

PRESCRIBED COURSES (9 credits)[1]
IST 302(3), IST 420(3), IST 421(3) (Sem: 5-8)

ADDITIONAL COURSES (3 credits)[1]
IST 240(3) or IST 242(3) (Sem: 1-4)

SUPPORTING COURSES AND RELATED AREAS (12 credits)
Select 12 credits from College-approved list (at least 3 credits at the 400-level and no more than 6 credits below the 200-level.) (Sem: 5-8)

Integrated B.S. in Information Sciences and Technology / M.S. in Information Sciences and Technology
The College of Information Sciences and Technology offers an integrated B.S./M.S. (IUG) program designed to allow academically superior students in the Information Sciences and Technology major to obtain both...
the bachelor’s in Information Sciences and Technology and M.S. degree in Information Sciences and Technology in a shorter period of time than would be necessary if the degrees were pursued separately. The first two to three years of undergraduate coursework follow the same undergraduate curriculum that other students follow in the Information Sciences & Technology major. Interested students may apply for admission to the IUG program as early as the end of their sophomore year but no later than the end of their junior year after completing a minimum of 60 credits. If admitted to the IUG, the final years of study include two graduate courses, Foundations of Theories and Methods of Information Sciences and Technology Research (IST 504) in the fall and Foundations of Research Design in Information Sciences and Technology (IST 505) in the spring, plus six credits of research methods courses, twelve credits of graduate specialty courses, and six credits of graduate thesis (IST 600) or scholarly paper (IST 594).

(Note: For Schreyer Honors College students, those who complete the graduate thesis for the Master’s requirement may use the graduate thesis, itself, to fulfill the undergraduate honors thesis requirement, as well. Honors students who opt for the Master’s scholarly paper must also complete an undergraduate honors thesis.)

The integrated B.S. in Information Sciences and Technology/M.S. in Information Sciences and Technology (IUG) degree meets the needs of the most academically talented students in the Information Sciences and Technology undergraduate major. A proportion of these successful students wish to pursue graduate studies sometime after graduation. Offering the IUG benefits these students by offering an accelerated path to a graduate degree. Additionally, the IUG program can provide these students with a more cohesive program of study with opportunities to engage in more comprehensive research leading to both the Bachelor’s and Master’s degree.

For the B.S. in Information Sciences & Technology/M.S. in Information Sciences & Technology IUG program, a minimum of 125 credits are required for the bachelor’s degree and 30 credits for the M.S. degree. Students admitted to the IUG program may double-count a maximum of 12 credits to their graduate and undergraduate degrees. The required 6 credits of IST 504 and IST 505 will apply to both the graduate program and the undergraduate program. Students may choose an additional 6 credits to double-count for both the undergraduate and graduate degrees from the following: IST 411, IST 412, IST 413, IST 420, IST 421, IST 431, IST 432. Graduate thesis or scholarly paper credits may not double-count.

The objectives of the Integrated Undergraduate Graduate Program include:

1. To offer highly qualified students the opportunity to earn two degrees in less time than it would take to do two sequential degrees. In particular, IUG students may count up to 12 credits towards both their B.S. and M.S. degree requirements.
2. To permit coherent planning of studies through the graduate degree, with advising informed by not only the requirements of the baccalaureate program, but also the longer-range goals of the graduate degree.
3. To introduce undergraduate students to the rigors of both graduate study and graduate faculty.
4. To make the resources of the Graduate School available to IUG students.
5. To allow students with IUG status to benefit from their association with graduate students whose level of work and whose intensity of interest and commitment parallel their own.

Admission Requirements

To initiate the application process, students must submit an Integrated Undergraduate-Graduate (IUG) Degree in Information Sciences and Technology Form, a transcript, and two letters of recommendation (both from faculty members) to the IST Graduate Programs Office. The Director of Undergraduate Academic Affairs, in consultation with the Graduate Programs Coordinator, will help undergraduate candidates determine a proposed sequence of courses that will prepare them for acceptance into the Integrated Undergraduate-Graduate (IUG) degree program. Acceptance into the IST IUG program will be determined by the Graduate Recruitment Committee.

Information Sciences and Technology undergraduate majors may apply for admission no earlier than February 15th of their sophomore year and no later than the February 15th of their junior year after completing a minimum of 60 credits, if they meet the following admission requirements:

1. Must be enrolled in the ISTBS undergraduate degree program.
2. Must have completed 60 credits of an ISTBS undergraduate degree program.
3. Must apply to the IUG program by the end of their junior year.
4. Must be accepted without reservation into the Graduate School and M.S. program in IST. Students must complete the Graduate School application.
5. Must have an overall GPA of 3.5 (on a 4.0 scale) in undergraduate coursework and a minimum GPA of 3.5 in all coursework completed for the major.
6. Must present an approved plan of study. The plan should cover the entire time period of the integrated program, and it should be reviewed periodically with an adviser.
7. Must present two letters of recommendation from faculty members. (Note: For Schreyer Honors College students, these can be the same two letters required by the Schreyer Honors College.)

8. Must meet with both the Director of Undergraduate Academic Affairs and the Graduate Program Coordinator to declare interest and receive information about the IUG program.

For Schreyer Honors College students, students must also follow guidelines and procedures for applying for IUG in the Schreyer Honors College:
http://www.shc.psu.edu/students/iug/program/

In addition, applicants must apply to and be admitted to the Graduate School of the Pennsylvania State University at the time of their application to the IUG degree program. These admission standards are high, as it is thought the program will only be appropriate for students with high levels of academic skills. The program area does have discretion in admitting Information Sciences and Technology majors into the integrated program, and extenuating circumstances can always be considered in terms of possible admission. Individuals who are unable to be admitted into the integrated program of study can apply for regular admission to the graduate program when they complete their undergraduate program of study.

Sample Sequence of Graduate Coursework in Addition to Undergraduate Courses

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Spring</th>
<th>MS Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1 (Senior Undergraduate Year)</td>
<td>IST 504: Foundations 3 Methods course (3)**</td>
<td>IST 505: Research Design (3) Methods course (3)**</td>
<td>30*</td>
</tr>
<tr>
<td>Year 2 (Super Senior Undergraduate Year)</td>
<td>IST 600 or IST 594 Thesis Research (3) Grad Speciality Course (3)** Grad Speciality Course (3)**</td>
<td>Methods course (3)** IST 600 or IST 594 Thesis Research (3) Grad Speciality Course (3)** Grad Speciality Course (3)**</td>
<td></td>
</tr>
</tbody>
</table>

* Students admitted to the IUG program may double-count a maximum of 12 credits toward their graduate and undergraduate degrees in Information Sciences and Technology. In their senior year, IUG students will take 6 credits of specified graduate work, courses IST 504 and IST 505, and 6 credits of methods courses. These 6 credits of IST 504 and IST 505 will apply to both the graduate program and the undergraduate IST/B.S. support of option requirement. In their super senior year, students may choose an additional 6 credits to double-count for both the undergraduate and graduate degrees. These courses must be at the 400-level or above. Students may choose any 400-level undergraduate option course (IST 411, IST 412, IST 413, IST 420, IST 421, IST 431, IST 432) that they are using to fulfill an undergraduate option requirement and apply the credits to both the undergraduate option requirement and the graduate specialty course requirement. Credits associated with the thesis or culminating scholarly paper, i.e., IST 600 and IST 594, may not be double-counted. However, for Schreyer Honors College students, the Master’s thesis deliverable, itself, may double-count for the undergraduate thesis deliverable requirement.

** Choose graduate level methods course after consultation in advance with the student’s faculty adviser.

*** Choose any 400 or 500 level course that contributes to the student’s chosen area of specialty with a maximum of six credits at the 400 level.

The total resulting credits will be a minimum of 155 credits, with 125 credits completed for the undergraduate IST degree. Twelve graduate credits will be completed in the senior year, and the remaining 18 graduate credits will be completed in the super senior year.

If for any reason a student admitted to the B.S./M.S. program is unable to complete the requirement for the Master of Science degree program in Information Sciences and Technology, the student will be permitted to receive the Bachelor’s degree assuming all degree requirements have been satisfactorily completed.

Student performance will be monitored on an on-going basis by the student’s adviser and Graduate
Programs. Students admitted to the integrated program must maintain a minimum cumulative GPA of 3.3 overall and a minimum 3.0 GPA in all courses used toward the M.S. degree in order to maintain good academic standing and meet graduation requirements. (See information on Grade-Point Average in the Graduate Bulletin: http://bulletins.psu.edu/graduate/degerequirements/masters#) For Schreyer Honors College students in the IUG program, students must maintain a minimum cumulative GPA of 3.4 overall and a minimum 3.0 GPA in all courses used toward the M.S. degree in order to maintain good academic standing and meet graduation requirements. Successful completion of a Schreyer Scholar’s Master’s thesis will be accepted as completion of the honors thesis requirement.

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

[2] Students in the Information Systems: Design and Development Option are expected to take IST 242 prior to taking the prescribed and additional courses for that option.

Last Revised by the Department: Fall Semester 2017

Blue Sheet Item #: 46-01-087

Review Date: 8/22/2017

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**Nursing**

Altoona College
Penn State Abington
Penn State Erie, The Behrend College
Penn State Harrisburg
University College: Penn State Fayette, Penn State Mont Alto, Penn State New Kensington, Penn State Schuylkill, Penn State Shenango, Penn State Worthington Scranton
University Park, School of Nursing (NURN)
World Campus

PROFESSOR PAULA MILONE-NUZZO, Dean, College of Nursing

This major prepares registered nurse students as professional practitioners in areas of health promotion and maintenance, illness care, and rehabilitation. The major in Nursing is accredited by the Commission on Collegiate Nursing Education (CCNE), One DuPont Circle, NW Suite 530, Washington, DC 20036 (202-463-6930). Part-time or full-time study is available at any of the campus sites. The University Park site is a blended program, which includes resident instruction and online nursing courses. The World Campus site is completely online.

Senate legislation 42-97 *Credit by Portfolio Assessment* enables students to receive credit for certain prescribed nursing courses based on their RN licensure.

Students must meet all requirements of the clinical institutions that provide preceptors and clinical experiences. These requirements may include CPR certification, professional liability insurance, health examination, drug testing, criminal background check (State and Federal) and child abuse history clearances. Students also are responsible for their own transportation to and from clinical settings and may need the use of a car.

Graduates of this major may qualify for admission to a graduate nursing program.

For the B.S.N. degree in Nursing, a minimum of 120 credits is required.

*Scheduling Recommendation by Semester Standing given like (Sem: 1-2)*

**GENERAL EDUCATION:** 45 credits
(21 of these 45 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education in this bulletin.)

**UNITED STATES CULTURES AND INTERNATIONAL CULTURES:**
(Included in ELECTIVES, GENERAL EDUCATION course selection, or REQUIREMENTS FOR THE MAJOR)

**WRITING ACROSS THE CURRICULUM:**
(Included in REQUIREMENTS FOR THE MAJOR)

**ELECTIVES:** 3-5 credits

**REQUIREMENTS FOR THE MAJOR:** 91-93 credits[1]
(This includes 21 credits of General Education courses: 3 credits of GHA courses; 9 credits of GN courses; 3
credits of GQ courses; 6 credits of GS courses.)

**PRESCRIBED COURSES** (76 credits)
BIOL 129 GN(4), BIOL 141 GN(3), BIOL 142(1), HDFS 129 GS(3), MICRB 106 GN(3), MICRB 107 GN(1), NUTR 251 GHA(3), PSYCH 100 GS(3) (Sem: 1-4)
NURS 200W(3)[38], NURS 357(3)[38], NURS 390 US(3)[38] (Sem: 3-4)
NURS 225(3)[37], NURS 230(4)[37], NURS 250 US(2)[37], NURS 301(4)[37], NURS 305(3)[37], NURS 306(3)[37],
NURS 310(3)[37], NURS 320(3)[37], NURS 405B(4)[37], NURS 420(4)[37], (Sem: 5-6)
NURS 417 US;IL(4)[38], NURS 465(3)[38], NURS 475(3)[38] (Sem: 7-8)

**ADDITIONAL COURSES** (9-11 credits)
Select 3-4 credits from: CHEM 101 GN(3), or CHEM 110 GN(3) and CHEM 111 GN(1) (Sem: 1-4)
Select 3 credits from: SOC 1 GS(3) or SOC 5 GS(3) (Sem: 1-4)
Select 3-4 credits from: STAT 200 GQ(4) or STAT 250 GQ(3) (Sem: 1-4)
Select 3 credits from: NURS 251(3)[38] or NURS 352(3)[38] (Sem: 3-4)

**SUPPORTING COURSES AND RELATED AREAS** (6 credits)
Select 6 credits from courses on school-approved list in consultation with adviser (3 credits of which must be at the 400 level)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.
[37] Credit by Portfolio Assessment
[38] Due to restricted enrollment, the School of Nursing assigns the semester in which students enroll in these courses and all course prerequisites must be successfully completed.

Last Revised by the Department: Fall Semester 2017

Blue Sheet Item #: 46-02-078
Review Date: 10/3/2017
UCA Revision #: 8/9/06
HH

Updated contact info for ACEN accrediting agency: 7/31/13

**Psychology**

*Capital College (PSYC)*

**COBI MICHAEL, Program Coordinator, School of Behavioral Science and Education**

The Psychology major emphasizes the scientific study of human behavior in areas such as cognition, development, learning, physiology, personality, and social processes. The curriculum is designed to provide students with a broad background in psychological theory and research and to develop the analytical and critical thinking skills necessary to be good consumers of scientific information.

The Psychology program exposes students to a number of areas of psychology but allows flexibility in the specific courses that are taken in each sub-area. Students are also required to obtain applied experience by completing an internship or by assisting faculty with their research. Elective credits can be used for additional internship or research experience.

The Psychology program prepares students for careers in local, state, and federal government and for entry-level psychological services positions in human service, applied behavior, human resources, and related fields. The Psychology program also provides a strong background for graduate education at both the master's and the doctoral level in counseling, social work, and many areas of psychology.

The Integrated Undergraduate Graduate (IUG) program is available for strong undergraduate students who wish to pursue a bachelor's and master's degree in five years. Psychology undergraduates may apply for admission to the IUG program in Applied Research Psychology by no later than February 15th the spring of their junior year after completing a minimum of 45 credits, if they meet the following admission requirements:

1. Grade point average of 3.50 or above cumulative.
2. Completion of undergraduate statistics and an undergraduate research course with an A- or above in both.
3. Completing 18 credits or more in psychology with a psychology GPA of 3.67 or above.
4. Typical successful candidates will obtain GRE scores of 146 or above on both the verbal and quantitative sections, with an analytical score of 3.5 or above.
5. Complete interviews with graduate faculty member.
6. Provide three professional letters of recommendation with at least two from academic references.

For a B.S. degree in Psychology, a minimum of 122 credits is required. Students admitted to the IUG program may apply 11 credits to their graduate and undergraduate degrees in psychology.

**Entry to Major Requirements:**
Entry to the Psychology major requires a 2.00 cumulative grade-point average and an average of C (2.00) or better in any courses already taken in the major.

**Scheduling Recommendation by Semester Standing given like (Sem: 1-2)**

**GENERAL EDUCATION:** 45 credits
(6 of these 45 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education Course Requirements in this bulletin.)

**FIRST-YEAR SEMINAR:**
(Included in ELECTIVES)

**UNITED STATES CULTURES AND INTERNATIONAL CULTURES :**
(Included in ELECTIVES, GENERAL EDUCATION course selection, or REQUIREMENTS FOR THE MAJOR)

**WRITING ACROSS THE CURRICULUM:**
(Included in REQUIREMENTS FOR THE MAJOR)

**ELECTIVES:** 9 credits

**REQUIREMENTS FOR THE MAJOR:** 74 credits
(This includes 6 credits of General Education courses: 3 credits of GWS courses: 3 credits of GN courses.)

**PRESCRIBED COURSES** (10 credits)
ENGL 202A GWS(3), PSYCH 100 GS(3) (Sem: 1-4)
PSYCH 301(4) (Sem: 4-5)

**ADDITIONAL COURSES** (46 credits)
Select BISC 4 GN(3) or BIOL 141 GN(3) (Sem: 1-4)
At least 15 credits of the following courses must be at the 400 level.)

Select 4 credits from: (Sem: 3-4)
Category 1 (Statistics) PSYCH 200 GQ(4) or STAT 200 GQ(4)
Select 6 credits from two different developmental categories (3 credits each category): (Sem: 2-8)
Category 2a (Lifespan) PSYCH 212 GS(3)
Category 2b (Adult) PSYCH 416(3)
Category 2c (Child) PSYCH 410(3)
Category 2d (Adolescence) PSYCH 412(3)
Select 6 credits from two different individual difference categories (3 credits each category) (Sem: 2-8)
Category 3a (Social Psychology) PSYCH 221 GS(3) or PSYCH 420(3)
Category 3b (Personality Psychology) PSYCH 238 GS(3) or PSYCH 438(3)
Category 3c (Personal Adjustment) PSYCH 243 GS(3) or PSYCH 471(3)
Category 3d (Health Psychology) PSYCH 441(3)
Select 6 credits from two different clinical categories (3 credits each category) (Sem: 5-8)
Category 4a (Physical Disabilities) PSYCH 370 US(3)
Category 4b (Childhood Disorders) PSYCH 476(3)
Category 4c (Abnormal Psychology) PSYCH 270(3) or PSYCH 470(3)
Category 4d (Behavior Modification) PSYCH 473(3)
Category 4e (Developmental Disabilities) PSYCH 443
Select 6 credits from two different experimental categories (3 credits each category) (Sem: 5-8)
Category 5a (Physiological Psychology) PSYCH 260(3) or PSYCH 462(3)
Category 5b (Cognitive Psychology) PSYCH 256 GS(3) or PSYCH 452 or PSYCH 456(3)
Category 5c (Learning Theory) PSYCH 261 GS(3) or PSYCH 461(3)
Select 3 credits from applications in psychology (Sem: 5-8)
Category 6 (Applied Experience) PSYCH 395(1-18) or PSYC 494(1-12)
Select 12 credits of any PSYCH courses not used above, with the exception that only one course selected from any Category 1 through 5 will count for the major (Sem: 2-8)

Students in the IUG program will take 11 credits of graduate work in their senior year, courses PSYC 500(3), PSYC 520(4) and PSYC 521(4). These 11 credits will apply to the graduate program and the
undergraduate PSYCH elective undergraduate requirement.

SUPPORTING COURSES AND RELATED AREAS (18 credits)


Integrated B.S/M.A. in Applied Psychological Research

The Applied Research Psychology Program offers an integrated B.S./M.A. (IUG) program designed to allow academically superior psychology undergraduates to obtain both the bachelor’s and M.A. degree within five years of study. The first three years of undergraduate coursework are the same as other psychology undergraduates, but the interested students apply for the IUG program in the spring of their junior year of study. If admitted to the IUG, the fourth year of study includes the graduate courses Ethics and Professional Practice in Psychology and Counseling (PSYC 500), Research Methods (PSYC 521) in the fall and Statistics (PSYC 521) in the spring. The IUG students then complete the remaining master’s degree requirements in the fifth year, including the master’s paper (PSYC 530). The integrated B.S./M.A. degree in Psychology meets the needs of the most academically talented students in the Psychology undergraduate major. A large proportion of the most academically talented students apply or wish to apply to graduate schools during their final year of undergraduate studies or soon after graduation. These students can benefit from the integrated degree because it provides a more challenging curriculum that allows them to accelerate their program of study to possibly receive an undergraduate and graduate degree within 5 years of study. Additionally, the integrated program can provide these students with a more cohesive program of study with opportunities to engage in more comprehensive research and clinical experience leading to both the Bachelor and Master’s degree.

For the IUG in Applied Psychological Research, a minimum of 122 credits are required for the bachelor’s degree and 35 credits for the M.A. degree. The graduate credits for PSYC 500, 521 and 520 (11 total credits) can apply to both the M.A. degree and as psychology electives for the bachelor’s degree.

The objectives of the Integrated Undergraduate Graduate Program in Applied Research Psychology include:

1. To offer highly qualified students the opportunity to earn two degrees in five years. In particular, IUG students may count up to 12 credits towards both their B.S. and M.A. degree requirements.
2. To permit coherent planning of studies through the graduate degree, with advising informed by not only the requirements of the baccalaureate program, but also the longer-range goals of the graduate degree.
3. To introduce undergraduate students to the rigors of both graduate study and graduate faculty.
4. To make the resources of the Graduate School available to IUG students.
5. To allow students with IUG status to benefit from their association with graduate students whose level of work and whose intensity of interest and commitment parallel their own.
6. To allow students to coordinate as well as concurrently pursue the two degree programs, which enables them to achieve greater depth and comprehension than if the degrees are pursued sequentially.

Admission Requirements

To initiate the application process, students must submit an Integrated Undergraduate-Graduate (IUG) Degree in Applied Research Psychology Application Form, a transcript, and three letters of recommendation, with at least two from faculty members. A graduate faculty adviser will help undergraduate candidates determine a sequence of courses that will prepare them for acceptance into the Integrated Undergraduate-Graduate (IUG) degree program.

Psychology undergraduates may apply for admission by no later than February 15th the spring of their junior year after completing a minimum of 45 credits, if they meet the following admission requirements:
1. Grade point average of 3.50 or above cumulative.
2. Completion of undergraduate statistics and an undergraduate research course with an A- (3.67) or above in both.
3. Completing 18 credits or more in psychology with a psychology GPA of 3.67 or above.
4. GRE scores are required for the IUG program. Typical successful candidates will obtain GRE scores of 146
or above on both the verbal and quantitative sections, with an analytical score of 3.5 or above.
5. Complete interviews with graduate faculty members.
6. Provide three professional letters of recommendation with at least two from academic references.
These admission standards are high, as it thought the program will only be appropriate for students with high levels of academic skills. The program area does have discretion in admitting psychology majors into the integrated program, and extenuating circumstances can always be considered in terms of possible admission. Individuals who are unable to be admitted in to the integrated program of study can apply for regular admission when they complete their program of study. These materials must be completed by the spring of the junior year to allow admission into the IUG program the following fall.

Sample Sequence of Graduate Coursework in Addition to Undergraduate Courses

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall (Senior UG)</th>
<th>Spring (Senior UG)</th>
<th>Summer</th>
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</table>
| **Year 1 (Senior Undergraduate Year)**  
(11-14 graduate credits) | PSYC 520 Research Methods (4)*  
PSYC 500 Ethics and Professional Practice in Psychology and Counseling (3)* | PSYC 521 Statistics (4)* | PSYC 594 (3) if elected |
| **Year 2**  
(21-24 graduate credits) | PSYC 501 Cultural Competency in Psychology (3)  
PSYC 594 Research (3)  
Elective (3) | PSYC 524 Biological Bases (3)  
PSYC 502 Applied Social Psychology (3)  
PSYC 530 Master's Paper (3) | Research or Elective (3)  
PSYC 530 Master's Paper (1-3) |

* Applied to both undergraduate and graduate degree for a total of 11 credits.

If for any reason a student admitted to the B.S./M.A. program is unable to complete the requirement for the Master of Arts degree program in American Studies, the student will be permitted to receive the Bachelor's degree assuming all degree requirements have been satisfactorily completed.

As stated in the Graduate Bulletin, a minimum grade-point average of 3.00 for work done at the University is required for graduation and to maintain good academic standing. See [http://bulletins.psu.edu/bulletins/whitebook/degree_requirements.cfm?section=masters](http://bulletins.psu.edu/bulletins/whitebook/degree_requirements.cfm?section=masters)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Revised by the Department: Fall Semester 2014

Blue Sheet Item #: 43-04-042

Review Date: 01/13/2015

UCA Revision #1: 9/1/06  
UCA Revision #2: 7/30/07

Publications updated department head: 4/28/08

CL

**Associate Degrees**

**Business Administration**

*Abington College (2BAAB)*  
*Altoona College (2BAAL)*  
*Berks College (2BABL)*  
*Capital College (2BACA)*
The associate degree program in Business Administration provides an introductory foundation to core aspects of the business environment that prepares graduates for future baccalaureate study in business or for direct entry into the work place. The primary objective of this major is to provide a business-oriented program with sufficient communicative and mathematical skills, socially relevant course work, and specific business specialties to develop a well-rounded and knowledgeable graduate.

Students should work closely with academic advisers to schedule course work required to transition to baccalaureate business programs.

ENTRANCE REQUIREMENTS: Students must have a minimum 2.0 GPA to change to this Associate degree after admission to the University.

For the Associate in Science degree in Business Administration, a minimum of 60 credits is required.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 21 credits
(9 credits of these 21 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education in this bulletin.)

REQUIREMENTS FOR THE MAJOR: 48-50 credits
(This includes 3 credits of GQ General Education courses and 6 credits of GWS General Education courses.)

PRESCRIBED COURSES (13 credits)
CAS 100 GWS(3) (Sem: 2-4)
ACCTG 211(4), ENGL 202D GWS(3)[1], MIS 204(3) (Sem: 2-4)

ADDITIONAL COURSES (23-24 credits)
ENGL 15 GWS(3)[1] or ENGL 30 GWS(3)[1] (Sem: 1-2)
MATH 21 GQ(3), MATH 22 GQ(3), or MATH 110 GQ(4) (Sem: 1-2)
BA 243(4) or BA 241(2) and BA 242(2) (Sem: 1-4)
ECON 102 GS(3) or ECON 104 GS(3) (Sem: 1-4)
MGMT 301(3)[1] or MGMT 301W(3)[1] (Sem: 3-4)
MKTG 301(3)[1] or MKTG 301W(3)[1] (Sem: 3-4)
SCM 200 GQ(4) or STAT 200 GQ(4) (Sem: 3-4)

SUPPORTING COURSES AND RELATED AREAS (12-13)
Select 12-13 credits from: BA 100(3); BA 250(3); BA 364(3); CAS 250(3) or CAS 252(3); CAS 352(3); MATH 22 GQ(3); MATH 110 GQ(4); ACCTG 300 to 399(3); ECON 100 to ECON 399(3); ENTR 100 to 399(3); FIN 100 to 399(3); HPA 100 to 399(3); IB 303 IL(3); LER 100 to 399(3); MGMT 100 to 399(3); MKTG 100 to 399(3); MIS 100 to 399(3); RM 100 to 399(3); or SCM 200 to 399(3) (Sem: 1-4)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Revised by the Department: Spring Semester 2017
Blue Sheet Item #: 45-04-001
Review Date: 1/10/17
UCA Revision #1: 8/9/06
UCA Revision #2: 7/26/07
UC

Human Development and Family Studies

Altoona College (2FSAL)
University College (2FSCC): Penn State Brandywine, Penn State DuBois, Penn State Fayette, Penn State Mont Alto, Penn State Schuykill, Penn State Shenango, Penn State Worthington Scranton, Penn State York University Park, College of Health and Human Development (2EHFS): offered via World Campus
Not all options are available at every campus. Contact the campus you are interested in attending to determine which options are offered.

For more information, contact 119 Health and Human Development Building, University Park campus.

This major integrates practical and academic experiences to provide the student with entry-level professional competence in the human service field. The objective of the major is to offer a general education background, a knowledge base in life span and family development, and a core of professional skills that may be applied in program planning and service delivery activities. The major is offered part-time, in the evening, and through independent learning.

ADULT DEVELOPMENT AND AGING SERVICES OPTION: This option is designed to prepare students for a wide variety of service roles in mental health facilities, nursing homes and other institutions for the aged, area agencies on aging, public welfare and family service agencies, women's resource centers, human relations programs, employee assistance programs and customer services and consumer relations programs in business and industry. An improved field experience in any of a wide variety of settings that serve adults, the aged, and their families, is required for this option.

CHILDREN, YOUTH, AND FAMILY SERVICES OPTION: This option is designed to prepare students for service roles in preschools; day care centers; hospitals; institutional and community programs for emotionally disturbed, abused, or neglected children and adolescents; as well as a variety of public welfare and family service agencies. An approved field experience in a children, youth, or family services setting is required for this option.

EARLY CHILDHOOD CARE AND EDUCATION OPTION: This option is designed to increase professional capabilities in child care training in regard to issues of quality, affordability, and accessibility of programming. The primary foci are on language, literacy, and science reasoning. In the course work, there is a blending of theory and practice that requires experience in a group setting with young children. Courses concentrate on infants and toddlers as well as older preschoolers. Each course has a strong parent/family communications component and stresses observation techniques appropriate for assessing and evaluating the development of young children.

ENTRANCE REQUIREMENTS: Students must have a minimum 2.0 GPA to change to this Associate degree after admission to the University.

For the Associate in Science degree in Human Development and Family Studies, a minimum of 60 credits is required.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 21 credits
(15 of these 21 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education in this bulletin.)

ELECTIVES: 0-3 credits

REQUIREMENTS FOR THE MAJOR: 51-55 credits
(This includes 15 credits of General Education courses: 6 credits of GWS courses; 3 credits of GS courses; 3 credits of GN courses; and 3 credits of GQ courses.)

COMMON REQUIREMENTS FOR THE MAJOR (ALL OPTIONS): 30-31 credits

PRESCRIBED COURSES (21 credits)
CAS 100 GWS(3), ENGL 015 GWS(3), HDFS 129 GS(3)[1], HDFS 301(3)[1], PSYCH 100 GS(3) (Sem: 1-2)
HDFS 395(6) (Sem: 3-4)

ADDITIONAL COURSES (9-10 credits)
EDPSY 101 GQ(3)[1], STAT 100 GQ(3)[1], or STAT 200 GQ(4)[1] (Sem: 1-2)
HDFS 315 US(3)[1] or SOC 030 GS(3) (Sem: 3-4)
BIOL 141 GN(3), BIOL 155 GN(3), or BISC 004 GN(3) (Sem: 3-4)

REQUIREMENTS FOR THE OPTION: 21-24 credits

ADULT DEVELOPMENT AND AGING SERVICES OPTION: (21 credits)
PRESCRIBED COURSES (6 credits)
HDFS 249 GS(3)[1], HDFS 311(3)[1] (Sem: 1-4)

SUPPORTING COURSES AND RELATED AREAS (15 credits)
Select 15 credits in consultation with the adviser from University-wide offerings that enhance competence in the option (Sem: 1-4)
CHILDREN, YOUTH, AND FAMILY SERVICES OPTION: (24 credits)

PRESCRIBED COURSES (9 credits)
HDFS 229 GS[1], HDFS 239 GS[1], HDFS 311[1] (Sem: 1-4)

SUPPORTING COURSES AND RELATED AREAS (15 credits)
Select 15 credits in consultation with the adviser from University-wide offerings that enhance competence in the option (Sem: 1-4)

EARLY CHILDHOOD CARE AND EDUCATION OPTION: (24 credits)

PRESCRIBED COURSES (24 credits)
HDFS 229 GS[1], HDFS 230[1], HDFS 231[1], HDFS 311[1] (Sem: 1-2)
HDFS 232[1], HDFS 233[1], HDFS 234[1], HDFS 330[1] (Sem: 3-4)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Revised by the Department: Spring Semester 2017
Blue Sheet Item #: 45-04-013B
Review Date: 1/10/17
UCA Revision #1: 8/8/06

Letters, Arts, and Sciences

Abington College (2LAAB)
Altoona College (2LAAL)
Penn State Erie, The Behrend College (2LABC)
Berks College (2LABL)
Penn State Harrisburg (2LACA)
University College (2LACC): Penn State Brandywine, Penn State DuBois, Penn State Fayette, Penn State Hazleton, Penn State Mont Alto, Penn State New Kensington, Penn State Schuylkill, Penn State Shenango Valley, Penn State Wilkes-Barre, Penn State Worthington-Scranton
University Park, College of the Liberal Arts (2 LAS)
World Campus

The objectives of the Letters, Arts, and Sciences major are to broaden the student's understanding, interests, and skills; to help the student become a more responsible, productive member of the family and community; and to offer a degree program with sufficient electives to permit some specialization according to the student's interests or career plans. Letters, Arts, and Sciences is a complete two-year degree major. However, graduates who later seek admission to baccalaureate degree majors may apply baccalaureate credits toward the new degree.

In addition to a wide variety of baccalaureate majors offered at University Park campus, graduates of the Letters, Arts, and Sciences major may qualify for admission to the baccalaureate degree majors in Behavioral Sciences, Elementary Education, Humanities, or Public Policy offered at Penn State Harrisburg. Or they may qualify for any of a large number of baccalaureate degree majors offered by Penn State Erie, The Behrend College, in business, the liberal arts, and sciences.

ENTRANCE REQUIREMENTS: Students must have a minimum 2.0 GPA to change to this Associate degree after admission to the University.

For the Associate in Arts degree in Letters, Arts, and Sciences, a minimum of 60 credits is required.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 21 credits
(6 of these 21 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education in this bulletin.)

ELECTIVES: 15 credits

REQUIREMENTS FOR THE MAJOR: 30 credits[1]
(This includes 6 credits of General Education GWS courses.)
PRESCRIBED COURSES  (6 credits)
ENGL 015 GWS(3) (Sem: 1-2)
CAS 100 GWS(3) (Sem: 3-4)

ADDITIONAL COURSES  (3 credits)
ENGL 202A GWS(3), ENGL 202B GWS(3), ENGL 202C GWS(3), or ENGL 202D GWS(3) (Sem: 3-4)

SUPPORTING COURSES AND RELATED AREAS  (21 credits)
Select 3 credits in any course designated as arts* (Sem: 1-4)
Select 3 credits in any course designated as humanities* (Sem: 1-4)
Select 3 credits in any course designated as social and behavioral sciences* (Sem: 1-4)
Select 3 credits in any course designated as physical, biological, or earth sciences* (Sem: 1-4)
Select 9 credits in any one of the following areas*: arts, humanities, social and behavioral sciences, natural sciences and quantification, and foreign language skills. (If foreign language courses are chosen, it is recommended that these courses be in one foreign language sequence.) (Sem: 1-4)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

The required credits of General Education and Requirements for the Major must be baccalaureate-level courses. For students intending to seek admission to a baccalaureate program upon graduation, it is recommended that most, if not all, of the courses be at the baccalaureate level. For those students who will seek a bachelor of arts degree upon graduation from Letters, Arts, and Sciences, it is strongly recommended that a foreign language be taken since admission to a bachelor of arts program in the College of the Liberal Arts requires one college-level course, or the equivalent, in a foreign language.

*Courses that will satisfy the arts, humanities, social and behavioral sciences, natural sciences, and quantification requirements are defined on the Letters, Arts, and Sciences checksheet, which may be obtained from the College of the Liberal Arts associate dean for undergraduate studies at the University Park campus or from any Letters, Arts, and Sciences representative at other locations.

Last Revised by the Department: Spring Session 2017
Blue Sheet Item #: 45-04-071B
Review Date: 1/10/17
Reviewed by Publications: 06/23/06

Radiological Sciences

University College: Penn State New Kensington (2RSCC), Penn State Schuylkill (2RSCC)

For students interested in pursuing an education in the paramedical field of radiography (radiologic technology), the radiological sciences major meets the educational and clinical requirements for the graduate to function as an entry-level radiographer. Required course work is divided into three interrelated areas including general education, radiography specific, and clinical education components. During the clinical education component, students perform radiographic exams under the directed supervision of certified radiographers at multiple area clinical education settings. The clinical component emphasizes the concepts of team practice and patient-centered care. Both the radiography-specific course work and the clinical component are structured sequentially over six or seven consecutive semesters, commencing each fall semester. Upon successful completion of the 72-credit associate degree, the graduate will be eligible to attempt the American Registry of Radiologic Technologists (ARRT) examination for certification.

ENTRANCE REQUIREMENTS: Students must have a minimum 2.0 GPA to change to this Associate degree after admission to the University.

For the Associate in Science degree in Radiological Sciences, a minimum of 72 credits is required.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

GENERAL EDUCATION: 21 credits
(15 of these 21 credits are included in the REQUIREMENTS FOR THE MAJOR)
(See description of General Education in this bulletin.)

REQUIREMENTS FOR THE MAJOR: 66 credits
(This includes 15 credits of General Education courses: 3 credits of GH courses; 3 credits of GN courses; 3 credits of GQ courses; 3 credits of GS; 3 credits of GWS courses.)
PRESCRIBED COURSES (59 credits)
BIOL 129 GN(4)[1], RADSC 101(4)[1], RADSC 110(3)[1] (Sem: 1)
BIOL 141 GN(3), ENGL 015 GWS(3), IST 110 GS(3), MATH 021 GQ(3), PHIL 103 GH(3), RADSC 102(4)[1],
RADSC 103(3)[1], RADSC 204(3)[1], RADSC 205(3)[1], RADSC 210(3)[1], RADSC 220(3)[1], RADSC 295B(1)[1],
RADSC 295D(1)[1], RADSC 295A(1.5), RADSC 295C(1), RADCSC 295E(1.5), RADSC 295F(2) (Sem: 1-6)
RADSC 206(3)[1], RADSC 240(2)[1] (Sem: 5-6)
RADSC 207(4)[1] (Sem: 6-7)

ADDITIONAL COURSES (7 credits)[1]
At Penn State New Kensington:
Take 7 credits from RADSC 295A(1.5), RADSC 295C(2), RADCSC 295E(1.5), RADSC 295F(2) (Sem: 1-6)

OR

At Penn State Schulykill:
Take 7 credits from RADSC 295A(1), RADSC 295C(1), RADCSC 295E(2), RADSC 295G(1), RADSC 295I(2)
(Sem: 1-7)

[1] A student enrolled in this major must receive a grade of C or better, as specified in Senate Policy 82-44.

Last Revised by the Department: Spring Semester 2017

Blue Sheet Item #: 45-04-079

Review Date: 1/10/2017

CL/UC

Minors

Business Minor

Penn State Abington, Dr. Feng Zhang, fzz34@psu.edu
University College via World Campus, Lehigh Valley

Contacts: Business Minor Contact at campuses offering the BSB major or University College at:
sah43@psu.edu; Lehigh Valley - Maung Min

The Business minor is a strong complement to virtually any major. Courses prescribed for the minor are
taught by Penn State faculty providing courses to the B.S. in Business and the A.S. in Business
Administration. It provides students with the opportunity to develop and apply skills appropriate to the
business contexts of their chosen majors. Students pursuing the Business minor must complete thirteen
credits of prescribed course work and six credits of additional course work. A grade of C or better is
required for all courses in the minor. The prescribed thirteen credits of coursework presents students with a
critical foundation of core business disciplines: accounting, management, marketing, and either macro- or
micro-economics. The six credits of additional coursework must be taken at the 400-level.

The additional coursework enables students to expand on the core foundation in one of two ways. They may
choose to solidify their business knowledge base by exploring six credits of 400-level business courses in
the following disciplines: Accounting; Business Administration; Business Law; Energy Business and Finance;
Economics; Entrepreneurship; Finance; Financial Services; Health Policy and Administration; International
Business; Labor Studies and Employment Relations; Management Information Systems; Management;
Marketing; Risk Management; Supply Chain Management; or Statistics. Alternately, students can augment
three credits of 400-level coursework in one of the above listed business disciplines with three credits of
400-level work from an approved list of specific business-related course in disciplines such as
Communication Arts and Sciences; Corporate Communication; Communications; Criminal Justice;
Engineering; English; Human Development and Family Studies; History; Hospitality Management;
Information Sciences and Technology; Kinesiology; Philosophy; Political Science; Psychology; Recreation,
Park and Tourism Management; or Sociology.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

REQUIREMENTS FOR THE MINOR: 19 credits

PRESCRIBED COURSES: (10 credits)
ACCTG 211(4) (Sem: 1-5)
MGMT 301(3), MKTG 301(3) (Sem: 5-8)
ADDITIONAL COURSES: (3 credits)
Select 3 credits from ECON 102 GS(3) or ECON 104 GS(3) (Sem: 1-5)

SUPPORTING COURSES AND RELATED AREAS: (6 credits)
Select 3-6 credits at the 400 level from:
ACCTG, BA, BLAW, EBF, ECON, ENTR, FIN, FINSV, HPA, IB, LER, MIS, MGMT, MKTG, RM, SCM, or STAT (Sem: 5-8)
Select 0-3 credits at the 400-level from:
CAS 404(3), CAS 452(3), CAS 483(3), CC 401(3), CC 403(3), COMM 421W(3), COMM 427(3), COMM 471(3),
CRIMJ 408(3), CRIMJ/SOC 467(3), ENGL 419(3), ENGL 420(3), ENGR 425(3), HDFS 401(3), HDFS 424(3), HDFS
PSYCH 408(3), PSYCH 423(3), PSYCH 482(3), PSYCH 484(3), PSYCH 485(3), RPTM 410(3), RPTM 415(3),
RPTM 470(3), SOC 455(3), SOC 456(3) (Sem: 5-8)

Last Revised by the Department: Fall Semester 2014
Blue Sheet Item #: 43-03-174
Review Date: 11/18/2014
UCA Revision #: 8/3/06

Comments
AB/BK/UC

Civic and Community Engagement Minor

College of the Liberal Arts (CIVCM)

University Park - Rosa Eberly, rae2@psu.edu (Coordinator of the program)
Penn State Abington - Gary Calore, gsc1@psu.edu
Penn State Brandywine - Lynn Hartle, lch1@psu.edu
Penn State Erie - Dawn Blasko, dgb6@psu.edu
Penn State Greater Allegheny - Michael Vicaro, mpv2@psu.edu
Penn State Beaver - JoAnn Chirico, jxc64@psu.edu
Penn State Lehigh Valley - Mary Hutchinson, mcl6@psu.edu
Penn State Schuylkill - Elinor Madigan, emm17@psu.edu
Penn State Mont Alto - Jacqueline Schwab, sen@psu.edu
Penn State Berks - Laurie Grobman, leg8@psu.edu

Administered by a program faculty drawn from across the University, the Intercollege Minor in Civic and
Community Engagement is appropriate to undergraduate students seeking to apply domains of knowledge
from their majors or General Education programs to issues of consequence beyond the classroom. In the
minor students integrate democratic, professional, and creative development. In particular, the minor
serves to encourage, recognize, and systematize student participation in public service or problem-based
fieldwork and research that:

- is substantial, sustained, and includes structured opportunities for student reflection and critical
  assessment; and
- is integrated with and supported by traditional, classroom-based course work.

Specifically, the minor consists of a balanced program of fieldwork experience and supporting course work
that is selected with the advice and consent of a minor adviser and approved on behalf of the minor by a
program faculty. Fieldwork experiences are selected from a list of eligible courses (or approved comparable
alternatives), and supporting course work includes a conceptual foundations course that provides students
with a critical orientation to contemporary issues and themes in public scholarship. The minor culminates
with an approved capstone project, which may be a significant paper, or annotated portfolio, or other
demonstration of substantial assessment and integration of the minor experience and the broader issue of
application of academic theory and practice in the civic community.

The Civic and Community Engagement Minor Committee is authorized to award a minor certificate to any
undergraduate who, in addition to satisfying the degree requirements of his or her baccalaureate major,
satisfies the requirements for the Civic and Community Engagement Minor. The completion of the minor is
reflected by a formal notation of the student's official record at the time of graduation. To enter the program, a student must submit an application to the committee. Applicants to the minor in Civic and Community Engagement:

Must have a minimum overall GPA of 2.0.

Must present a proposed plan of study in the application process. The plan of study should include student's contact information and GPA, a brief statement of student's learning objectives in connection with the major or other proposed curricular concentration, such as minor or general education, proposed supporting courses (include description of course and syllabus if available), proposed fieldwork courses (include information about fieldwork, supervision, and reflection and assessment), and minor adviser endorsement of the plan. Minor proposals must be approved by the student's minor adviser and the committee.

May apply no more than 9 credits toward the minor that also count toward the major. Students with multiple majors may have some additional flexibility. Past fieldwork experiences and completed courses may be retroactively included in the plan of study, but must be approved by the minor adviser and the committee.

A grade of C or better is required for all courses in the minor.

Scheduling Recommendation by Semester Standing given like (Sem: 1-2)

REQUIREMENTS FOR THE MINOR: 18 credits

PRESCRIBED COURSES (3 credits)
CIVCM 211 GS(3) (Sem: 5)

SUPPORTING COURSES AND RELATED AREAS (15 credits)

at least 6 credits must be taken at the 400 level
Select 6-9 credits from Program List of public scholarship courses, of which at least 3 credits involve supervised field experience and of which 3-6 credits are public issues and democracy courses, or equivalents chosen in consultation with minor adviser (Sem: 5-8)
Select 3-6 credits in related areas in consultation with minor adviser (Sem: 5-8)
Select 3 credits of public scholarship capstone work at the 400 level in consultation with minor adviser (Sem: 7-8)

Last Revised by the Department: Summer Session 2007
Blue Sheet Item #: 35-04-233
Review Date: 1/16/07
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Information Sciences and Technology Minor

Abington College - contact: Joe Oakes, jxo19@psu.edu
Berks College
Capital College
University College: Penn State Beaver, Penn State Brandywine, Penn State Greater Allegheny, Penn State Hazleton, Penn State Lehigh Valley, Penn State New Kensington, Penn State Schuylkill, Penn State Wilkes-Barre, Penn State Worthington Scranton, Penn State York, World Campus
University Park, College of Information Sciences and Technology (IST)

This minor is structured to provide students with the theoretical frameworks and skill sets necessary to compete and be productive in the information technology-intensive global context that defines the new “Information Age.” Specifically, the minor will be focused on a program that will build an understanding of core information technologies and related areas of study; will prepare students for the practical application of various information sciences and related technologies; and engage students in sharpening their abilities to think critically and to work in teams. All this will be done with the intent to expose students to the cognitive, social, institutional, and global environments of Information Sciences and Technology and to then apply that knowledge as a supplement to their major.
A grade of C or better is required for all courses in this minor.

*Scheduling Recommendation by Semester Standing given like (Sem: 1-2)*

**REQUIREMENTS FOR THE MINOR:** 18 credits

**PRESCRIBED COURSES** (9 credits)
IST 110 GS(3), IST 210(3), IST 220(3) (Sem 1-6)

**ADDITIONAL COURSES** (9 credits)
Select 3 credits from IST 140(3), IST/COMM 234 GS(3), IST/WMNST 235 US(3), IST 250(3), IST 301(3), or IST 302(3) (Sem 5-8)
Select 6 credits from IST 402(3), IST 431(3), IST 432(3), IST 442 IL(3), IST 445(3), IST 452(3), IST 453(3) (Sem 5-8)

Last Revised by the Department: Spring Semester 2017

Blue Sheet Item #: 45-06-037

Review Date: 4/4/2017

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**Sociology Minor (SOC)**

_Contact: Abington College, Michael Bernstein, mjb70@psu.edu; Altoona College, Karyn McKinney, kdm12@psu.edu; Behrend College, Nicole Shoenberger, nas25@psu.edu; Capital College, Kenneth Cunningham, kuc1@psu.edu; Penn State Fayette, Russ Filburn, frf1@psu.edu; Penn State Schuylkill, Salih Hakan Can, shc11@psu.edu; College of the Liberal Arts, Sal Oropesa, rso1@psu.edu_

The sociology minor allows students to explore the wide range of topics, social groups, and social interactions studied by sociologists. From social inequalities and social problems to the familiar institutions of family, school, religion, and government, the diversity of courses available allows sociology minors to explore courses relevant to their interests. The courses also provide multiple viewpoints, studying the intimate interactions of families and small groups and the complex interactions of global economies and political alliances. Requiring a minimum of 18 credits in sociology, including Introductory Sociology (SOC 1) and two courses at the 400 level, students have flexibility in choosing a set of courses for their sociology minor.

A grade of C or better is required for all courses in the minor.

*Scheduling Recommendation by Semester Standing given like (Sem: 1-2)*

**REQUIREMENTS FOR THE MINOR:** 18 credits

**PRESCRIBED COURSES** (3 credits)
SOC 1 GS(3) (Sem: 1-6)

**SUPPORTING COURSES AND RELATED AREAS** (15 credits)
Select 15 credits in sociology; at least 6 of those credits must be at the 400 level (Sem: 1-8)

Last Revised by the Department: Fall Semester 2001

Editorial: 3/23/07

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**Theatre Minor**

_Penn State Berks - James Brown, jnb20@psu.edu_
_Penn State Harrisburg - Maria Enriquez, mse19@psu.edu_
_University College, Penn State Schuylkill, Penn State York_
_University Park, College of Arts and Architecture (THEA)_

The Theatre minor is designed to be an enhancement to a major area of study and/or personal enrichment. The minor should be particularly attractive to students in the humanities (English), communication (Film, Journalism), and the arts (Music, Architecture). The minor may also be attractive to students who need to demonstrate a wide range of interests.
The Theatre minor requirements total 18 credits. Theatre 100 GA;US;IL, a required course in the minor, is an experiential survey of all aspects of the living theatre, as presented by a resident company of theatre artists. Theatre 410, an advanced script analysis course, is also required. Students choose one course from the approved list of theatre history courses and one course from the approved list of design/technical courses. These supporting courses place the literature and aesthetic in historical, social, and political perspective. Students elect 6 theatre credits as additional courses. Typical supporting courses include: Theatre 102 GA, fundamentals of acting; THEA 208 GA;US;IL, Workshop: Theatre in Diverse Cultures; and advanced design or theatre history classes.

A grade of C or better is required for all courses in the minor.

*Scheduling Recommendation by Semester Standing given like (Sem: 1-2)*

**REQUIREMENTS FOR THE MINOR:** 18 credits

**PRESCRIBED COURSES** (3 credits)
THEA 410(3) (Sem: 5-8)

**ADDITIONAL COURSES** (9 credits)
THEA 100 GA;US;IL(3) or THEA 105 GA(3) (Sem: 1-2)
Select 3 credits from THEA 130(3), THEA 131(3), or THEA 150(3) (Sem: 1-4)

**SUPPORTING COURSES AND RELATED AREAS** (6 credits)
Select 6 credits of THEA courses (Sem: 3-8)

Last Revised by the Department: Fall Semester 2005

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Review Date: 5/2/07

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