Penn State Brandywine

Penn State Brandywine, about 20 miles west of Philadelphia, is a commuter campus with convenient public transportation access. The campus includes classrooms, administrative and faculty offices, computer labs, and other areas throughout its major buildings: Main Building, the Classroom Building, the Commons/Athletic Center, and the John D. Vairo Library.

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 Brandywine 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 Penn State Brandywine and move on to the University Park campus or other appropriate Penn State campus in order to complete their degree. 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

American Studies

Abington College (AMSAB)
Penn State Harrisburg (AMSCA)
University College (AMSCC): Penn State Brandywine

PROFESSOR JOHN HADDAD, Program Coordinator

This interdisciplinary major is designed to provide students with an integrated and critical knowledge of American culture, drawing on courses in American Studies and in the traditional disciplines and culminating in two senior seminars. A number of interests may be pursued within the major, including popular culture, art, technology, business, law, archives, museology, and conservation. The major helps prepare students for careers in business, teaching, government, and a number of other areas, and for enrollment in law and other professional programs.

For entrance into the major, the following must be met:
1. At the end of the sophomore year, any student in good standing may gain entrance into the major
without having completed specific courses.
2. Any student seeking entrance during the fifth semester will be granted entrance at the discretion of the American Studies Committee and/or Director following evaluation of the student's record.
3. Any student seeking entrance during or after the sixth semester will be expected to have completed at least 12 credits, which may be counted toward the major in American Studies.

For the B.A. degree in American Studies, a minimum of 123 credits is required.

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

GENERAL EDUCATION: 45 credits
(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 REQUIREMENTS FOR THE MAJOR)

ELECTIVES: 21 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: 33 credits

PRESCRIBED COURSES (6 credits)
AM ST 491W(6) (Sem: 5-8)

ADDITIONAL COURSES (3 credits)
AM ST 100 GH(3) or AM ST 100Y GH(3) (Sem: 1-4)

SUPPORTING COURSES AND RELATED AREAS (24 credits)
(Include 12 credits at the 400 level distributed in at least two of the areas.)
Select 9 credits in each of two of the following areas; select 6 credits in one other of the areas: (Sem: 3-8)
a. American literature
b. American history
c. American art, philosophy, and religion (humanities)
d. American social sciences

Integrated B.A./M.A. in American Studies

The American Studies Program offers an integrated B.A./M.A. program that is designed to allow academically superior baccalaureate students enrolled in the American Studies major to obtain both the B.A. and the M.A. degrees in American Studies within five years of study. The first two years of undergraduate coursework typically include the University General Education requirements and lower-level courses. In the third year, students typically take upper-division coursework in American Studies and define areas of interest. The fourth year involves graduate-level American Studies coursework including required courses in American Studies Theory and Methods (AM ST 500). The fifth and final year of the program typically consists of graduate coursework in American Studies including Seminar (AM ST 591) and identification of a research project that will culminate in the completion of a M.A. project (AM ST 580) or thesis (AM ST 600).

By encouraging greater depth and focus in the course of study beginning in the third undergraduate year, this program will help the student more clearly define his/her area of interest and expertise in the broad field of American Studies. As a result, long-range academic planning for exceptional students pursuing doctoral degrees or other professional goals after leaving Penn State will be greatly enhanced. For most students, the total time required to reach completion of the higher degree will be shortened by about a year. The student will have earlier contact with the rigors of graduate study and with graduate faculty. The resources of the Graduate School are accessible to students accepted into the IUG program. Students in their third and fourth year of study with IUG status benefit from their association with graduate students whose level of work parallel their own.

For the IUG American Studies B.A./M.A. degree, a minimum of 123 credits are required for the B.A. and a minimum of 30–33 credits for the M.A. (30 for non-thesis; 33 for thesis). Twelve credits at the 400 level or
higher, in consultation with the adviser, can apply to both the B.A. and M.A. degrees; at least 6 of these 12 credits must be at the 500 level.

If for any reason a student admitted to the B.A./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 B.A. degree assuming all degree requirements have been satisfactorily completed.

Admission Requirements

The number of openings in the integrated B.A./M.A. program is limited. Admission will be selective based on specific criteria and the unqualified recommendation of faculty. Applicants to the integrated program:

1. Must be enrolled in the American Studies B.A. program and meet the admission requirements of the American Studies M.A. program.
2. Must apply and be admitted to the Graduate School.
3. Shall be admitted no earlier than the beginning of the third semester of undergraduate study at Penn State (regardless of transfer or AP credits accumulated prior to enrollment) and no later than the end of the second week of the semester preceding the semester of expected conferral of the undergraduate degree, as specified in the proposed IUG plan of study.
4. Must have completed at least one 400-level American Studies course (AM ST prefix) with a grade of A.
5. Must submit transcript(s) of previous undergraduate work, recommendations from two faculty members, writing sample, and statement of goals.
6. Must have an overall GPA at or above 3.3 (on a 4.0 scale) in undergraduate coursework and a GPA at or above 3.5 in all coursework completed for the American Studies major.
7. Must present a plan of study approved by the student’s adviser in the application process.

Course Load

As many as 12 of the credits required for the master’s degree may be applied to both undergraduate and graduate degree programs. The courses to be double counted are:

AM ST 491W (two seminars on different topics)—6 credits during the student’s fourth (senior) year
AM ST 500 –3 credits during the student’s fourth (senior) year
AM ST 591—3 credits during the student’s fifth year

With the approval of the student’s adviser, students may take American Studies courses from the 100 to 400 levels at Penn State campuses other than Harrisburg, but 500-level courses must be taken at the Harrisburg campus.

Sample Sequence of Coursework

A typical sequence of coursework for the integrated program would appear as follows (AM ST 491W, AM ST 500, and AM ST 591 are applied to both undergraduate and graduate degree programs):

<table>
<thead>
<tr>
<th>YEAR</th>
<th>FALL</th>
<th>SPRING</th>
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<tbody>
<tr>
<td>3rd (Junior)</td>
<td>AM ST 100</td>
<td>3 AM ST supporting course</td>
</tr>
<tr>
<td></td>
<td>AM ST supporting course</td>
<td>3 AM ST supporting course</td>
</tr>
<tr>
<td></td>
<td>BA Requirement: Other Cultures</td>
<td>3 400-level AM ST course</td>
</tr>
<tr>
<td></td>
<td>BA Requirement: Knowledge Domain</td>
<td>3 400-level AM ST course</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3 Elective</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>15 Total</td>
</tr>
<tr>
<td>4th (Senior)</td>
<td>AM ST 491W*</td>
<td>3 AM ST 491W*</td>
</tr>
<tr>
<td></td>
<td>400-level AM ST course</td>
<td>3 400 level AM ST course</td>
</tr>
<tr>
<td></td>
<td>400-level AM ST supporting course</td>
<td>3 AM ST 500*</td>
</tr>
</tbody>
</table>
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)


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)


SUPPORTING COURSES AND RELATED AREAS (10-18 credits)
Select 10-18 credits from department list (Sem: 1-8)
427(3), BIOL 428(3), BIOL 438(3), BIOL 443(3), BIOL 460(3), BIOL 474(3)

Group III -- BIOL 400(1-3), BIOL 414(3), BIOL 417(4), BIOL 419(3), BIOL 421(4), BIOL 437(4), BIOL 439(3),
BIOL 444(3), BIOL 448(3), BIOL 450W(3-5), BIOL 461(3), BIOL 471(3), BIOL 473(2), 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)

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 I -- BIOL 410(3), BIOL 413(3), BIOL 427(3), BIOL 430(3), BIOL 443(3), BIOL 444(3), BIOL 446(3), BIOL

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)

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)

Group II -- BIOL 405(3), BIOL 411(3), BIOL 414(3), BIOL 417(4), BIOL 420(3), BIOL 421(4), BIOL 425(4), BIOL
427(3), BIOL 428(3), BIOL 438(3), BIOL 443(3), BIOL 448(3), BIOL 450W(3-5), BIOL 461(3), BIOL 471(3), BIOL 473(2), BIOL 496(2), BIOL 499A
IL(3), SC 295(1-3), SC 395(1-3), SC 495(1-3)

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

[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 2007

Blue Sheet Item #: 35-06-520
Review Date: 4/10/07
UCA Revision #1: 8/2/06
UCA Revision #2: 7/26/07
SC

Business
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)
B A 321(3)[1], B A 322(3)[1], B A 420(1)[1], FIN 301(3)[1], MGMT 301(3)[1], MKTG 301(3)[1], MKTG 301(3)[1], SCM 301(3)[1] (Sem: 5-6)
I B 303 IL(3)[1] (Sem: 5-8)
B A 421(3)[1], B A 422W(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)
B A 243(4) or B A 241(2) and B A 242(2) (Sem: 3-4)
Select 3 or 6 credits from B A 495A(3 or 6)[1], B A 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, B A, ECON, ENTR, FIN, FINSV, H P A, I B, MGMT, MIS, MKTG, R M, 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, B A, ECON, ENTR, FIN, FINSV, H P A, I B, MGMT, MIS, MKTG, R M, 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)
H P A 101(3) (Sem: 5-6)
H P A 332(3) (Sem: 5-8)

ADDITIONAL COURSES (0-3 credits)
Select 0-3 credits from BB H 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 H P A courses (Sem: 5-8)
Select 0-6 credits of 300-400-level courses from ACCTG, B A, ECON, ENTR, FIN, FINSV, H P A, I B, MGMT, MKTG, MIS, R M 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: B A 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 #: 8/3/06

Comments

Communication Arts and Sciences

Berks College (CASBL)
University College (CASCIC): Penn State Brandywine, Penn State York
University Park, College of the Liberal Arts (CAS)

Contacts: Berks College, Catherine Catanach, cdc18@psu.edu; Penn State Brandywine, Wayne McMullen, wjm11@psu.edu; Penn State York, Deborah Eicher-Catt, die4@psu.edu; College of the Liberal Arts, Dr. Rachel A. Smith, ras57@psu.edu

This major provides increased understanding and practice in the ways humans use symbols to influence people and the world around them. The ability to communicate effectively with others in personal, social, work and multicultural situations is essential in modern society. A student of Communication Arts and Sciences will learn to think critically, analyze and solve problems, understand and manage conflict, argue persuasively, influence people, form and keep relationships, give effective presentations, and participate in the civic and political life of a community. The flexibility of the program offers preparation for a variety of careers such as administration, law, business, health, and human services fields. A CAS degree also lends itself well to a concurrent degree program in which students prepare themselves in several fields of study.

For the B.A. degree in Communication Arts and Sciences, a minimum of 124 credits is required.

Per Senate Policy 83-80.5, the college dean or campus chancellor and program faculty may require up to 24 credits of course work in the major to be taken at the location or in the college or program where the degree is earned. For more information, check the Recommended Academic Plan for your intended program.

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

GENERAL EDUCATION: 45 credits
(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, 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: 25 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 front of Bulletin.)
REQUIREMENTS FOR THE MAJOR: 30 credits[1]

PRESCRIBED COURSES (9 credits)
CAS 201 GH(3), CAS 202 GS(3), CAS 204(3) (Sem: 3-6)

ADDITIONAL COURSES (6 credits)
Select 3 credits of skills courses from CAS 203 GS(3), CAS 205(3), CAS 211(3), CAS 213(3), CAS 214W(3), CAS 215(3), CAS 216(2), CAS 250(3), CAS 252(3), CAS 271 US;IL(3), CAS 280W(3), or CAS 283(3) (Sem: 3-8)
Select 3 credits of 300-level courses from CAS 302(2), CAS 311(3), CAS 321(3), CAS 352(3), CAS 373(3), CAS 375(3), CAS 383(3), CAS 398(1-9), CAS 399 IL(1-12) (Sem: 3-8)

SUPPORTING COURSES AND RELATED AREAS (15 credits)
Select 15 credits of other CAS courses; at least 12 credits must be at the 400 level. A maximum of 6 credits from CAS 494, 495, 496, and 499(IL) may satisfy this requirement. CAS 126(3) and CAS 195(1) may not be counted as part of the major (Sem: 1-8)

[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 2010
Blue Sheet Item #: 38-06-118
Review Date: 04/13/2010

Communications

University College (COMCC): Penn State Beaver, Penn State Brandywine, Penn State Greater Allegheny, Penn State New Kensington

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

With the rapid development of digital technologies over the last decade, the field of communications has seen unprecedented growth and convergence of medium in media both technologically and structurally. The communications degree program addresses strongly articulated employer requirements for the workplace through an integrated program model. The degree provides the basic theoretical foundations of the discipline, allows for appropriate branching outside the traditional curriculum, and permits a drawing from appropriate courses in the disciplines of information sciences and technology, communications, arts and sciences, English, and business.

The degree in communications provides two options for students who wish to develop their written and verbal skills in an effort to gain professional employment in fields such as public relations, publishing, speech writing, video and multimedia, production, and/or journalism.

CORPORATE COMMUNICATIONS OPTION: In extending traditional organizational communication and public relations to the digital age, this option prepares public relations specialists to compete in a global society. The program is also effective as preparation for e-commerce.

JOURNALISM OPTION: In today's workplace, journalism graduates are required to regularly engage rapidly converging media in their work. This option offers graduates a competitive advantage by complementing traditional options (newspaper, magazine, radio, TV) with convergent course work designed to prepare students for professional journalism in the digital age.

For a B.A. degree in Communications, a minimum of 120 credits is required.

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

GENERAL EDUCATION: 45 credits
(6-10 credits 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:
ELECTIVES: 4-9 credits

BACHELOR OF ARTS DEGREE REQUIREMENTS: 24 credits
(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: 52-53 credits
(This includes 6-10 credits of General Education courses: 0-6 credits of GS; 0-6 credits of GH; 0-4 credits GQ courses.)

COMMON REQUIREMENTS FOR THE MAJOR (ALL OPTIONS): 25 credits

PRESCRIBED COURSES (13 credits)[1]
COMM 160(1) (Sem: 1-2)
COMM 260W(3), COMM 270(3) (Sem: 3-4)
COMM 494(3), COMM 495(3) (Sem: 7-8)

ADDITIONAL COURSES (12 credits)
COMM 100 GS(3) or COMM 110 GH(3) (Sem: 1-2)[1]
Select 3 credits from the following (may double count with general education courses): AM ST 105 GH;US(3), ECON 102GS(3), ECON 104 GS(3), PHIL 103 GH(3), PSYCH 100 GS(3), SOC 001 GS(3), SOC 005 GS(3) (Sem: 1-2)
CAS 201 GH(3)[1] or CAS 202 GS(3)[1] (Sem: 3-4).
Select 3 credits from the following in Communications Research Methods/Theory (may not double count with option additional courses requirement): CAS 204(3), COMM 304(3), CAS 352(3), CAS 471 US;IL(3) (Sem: 5-6)

REQUIREMENTS FOR THE OPTION: 27-28 credits

CORPORATE COMMUNICATIONS OPTION: (27-28 credits)

PRESCRIBED COURSES (9 credits)[1]
CAS 252(3) (Sem: 3-4)
COMM 370(3) (Sem: 5-6)
COMM 471(3) (Sem: 7-8)

ADDITIONAL COURSES (18-19 credits)[1]
(Some courses in this category have prerequisites that are not required in the program. Credits applied may not double count with any other major or option requirements. Only 3 credits combined maximum or COMM 001, 002, 003 may apply. Only 3 credits maximum of COMM 297 may apply. Only 3 additional credits of COMM 495 may apply. STAT 200 may double count as GQ. Courses may double count toward IL and US requirements.)

MKTG 301(3) or MKTG 301W(3) (Sem: 5-6)
Select 15 credits from the following (at least 3 credits must be at the 400 level):

JOURNALISM OPTION: (27-28 credits)

PRESCRIBED COURSES (12 credits)[1]
COMM 403(3), COMM 409(3), COMM 460W(3), ENGL 420(3) (Sem: 5-8)

ADDITIONAL COURSES (15-16 credits)[1]
(Some courses in this category have prerequisites that are not required in the program. Credits applied may not double count with any other major or option requirements. Only 6 credits combined maximum of COMM 001, 002, 003, may apply. Only 6 credits maximum of COMM 297 may apply. Only 3 additional credits of COMM 495 may apply. STAT 200 may double count as GQ. Courses may double count toward IL and US requirements.)

Majors explore the imaginative and practical uses of English through courses in literature, writing, rhetoric, and language. They develop perspectives on human nature and cultural values through American, British, and other English literatures; they learn how to gather, analyze, synthesize, and communicate information; they gain mastery over their language. These skills help English majors find careers in such fields as publishing, business, industry, government, and teaching. English majors often go on to postgraduate study not only in English but in such areas as law, business, education, or other liberal disciplines.

Majors can emphasize writing, literature, or rhetoric, or a mix of literature, writing, and rhetoric. All provide a liberal education and all develop analytic and writing skills. Qualified students may participate in the career internship and in the English honors program.

Students interested in earning certification in secondary education should contact the College of Education, Department of Curriculum and Instruction. (See also Teacher Education Programs.)

For the B.A. degree in English, a minimum of 123 credits is required.

Per Senate Policy 83-80.5, the college dean or campus chancellor and program faculty may require up to 24 credits of course work in the major to be taken at the location or in the college or program where the degree is earned. For more information, check the Recommended Academic Plan for your intended program.

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

**GENERAL EDUCATION:** 45 credits
(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, 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:** 18 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 front of Bulletin.)

**REQUIREMENTS FOR THE MAJOR:** 36 credits

**ADDITIONAL COURSES** (18 credits)
Select 3 credits from ENGL 200(3) or ENGL 201 GH(3) (Sem: 1-6)
Select 3 credits of a 300/400-level course in each of the following areas:
Medieval through Sixteenth Century (Sem: 1-8)
Sixteenth Century through Eighteenth Century (Sem: 1-8)
The Nineteenth Century (Sem: 1-8)
Twentieth Century to the Present (Sem: 1-8)
Select 3 credits from ENGL 310H(3) or ENGL 487W(3) (Sem: 5-8)

SUPPORTING COURSES AND RELATED AREAS (18 credits)
In consultation with adviser, select 18 credits in literature, writing, or rhetoric (Sem: 1-8)
(At least 9 credits must be at the 300/400 level)

At least 3 of the 300/400 level credits must fulfill a departmental diversity requirement for a course related to race, gender, sexuality, disability, ethnicity, and/or postcolonial issues).

Integrated B.A./M.A. Program in English

The BA in English requires a minimum of 123 credits, with 36 of those credits required for the English major-3 credits of English 200, 3 credits of English 201, 3 credits of English 221, 18 credits of English 300 level or above, 3 credits of pre-1800 300 level or above, 3 credits of post-1800 race, ethnic, or minority literatures 300 level or above, 3 credits of English 487W, senior seminar.

The B.A./M.A. consists of these 36 English credits of the B.A., plus an additional 24 English credits of M.A. work distributed as follows: 12 credits of English 512, 513, or 515. English 512, 513, and 515 can be repeated for credit. In addition, students will take 6 credits of a graduate-level literature and 6 credits of M.A. Master’s paper, 596, to support work on a major project that will be the centerpiece of each student’s culminating Master’s paper. In the Master’s paper, students receiving an M.A. in English with a creative writing concentration will append their Master’s paper with a bibliographic essay referencing primary and/or secondary sources generated by their research for the paper. The essay can discuss the range of research modalities, including contextual background in the work itself as well as contemporary and historic literature that has influenced the style and form of the Master’s paper. Sources consulted for contextual background can include library and database materials, historical research, oral history, interviews, and other bibliographic tools. 12 credits, 6 at the 400 level (412/413/415) and 6 at the 500 level (512/513/515), will be double counted between the B.A. and the M.A. The IUG B.A./M.A. consists of a total of 60 English credits.

A minimum of 141 credits are required to complete the IUG B.A./M.A. in English.

Time of Admission to the Program

Students shall be admitted to the English IUG program no earlier than the beginning of the third semester of undergraduate study at Penn State (regardless of transfer or AP credits accumulated prior to enrollment) and no later than the end of the second week of the semester preceding the semester of expected conferral of the undergraduate degree, as specified in the proposed IUG plan of study.

Application to the English IUG would typically occur in the junior year after a student has completed 60 credits, enrolled in the English major, and completed two English courses in creative writing.

Admission Requirements

Admission to the integrated B.A./M.A. program will be based on the submission of a portfolio of creative work and a plan of study to the department’s Director of Graduate Studies and the Director of the B.A./M.A. program. Applications typically will be filed during the 5th or 6th semesters of study, and applicants must have achieved a minimum of 60 credits and a 3.3 overall GPA and 3.6 GPA in English to begin the program. The English Director of Graduate Studies will ensure that the applicant meets the minimum credit and GPA requirements for the program. The Director of the B.A./M.A. program will evaluate the quality of the student’s creative work and the applicant’s plan for fulfilling the requirements of the M.A. in English. The Director of the B.A./M.A. program, in consultation with the Creative Writing faculty, will have final approval for what constitutes an acceptable level of creative work and an acceptable plan for the completion of the M.A.

The application procedure requires submission of the following:

A. Support Letters from Faculty and Administrators (addressed to the department’s Director of Graduate Studies and the Director of the B.A./M.A. program)
B. A Personal Statement
C. Portfolio of Creative Work
D. A Plan of Study
E. A transcript and degree audit printed from e-Lion
F. A current resume or curriculum vita
G. A copy of the completed on-line Graduate School Application (GRE scores are not required).

**Plan of Study and Advising**

Prior to the application process, students should communicate their intent to enroll in the IUG to the English B.A. adviser and the Director of the B.A./M.A. program. The Director of the B.A./M.A. will help each student identify an appropriate series of English courses to properly prepare each student for the 500-level M.A. workshops and 500-level literature courses.

Students will be expected to maintain a minimum overall GPA of 3.3 for all undergraduate coursework and a GPA of 3.6 in English (ENGL) courses throughout the IUG program of study. Failure to do so will result in the student being advised that he/she must regain a GPA of 3.3 within one semester. If the GPA is not 3.3 or higher in general undergraduate coursework and 3.6 or higher in English coursework after that term, the student will be dropped from the IUG.

Each student enrolled in the B.A./M.A. will meet at the beginning of each term with the Director of the B.A./M.A. to discuss his or her progress through the M.A. degree and to make sure that he or she is following the plan established upon his or her admission to the B.A./M.A. program.

If the student decides not to continue on in the IUG, the student may, contingent on fulfilling all other requirements for the BA in English, graduate with a B.A. in English.

**Sequence of Courses**

The IUG B.A./M.A. consists of a total of 60 English credits. A minimum of 141 credits are required to complete the IUG B.A./M.A. in English.

[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 #: 43-03-103

Review Date: 11/18/2014

Comments
LA

**General Engineering (G E)**

*Abington College*
*University College, Penn State Brandywine, Penn State DuBois, Penn State Hazleton*

PROFESSOR SVEN BILÉN, *Head of School of Engineering, Design, Technology and Professional Programs (SEDTAPP)*
PROFESSOR IVAN E. ESPARRAGOZA, *Director of Engineering Technology and Commonwealth Engineering*

PROFESSOR ROBERT AVANZATO, *Program Coordinator, Penn State Abington*
PROFESSOR ASAD AZEMI, *Program Coordinator, Penn State Brandywine*
PROFESSOR DAUDI WARYOBA, *Program Coordinator, Penn State DuBois*
PROFESSOR KATHRYN W. JABLOKOW, *Program Coordinator, Penn State Great Valley*
PROFESSOR WIESLAW GREBSKI, *Program Coordinator, Penn State Hazleton*

The General Engineering program provides students with a broad foundation in engineering with specialization in a technically and professionally relevant topic. Students must choose the Multidisciplinary Engineering Design option at Abington, Brandywine and Great Valley campuses, Applied Materials option at the DuBois campus or the Alternative Energy and Power Generation option at the Hazleton campus. From this degree program, students will acquire the ability to work as members of a team toward successful attainment of a common goal, thus preparing them to work in for-profit or nonprofit organizations, or to further their studies in graduate school. Typical employment for General Engineering graduates includes positions such as engineer, product engineer, process engineer, manufacturing engineer, development engineer, and materials engineer. With employment opportunities such as these and others, graduates or the General Engineering program can attain professional and economically sustaining employment in their desired regional area. This degree program develops written and oral communication skills, culminating in a two-semester senior design course sequence consisting of a project based largely on student interest and faculty input.
Program Educational Objectives:

The educational objectives of the General Engineering program are designed to prepare graduates who, during the first few years of professional practice will

1. Be employed in public or private sectors in fields such as design, research and development, experimentation and testing, manufacturing, and technical sales.
2. Demonstrate a level of competence and expertise that may lead to an increasing level of responsibility and leadership within their respective organizations.
3. Communicate effectively and work collaboratively in multidisciplinary and multicultural work environments
4. Recognize and grow an appreciation of the global, environmental, social, and ethical contexts of their work.
5. Be committed to lifelong learning to enhance their careers and provide flexibility in responding to changing social and technical environments, which will enable graduates to pursue advanced degrees or certificate programs.

Program Outcomes (Student Outcomes):

Graduates of the General Engineering program shall be able to:

a) Apply knowledge of mathematics, science, and engineering
b) Design and conduct experiments, as well as to analyze and interpret data
c) Design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
d) Function on multidisciplinary teams
e) Identify, formulate, and solve engineering problems
f) Demonstrate an understanding of professional and ethical responsibility
g) Communicate effectively
h) Demonstrate the understanding of the impact of engineering solutions in a global, economic, environmental, and societal context
i) Recognize the need for, and an ability to engage in life-long learning
j) Demonstrate knowledge of contemporary issues
k) Use the techniques, skills, and modern engineering tools necessary for engineering practice.

In addition to the minimum grade point average (GPA) requirements* described in the University Policies, all College of Engineering entrance to major course requirements must also be completed with a minimum grade of C: CHEM 110 (GN), MATH 140 (GQ), MATH 141 (GQ), MATH 250 or MATH 251, PHYS 211 (GN) and PHYS 212 (GN). All of these courses must be completed by the end of the semester during which the admission to major process is carried out.

For the B.S. degree in General Engineering, a minimum of 127 credits are required.

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

GENERAL EDUCATION: 45 credits
(27 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 REQUIREMENTS FOR THE MAJOR.)

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: 109 credits
(This includes 27 credits of General Education courses: 9 credits of GN courses; 6 credits of GQ courses; 3 credits of GS courses; 9 credits of GWS courses.)

COMMON REQUIREMENTS FOR THE MAJOR (ALL OPTIONS): 71 credits

PRESCRIBED COURSES: 45 credits
CHEM 110 GN(3)[1], CHEM 111 GN(1), CHEM 112 GN(3), CHEM 113 GN(1), EDSGN 100(3), MATH 140 GQ(4)[1], MATH 141 GQ(4)[1], PHYS 211 GN(4)[1] (Sem: 1-2)
E MCH 211(3)[1], E MCH 213(3), MATH 231(2), MATH 251(4)[1], PHYS 212 GN(4)[1], PHYS 214 GN(2) (Sem: 3-4)
ENGR 490W(1), ENGR 491W(3) (Sem: 7-8)
ADDITIONAL COURSES: 22 credits
Select 1 credit of First-Year Seminar (Sem: 1-2)
CAS 100A GWS(3) or CAS 100B GWS(3) (Sem: 1-2)
ENGL 015 GWS(3) or ENGL 030 GWS(3) (Sem: 1-2)
CMPSC 121 GQ(3) or CMPSC 201 GQ(3) (Sem: 3-4)
ECON 102 GS(3) or ECON 104 GS(3) (Sem: 3-4)
ENGL 202C GWS(3) or ENGL 202D GWS(3) (Sem: 3-4)
M E 300(3) or EME 301(3) (Sem: 3-4)
ENGR 350(3), E MCH 407(3) or E MCH 461(3) (Sem: 5-6)

SUPPORTING COURSES AND RELATED AREAS: 4 credits
Select 4 credits in General Technical Electives from the program approved list.

REQUIREMENTS FOR THE OPTION: 38 credits

APPLIED MATERIALS OPTION: (38 credits)

PRESCRIBED COURSES: 38 credits
E MCH 212(3), ENGR 320(3), MATSE 201(3), MATSE 400(3), MATSE 413(3), STAT 200 GQ(4) (Sem: 5-6)
ENGR 421(4), ENGR 450(3), MATSE 402(3), MATSE 411(3), MATSE 417(3), MATSE 430(3) (Sem: 7-8)

ALTERNATIVE ENERGY AND POWER GENERATION OPTION: (38 credits)

PRESCRIBED COURSES: 38 credits
E E 210(4) (Sem: 3-4)
E E 314(3), EGEE 302(3), EME 303(3), M E 345(4), NUC E 401(3) (Sem: 5-6)
E E 485(3), E E 488(3), EGEE 420(3), EGEE 437(3), EGEE 438(3), EGEE 441(3) (Sem: 7-8)

MULTIDISCIPLINARY ENGINEERING DESIGN OPTION (38 credits)

PRESCRIBED COURSES: 38 credits
CMPEN 271(3), E E 210(4), E MCH 212(3) (Sem: 3-4)
CMPEN 331(3), CMPEN 472(3), E E 310(4), E E 352(4) (Sem: 5-6)
CMPEN 454(3), EDSGN 401(3), EDSGN 410(4), EDSGN 495(1), ENGR 407(3) (Sem: 7-8)

[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 #: 40-03-033
Review Date: 11/08/2011
R & T: Approved 5/24/2013

Human Development and Family Studies

Penn State Altoona (HFSAL)
Penn State Harrisburg (HFSCA)
University College (HFSCC): Penn State Brandywine, Penn State DuBois, Penn State Fayette, Penn State Mont Alto, Penn State Shenango, Penn State Worthington-Scranton, Penn State York
College of Health and Human Development (HD FS)
World Campus

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

PROFESSOR DOUGLAS M. TETI, Head of the Department

This major is a multidisciplinary program that examines the development of individuals and families across the life span. It enables students to prepare for professional, managerial, or scientific roles in health and
human services professions, in public and nonprofit agencies, and in business and industry, as well as for advanced professional or graduate study. Students obtain a broad background in individual and family development across the life span. Courses emphasize biological, psychological, social/cultural, and economic aspects of development. Through course work and undergraduate internships or research projects, students develop skills relevant to career objectives, such as counseling, human assessment, program planning and evaluation, and research.

Two options are available within the major: (1) Life Span Human Services option and (2) Life Span Developmental Science option. The introductory paragraph to each of the options includes a brief list of career opportunities. More extensive descriptions of career opportunities in both public and private sectors are available for the program.

**LIFE SPAN HUMAN SERVICES OPTION:** This option focuses on the acquisition and application of scientific knowledge about development and family functioning across the life span for the purposes of enhancing personal and family development. Courses emphasize: (1) understanding the biological, psychological, and social development across the life span, and the structuring and functioning of families; (2) understanding basic theoretical and methodological issues; and (3) the development of applied skills in intervention and evaluation, prevention, and in the formulation of social policy. An approved field experience in a setting that serves children, youth, adults, or the aged is required for this option. Typical employment settings include preschools, daycare centers, hospital programs for children, youth, and families, institutional and community mental health programs for individuals and families, programs for abused or neglected children and adolescents, women’s resource centers, human resources programs, employee assistance programs, nursing homes, area agencies on aging and other community settings for older adults, and public welfare and family service agencies. Typical postgraduate pursuits of students completing this option include graduate study in human development, family studies, psychology, or sociology, or advanced professional training in psychology, law, behavioral health, counseling or social work.

**LIFE SPAN DEVELOPMENTAL SCIENCE OPTION:** This option focuses on the understanding of contemporary methodological approaches to the acquisition of scientific knowledge about individual development over the life span and about family development. This option provides preparation for advanced training in careers in developmental or family research, teaching at a college or university, or for professional careers that require graduate training. Courses within this option emphasize a thorough understanding of the theory and methods of developmental and family theory and research. An approved, multi-semester research practicum is an integral component of this option. Typical postgraduate pursuits of students completing this option include graduate study in human development, family studies, psychology, or sociology, or advanced professional training in psychology, law, behavioral health, social work, or in other programs related to services for individuals and families.

For the B.S. degree in Human Development and Family Studies, a minimum of 120 credits is required.

Per Senate Policy 83.80.5, the college dean or campus chancellor and program faculty may require up to 24 credits of course work in the major to be taken at the location or in the college or program where the degree is earned. HD FS requires students to complete 24 credits for the major through courses taken at University Park. Courses taken at other Penn State campuses may not be counted toward this 24 credit minimum. For more information, check the Recommended Academic Plan for this major.

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

**GENERAL EDUCATION:** 45 credits

(3-4 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 selections, or REQUIREMENTS FOR THE MAJOR)

**WRITING ACROSS THE CURRICULUM:**

(Included in REQUIREMENTS FOR THE MAJOR)

**ELECTIVES:** 3-5 credits

**REQUIREMENTS FOR THE MAJOR:** 73-76 credits

(This includes 3-4 credits of General Education GQ courses.)

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

**PRESCRIBED COURSES** (18 credits) [11]

HD FS 129 GS(3), HD FS 301(3), HD FS 311(3), HD FS 312W(3), HD FS 315 US(3) [93], HD FS 418(3) (Sem: 3-6)
ADDITIONAL COURSES (12-13 credits)[1]
Select 6 credits from HD FS 229 GS(3), HD FS 239 GS(3), HD FS 249 GS(3) (Sem: 1-4)
STAT 200 GQ(4) or EDPSY 101 GQ(3) (Sem: 1-4)
Select 3 credits of United States Cultures (US)[92] (Sem: 4-8)

REQUIREMENTS FOR THE OPTION: 43-45 credits

LIFE SPAN HUMAN SERVICES OPTION: (43-45 credits)

PRESCRIBED COURSES (9 credits)[1]
HD FS 411(3), HD FS 414(3), HD FS 455(3) (Sem: 5-8)

ADDITIONAL COURSES (22-24 credits)[1]
Select 3 credits from HD FS 428(3), HD FS 429(3), HD FS 433(3) or HD FS 445(3) (Sem: 5-8)
Select 6 credits from 300- or 400-level HD FS courses (Sem: 5-8)
Select 13-15 credits from (a) or (b)
(a) Approved field practice in a human service setting: HD FS 490(2), HD FS 495A(9), HD FS 495B(3) (Sem: 5-8)
(b) Approved group project or field practice in human service setting: HD FS 401(3), HD FS 402(4), HD FS 495C(6-8) (Sem: 5-8)

SUPPORTING COURSES AND RELATED AREAS (12 credits)
Select 12 credits (minimum of 6 credits at the 400 level) in consultation with adviser from University-wide offerings that develop competency in the option (a grade of C or better is required in any HD FS course taken to satisfy this requirement) (Sem: 5-8)

LIFE SPAN DEVELOPMENTAL SCIENCE OPTION: 45 credits

PRESCRIBED COURSES (6 credits)[1]
HD FS 494(6) or HD FS 494H(6) (Sem: 5-8)

ADDITIONAL COURSES (21 credits)[1]
Select 6 credits from HD FS 428(3), HD FS 429(3), HD FS 433(3), HD FS 445(3) (Sem: 5-8)
Select 15 credits (minimum of 9 credits at the 400-level) from HD FS courses (Sem: 5-8)

SUPPORTING COURSES AND RELATED AREAS (18 credits)
Select 18 credits (minimum of 9 credits at the 400 level) in consultation with adviser from University-wide offerings that develop competency in option (a grade of C or better is required in any HD FS course taken to satisfy this requirement) (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.
[92] This course is in addition to the 6 credits of United States Cultures and International Cultures.
[93] This course fulfills the University's United States Cultures requirement.

Last Revised by the Department: Summer Session 2006

Blue Sheet Item #: 34-02-111

Review Date: 10/11/05

HH

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

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

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(3)[1], IST 210(3)[1], IST 220(3)[1], IST 230(3)[1] (Sem: 1-4)
STAT 200 GQ(4) (Sem: 3-6)
IST 495(1)[1] (Sem: 3-8)
IST 301(3)[1], IST 331(3)[1] (Sem: 5-8)
IST 440W(3)[1] (Sem: 7-8)

ADDITIONAL COURSES (13 credits)
CMPSC 101 GQ(3)[1], CMPSC 121 GQ(3)[1], or IST 140(3)[1] (Sem: 1-4)
ECON 014 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 (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 (Sem: 5-8)

INFORMATION TECHNOLOGY: INTEGRATION & APPLICATION OPTION: 24 credits
PRESCRIBED COURSES (9 credits)
IST 302(3), IST 420(3), IST 421(3) (Sem: 5-8)

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

SUPPORTING COURSES AND RELATED AREAS (12 credits)
Select 12 credits from College-approved list (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 comprehensive 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 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](http://www.shc.psu.edu/students/iug/program/).
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:

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
*** 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 ongoing 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/bulletins/whitebook/degree_requirements.cfm?section=masters](http://bulletins.psu.edu/bulletins/whitebook/degree_requirements.cfm?section=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. (See Grade Point Average Requirement in the Schreyer Honors College Student Handbook: [https://www.shc.psu.edu/documents/academic/handbook/handbook_1415.pdf](https://www.shc.psu.edu/documents/academic/handbook/handbook_1415.pdf).) 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: Spring Semester 2016

Blue Sheet Item #: 44-04-020

Review Date: 1/26/2016

PROGRAM CURRENTLY ON HOLD at PENN STATE Harrisburg;
NOT ACCEPTING NEW STUDENTS
Begin Date of Enrollment Hold: Fall Semester 2015

Letters, Arts, and Sciences

Abington College (LASAB)
Altoona College (LASAL)
Penn State Harrisburg (LASCA)
University College (LASCC): Penn State Brandywine, Penn State DuBois, Penn State Greater Allegheny, Penn State Hazleton, Penn State Mont Alto, Penn State Shenango, Penn State Worthington Scranton
University Park, College of the Liberal Arts (LAS)
World Campus

Letters, Arts, and Sciences is a multi-disciplinary, theme-oriented, and student-designed major leading to a bachelor of arts degree. The major consists of 36 credits, divided into two sections. The core (12 credits) consists of 3 credits each in the following: research methods/projects; communication skills; theory/application; and critical analysis. The additional courses (24 credits) consist of courses directed toward the student's theme, 15 credits of which must be at the 400 level.

In order to be eligible for entrance to the major, the student must submit a proposal. In consultation with an LAS adviser, the student formulates a proposal designing a program that investigates a theme from the viewpoint of at least three different subject areas. Students may not duplicate existing majors from any academic area. An important standard for entrance to the Letters, Arts, and Sciences major is the student's ability to design a program with academic integrity worthy of a bachelor of arts degree.

For the B.A. degree in Letters, Arts, and Sciences, a minimum of 120 credits is required.
Per Senate Policy 83-80.5, the college dean or campus chancellor and program faculty may require up to 24 credits of course work in the major to be taken at the location or in the college or program where the degree is earned. For more information, check the Recommended Academic Plan for your intended program.

**Early Admission Program for Professional Schools:** If a student is accepted and enrolled as a degree candidate in a professional postgraduate degree program requiring three years or more to complete (such as medical school, dental school, law school, theological seminary, etc.) and if that student completes 94 undergraduate credits at Penn State including General Education, B.A. requirements, and the LAS 12-credit core requirements, that student may use up to 30 credits from the professional school to complete the B.A. in LAS.

It must be emphasized that only top students are accepted into professional school programs on such an early admission basis and that not every professional school has such a policy. Students must have enrolled in LAS prior to attending the professional school to request graduation in LAS.

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

**GENERAL EDUCATION:** 45 credits
(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 course selection)

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

**ELECTIVES:** 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:** 36 credits

**ADDITIONAL COURSES** (24 credits)
In consultation with adviser, select 24 credits from University-wide offerings to include:

a) 12 credits at the 400 level representing at least three different subject areas;

b) a 3 credit 400-level capstone course (to be selected in consultation with adviser);

c) at least 9 credits (of the 24 total) from the humanities and social sciences. (Sem: 1-8)

**SUPPORTING COURSES AND RELATED AREAS** (12 credits)
In consultation with adviser, select 3 credits in research methods/projects from courses that involve research methodology or that focus on a research project; select 3 credits in communication skills from courses that focus on expression including those in verbal, symbolic, and written skills; select 3 credits in theory/application from courses that focus on theory, principle, central concepts, or fundamental issues; select 3 credits in critical analysis from courses that focus on evaluation, synthesis, and analysis. (Sem: 1-8)

[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: Summer Session 2008

Blue Sheet Item #: 36-04-042

Review Date: 1/15/08

Reviewed by Publications: 06/23/06

LA

**Psychology**

*Altoona College (PSCBA)*

*University College (PYACC) - Penn State Beaver, Penn State Brandywine, Penn State Fayette, Penn State*
The Psychology major will combine the knowledge, skills, and values of psychology with a liberal arts foundation. Students should develop a knowledge base consisting of concepts, theory, empirical findings, and trends within psychology; understand and apply basic research methods in psychology; use critical thinking and the scientific approach to solve problems related to behavior and mental processes; apply psychological principles to personal and social issues; and be able to understand the gender, sexual orientation, race, ethnicity, culture, and class issues in psychological theory, research, and practice. Students should also develop information and computer competence, communication skills, and develop realistic ideas about how to implement their psychology education in occupational pursuits in a variety of settings. The major may lead to either a Bachelor of Arts or a Bachelor of Science degree. The B.A. degree incorporates a broad exposure to the many facets of the field of psychology, in addition to the B.A. requirements. The B.S. degree provides the same exposure to the field of psychology and adds options in Science and Business to prepare students for more specific career directions. Students in both degree programs may also prepare for graduate school; research experience with faculty members is encouraged for such students.

For the B.A. degree in Psychology, a minimum of 124 credits is required.

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

GENERAL EDUCATION: 45 credits
(0-4 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 REQUIREMENTS FOR THE MAJOR)

ELECTIVES: 14-18 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: 41 credits[1]
(This includes 0-4 credits of General Education GQ courses.)

PREScribed COURSES (7 credits)
PSYCH 100 GS(3) (Sem: 1-4)
PSYCH 301W(4) (Sem: 3-6)

ADDITIONAL COURSES (34 credits)
(Must include 15 credits at 400-level.)
Select 4 credits from PSYCH 200 GQ(4) or STAT 200 GQ(4) (Sem: 3-4)

Select 18 credits--a minimum of 3 credits from each of the following six categories

6. Capstone Experience: PSYCH 439(3), PSYCH 490(3), PSYCH 493(3-6), PSYCH 494(3-18), PSYCH 495(6-15), PSYCH 496(3-18) (Sem: 7-8)

Select 12 credits of additional Psychology courses from any offered for a total of 30 credits of Psychology courses beyond PSYCH 100 and PSYCH 301W (Sem: 2-8)

[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 2012

Blue Sheet Item #: 40-05-071

Review Date: 02/21/2012

UCA Revision #1: 9/1/06

AL

Psychology

Altoona College (PSCBS)
University College (PYSCC) - Penn State Beaver, Penn State Brandywine, Penn State Fayette, Penn State Greater Allegheny, Penn State Hazleton, Penn State Lehigh Valley, Penn State New Kensington, Penn State Worthington Scranton, Penn State York

The Psychology major will combine the knowledge, skills, and values of psychology with a liberal arts foundation. Students should develop a knowledge base consisting of concepts, theory, empirical findings, and trends within psychology; understand and apply basic research methods in psychology; use critical thinking and the scientific approach to solve problems related to behavior and mental processes; apply psychological principles to personal and social issues; and be able to understand the gender, sexual orientation, race, ethnicity, culture, and class issues in psychological theory, research, and practice. Students should also develop information and computer competence, communication skills, and develop realistic ideas about how to implement their psychology education in occupational pursuits in a variety of settings. The major may lead to either a Bachelor of Arts or a Bachelor of Science degree. The B.A. degree incorporates a broad exposure to the many facets of the field of psychology, in addition to the B.A. requirements. The B.S. degree provides the same exposure to the field of psychology and adds options in Science and Business to prepare students for more specific career directions. Students in both degree programs may also prepare for graduate school; research experience with faculty members is encouraged for such students.

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

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

GENERAL EDUCATION: 45 credits
(0-4 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 REQUIREMENTS FOR THE MAJOR)

ELECTIVES: 14-18 credits

(This includes 0-4 credits of General Education GQ courses.)

COMMON REQUIREMENTS FOR THE MAJOR (ALL OPTIONS): 41 credits

PRESCRIBED COURSES (7 credits)
PSYCH 100 GS(3) (Sem: 1-4)
PSYCH 301W(4) (Sem: 3-6)

ADDITIONAL COURSES (34 credits)
(Must include 15 credits at the 400-level)
Select 4 credits from PSYCH 200 GQ(4) or STAT 200 GQ(4) (Sem: 3-4)

Select 18 credits—a minimum of 3 credits from each of the following six categories:

6. Capstone Experience: PSYCH 439(3), PSYCH 490(3), PSYCH 493(3-6), PSYCH 494(3-18), PSYCH 495(6-15), PSYCH 496(3-18) (Sem: 7-8)

Select 12 credits of additional Psychology courses from any offered for a total of 30 credits of Psychology courses beyond PSYCH 100 and PSYCH 301W (Sem: 2-8)

REQUIREMENTS FOR THE OPTION: 24 credits

SCIENCE OPTION: (24 credits)

ADDITIONAL COURSES (15 credits)
Select 15 credits from: ANTH 021 GN(3); ANTH 022 GN(3); BB H 101 GHA(3) any BIOL course; any CHEM course; any MICRB course; any PHYS course (Sem: 2-8)

SUPPORTING COURSES (9 credits)
Select 6 credits in natural sciences/quantification from department list (Sem: 2-8)
Select 3 credits in social and behavioral sciences from department list (Sem: 2-8)

BUSINESS OPTION: (24 credits)

ADDITIONAL COURSES (15 credits)
Select 15 credits from: Any ACCTG course; B A 100 GS(3); B A 241(2), B A 242(2) or B A 243(4); Any ECON course; any FIN course; any H P A coures; any I B course; any MGMT course; any MKTG course; any SCM except 200 (Sem: 2-8)

SUPPORTING COURSES (9 credits)
Select 6 credits in natural sciences/quantification from department list (MATH 022 or MATH 110 recommended) (Sem: 2-8)
Select 3 credits in social and behavioral sciences from department list (Sem: 2-8)

[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 2012

Blue Sheet Item #: 40-05-072
Review Date: 02/21/2012
UCA Revision #: 8/31/06
AL

Associate Degrees

Business Administration

Abington College (2BAAB)
Altoona College (2BAAL)
Berk College (2BABL)
Capital College (2BACA)
University College (2BACC): Penn State Brandywine, Penn State DuBois, Penn State Fayette, Penn State...
Not all options are available at every campus. Contact the campus you are interested in attending to determine which options are offered.

The associate degree program in Business Administration provides a foundation in business that, through two options, prepares graduates for either entrance to the Bachelor of Science in Business (BSB) programs 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.

The General Business Option provides an introductory foundation to core aspects of the business environment while also preparing students for future transfer into the Bachelor of Science in Business (BSB).

The Professional Studies Option provides a technically oriented program that prepares students for direct entry into the work force. Because some of the course work in this option is not accepted in baccalaureate business programs, students are encouraged to work closely with faculty and staff advisers.

Students who plan to continue into BSB should meet with their advisers regarding entrance to major and other related requirements.

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.)

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

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 (17-18 credits)
ENGL 015 GWS(3)[1] or ENGL 030 GWS(3)[1] (Sem: 1-2)
MATH 021 GQ(3), MATH 022 GQ(3), or MATH 110 GQ(4) (Sem: 1-2) [74]
B A 243(4)[1] or B A 241(2)[1] and B A 242(2)[1] (Sem: 1-4)
ECON 102 GS(3) or ECON 104 GS(3) (Sem: 1-4)
SCM 200 GQ(4) or STAT 200 GQ(4) (Sem: 2-4)

REQUIREMENTS FOR THE OPTION: 18-19 credits
(Both options may not be available at every campus.)

GENERAL BUSINESS OPTION: (18-19 credits) [75]

ADDITIONAL COURSES (18-19 credits)
a) Select 3 credits from MGMT 301(3)[1] or MGMT 301W(3)[1] (Sem: 3-4)
b) Select 3 credits from MKTG 301(3)[1] or MKTG 301W(3)[1] (Sem: 3-4)
c) Select 12-13 credits from B A 250(3); CAS 250(3) or CAS 252(3); LER 100 GS(3) or LER 136 US(3); ECON 102 GS(3) or ECON 104 GS(3); MATH 022 GQ(3), MATH 110 GQ(4), MKTG 220(3) (Sem: 1-4)

PROFESSIONAL STUDIES OPTION: (18 credits) [75]

ADDITIONAL COURSES (18 credits)
Select 18 credits from ACCTG 151(3), ACCTG 152(3), ACCTG 153(3), ACCTG 160(3), B A 100 GS(3), B A 250(3); ECON 102 GS(3) or ECON 104 GS(3); CMPSC 109(3), FIN 100(3), FIN 108(3), H P A 101(3), IST 110 GS(3), IST 210(3), IST 220(3), IST 250(3), LER 100 GS(3), LER 136 US(3); MGMT 100(3) or MGMT 100W(3); MGMT 150(3), MIS 103(3), MIS 106(1-6); MIS 190(3), MKTG 220(3); MKTG 221(3) or MKTG 221W(3); R M 100(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.
[74] Students should work closely with academic advisers to ensure the completion of any and all course work required for entrance to BSB.
[75] This Option is designed for students planning to enter the work force directly upon graduation. Some courses included in this option will not transfer into baccalaureate business programs. Students are
encouraged to work closely with their advisers.

Last Revised by the Department: Fall Semester 2007

Blue Sheet Item #: 35-06-534

Review Date: 4/10/07

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 Schuylkill, 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.

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), HD FS 129 GS(3)[1], HD FS 301(3)[1], PSYCH 100 GS(3) (Sem: 1-2)
HD FS 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)
HD FS 315 US(3)[1] or SOC 030 GS(3) (Sem: 3-4)
BIOL 141 GN(3), BIOL 155 GN(3), or BI SC 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)
HD FS 249 GS(3)[1], HD FS 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)
HD FS 229 GS(3)[1], HD FS 239 GS(3)[1], HD FS 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)

EARLY CHILDHOOD CARE AND EDUCATION OPTION: (24 credits)

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

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 COURSE (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: Summer Session 1988
Blue Sheet Item #: 16-10-044
Review Date: 10/8/02
Reviewed by Publications: 06/23/06
LA

Minors

Business Minor

University College via World Campus

Contacts: Business Minor Contact at campuses offering the BSB major or University College at: sah43@psu.edu

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, B A, B LAW, E B F, ECON, ENTR, FIN, FINSV, H P A, I B, LER, MIS, MGMT, MKTG, R M, SCM, or STAT (Sem: 5-8)

Select 0-3 credits at the 400-level from:

Last Revised by the Department: Fall Semester 2014

Blue Sheet Item #: 43-03-174

Review Date: 11/18/2014

UCA Revision #1: 8/3/06

Comments
AB/BK/UC

Communication Arts and Sciences Minor (CAS)

Contact: College of the Liberal Arts, Peter Miraldi, pnm10@psu.edu; Penn State York, Dr. Deborah Eicher-Catt, die4@psu.edu

This minor provides understanding and practice in the ways humans achieve their personal and career goals by means of communication. Students may choose any of the department's pathways of specialization, such as Interpersonal, Family, Intercultural, Organizational, Legal, Political Communication and Presentation Skills, Communication and Technology, or Rhetoric. For example, Legal Communication focuses on communication within the legal system, and provides students with the theory and skills to understand the uses, evaluation, and structure of public policy and legal disputes. Students learn how perception, meaning, and conflict function in human communication if they choose to specialize in Interpersonal Communication, while Organizational Communication critically examines leadership, decision-making, interviewing, and teamwork in formal organizations. In coordination with an adviser, a
student of any major may tailor this minor to complement his or her educational and career goals by pursuing a particular pathway.

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

ADDITIONAL COURSES (6 credits)
Select 3 credits from CAS 203(3), CAS 205(3), CAS 211(3), CAS 213(3), CAS 214W(3), CAS 215(3), CAS 250(3), CAS 252(3), CAS 271 US:IL(3), CAS 280W(3), or CAS 283(3) (Sem: 3-6)
Select 3 credits from CAS 200(3), CAS 201 GH(3), or CAS 202(3) (Sem: 3-8)

SUPPORTING COURSES AND RELATED AREAS (12 credits)
Select 6 credits of Communication Arts and Sciences courses (Sem: 1-8)
Select 6 credits of Communication Arts and Sciences courses at the 400 level (Sem: 1-8)
Note: CAS 100 GWS(3), CAS 126(3), or CAS 195(1) may not be counted as part of the minor.

Last Revised by the Department: Fall Semester 2002
Blue Sheet Item #: 30-07-104
Review Date: 2/25/05

LA

English Minor (ENGL)

University Park, College of the Liberal Arts (ENGL)

Contact: Abington College, Tom Smith, trs8@psu.edu; Altoona College, Erin Murphy, ecm14@psu.edu; Penn State Brandywine, Adam Sorkin, ajs2@psu.edu; Penn State Fayette, Danielle Mitchell, dmm52@psu.edu; Penn State Greater Allegheny, Mildred Mickel, mrm33@psu.edu; Penn State Mont Alto, Kevin Boon, kab25@psu.edu; Penn State Wilkes-Barre, Steven Putzel, sdp4@psu.edu; College of the Liberal Arts, Elizabeth Brown, eaf4@psu.edu; Penn State York, Dr. Jennifer Nesbitt, jpn12@psu.edu

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

For the minor in English a minimum of 18 credits are required.

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

REQUIREMENTS FOR THE MINOR: 18 credits

SUPPORTING COURSES AND RELATED AREAS: (18 credits)
Students may not count courses used to satisfy General Education Writing/Speaking Skills
Select 6 credits from ENGL 200-299 (Sem: 3-8)
Select 6 credits from ENGL 400-499 (Sem: 3-8)
Select 6 additional credits in English (Sem: 3-8)

Last Revised by the Department: Fall Semester 2015
Blue Sheet # 44-03-073
Review Date: 11/17/15

Gerontology Minor

Intercollege Program (GERON)
University College: Penn State Brandywine, Penn State DuBois, Penn State Shenango

Contact: College of Health and Human Development, Devon M. Thomas, dmc233@psu.edu

The intercollege minor in Gerontology is designed for students to gain an in-depth understanding of the aging process and old age. With the growth of the number of older people in the population, increased
need has arisen for people with knowledge of the aging process in a variety of professional and occupational roles. In conjunction with the student’s major, the minor prepares students for entry-level human service positions working with the elderly, or for graduate or professional school programs including communication disorders, counseling, health planning and administration, medicine, psychology, recreation and park management, and social work where knowledge of the aging process and problems of older people is relevant. Eighteen credits are required for the minor, including at least 6 credits at the 400 level. Advising is available through Mrs. Devon M. Thomas, 315 Health and Human Development Building, University Park, PA 16802 (814-863-8000, dmc233@psu.edu).

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)
HD FS 249 GS(3) (Sem: 3-8)

**ADDITIONAL COURSES** (15 credits)
BIOL 155 GN(3) or BIOL 409(3) (Sem: 1-7)
SOC 435 (HD FS 434)(3) or HD FS 445 (PSYCH 416)(3) (Sem: 5-8)

**Note:** Students may enroll in special topics courses (297, 497) that focus on aging or old age, with faculty permission. With faculty approval, students may also enroll for independent studies in their major department to write a senior thesis focused on an issue of aging.

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Information Sciences and Technology Minor

Abington College
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 250(3), IST 301(3), or IST 302(3) (Sem 5-8)
Select 6 credits from IST 402(3), IST 431(3), or IST 432(3) (Sem 5-8)

Last Revised by the Department: Fall Semester 2014
Blue Sheet Item #: 43-03-085
Review Date: 11/18/2014

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**International Studies Minor (INSTD)**

Contact: Abington College, Manohar Singh, m.singh@psu.edu; Penn State Brandywine, Paul Greene, pdg4@psu.edu; Worthington Scranton, John Dolis, jjd3@psu.edu; College of the Liberal Arts, Henry Morello, hum1@psu.edu

The International Studies minor is intended to recognize, for undergraduate students in any major, the completion of an education abroad program, foreign language competency, and related advanced course work. Ideally, the language, international, and advanced study should be integrated around some thematic or geographical focus.

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:** 18-30 credits

**SUPPORTING COURSES AND RELATED AREAS** (18-30 credits)
12th-credit-level proficiency in one foreign language demonstrated by course work or examination (Sem: 1-4)

Students must complete 12 credits as participants in an approved Penn State Education Abroad Program, no more than 6 credits of which may be foreign language study beyond the 12-credit level (Sem: 5-6)

Select 6 credits (400 level) related to the education abroad experience, or the student's major, or to complete a thematic concentration. Courses must be selected from the approved list of courses with international focus or in consultation with the International Studies Minor adviser (Sem: 5-8)

Last Revised by the Department: Fall Semester 1994
Blue Sheet Item #: 22-06-021
Review Date: 1/30/00

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**Peace and Conflict Studies Minor**

*University College: Penn State Brandywine (PEACE)*

This minor may be pursued by students in any major. It is designed to help students take a coherent set of courses organized around the study of the sources of international conflict, peace movements, and peace building. The minor requires 18 credits, of which at least nine must be upper division, including six credits at the 400 level. Students will be required to take two prescribed courses, one introductory and one capstone. They also will take three credits of additional courses with an international focus and nine credits from a list of supporting courses, which includes the study of conflict in race relations, family, community, and the development of personal peace as a precursor to peace building. The full requirements with the lists of additional and supporting courses are available in the Peace and Conflict Studies program office. Substitutions for requirements require the permission of the Peace and Conflict Studies minor adviser at Penn State Brandywine.

See this minor list for Brandywine at [www.brandywine.psu.edu/Academics](http://www.brandywine.psu.edu/Academics) for additional information.

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 (6 credits)
PL SC 091(3) (Sem: 1-4)
PL SC 491(3) (Sem: 7-8)

ADDITIONAL COURSES (3 credits)
INT U 200 GS(3) or PL SC 014 GS;IL(3) (Sem: 3-8)
(INT U 200 GS(3) and PL SC 014 GS;IL(3) cannot both be taken for credit)

SUPPORTING COURSES AND RELATED AREAS (9 credits)
Select 3 credits from the additional course list in the Peace and Conflict Studies program office (Sem: 3-8)
Select 6 credits from the supporting course list in the Peace and Conflict Studies program office (Sem: 3-8)

Last Revised by the Department: Spring Semester 1995
Blue Sheet Item #: 22-06-013
Review Date: 1/30/00
College change 9/17/2012
Effective: Spring 2013

Women's Studies Minor (WMNST)

Contacts:  Abington College, Tom Smith, trs8@psu.edu; Altoona College, Le Ann De Reus, led12@psu.edu; Penn State Behrend College, Dr. Sarah Whitney, sew1@psu.edu; Berks College, Laurie Grobman, leg8@psu.edu; Penn State Brandywine, Phyllis Cole, pbc2@psu.edu; Penn State DuBois, Jacquelyn Atkins, jka1@psu.edu; Penn State Mont Alto, Alice Royer, axr24@psu.edu; College of the Liberal Arts, Mindy Boffemmyer, mub21@psu.edu; Penn State York, Dr. Deborah Eicher-Catt, dle4@psu.edu

This interdisciplinary minor is designed to develop a broad understanding of the study of women and women's perspectives in all areas of academic scholarship. The primary focus is on feminist analyses of women's lives, women's social, cultural, and scientific contributions, and the structure of sex/gender systems. The interdisciplinary and inclusive nature of the field is reflected in a curriculum that includes courses cross-listed with a wide variety of departments, courses that deal with aspects of women's lives throughout history, and courses that recognize the diversities of culture, race, religion, ethnicity, age, disability, and sexual orientation. The Women's Studies minor emphasizes the development of critical and analytical skills, creative approaches to problem solving, and the ability to articulate productive alternatives.

Women's Studies minors have a definite career advantage, and can be successful in a wide variety of career paths. Some of these include legal advocacy, counseling, journalism, public relations, management, nonprofit administration, teaching, medicine, politics, or art. In addition, many alumnae/i are currently studying in professional, law, or graduate schools.

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)
WMNST 301 GH(3) (Sem: 1-4)

ADDITIONAL COURSES (3 credits)
WMNST 100 GS;US;IL(3) or WMNST 106 GS;US;IL (Sem: 1-4)

SUPPORTING COURSES AND RELATED AREAS (12 credits)
Select 12 credits in Women's Studies or from the program-approved list; at least 6 credits must be at the 400-level
--3 credits from each of the following categories: (Sem: 1-8)
  a. arts or humanities
  b. natural or social sciences
  c. focusing on non-Western women or on women of color in the United States
This is the official bulletin of The Pennsylvania State University. Programmatic expectations for General Education are those in effect at the time of admission to degree candidacy, and college and major requirements are those in effect at the time of entry to college and major. These are accurately indicated in each student's degree audit.

The University reserves the right to change the requirements and regulations listed here and to determine whether a student has satisfactorily met its requirements for admission or graduation, and to reject any applicant for any reason the University determines to be material to the applicant's qualifications to pursue higher education. Nothing in this material should be considered a guarantee that completion of a program and graduation from the University will result in employment.

The University Faculty Senate has responsibility for and authority over all academic information contained in the Undergraduate Bulletin.