

# **University Bulletin**

# Undergraduate Degree Programs

# **Primary Navigation**

# **Penn State Beaver**

Penn State Beaver is located on 100 acres in Monaca, 20 miles west of the Pittsburgh International Airport and 35 miles from the city of Pittsburgh. It comprises thirteen major buildings, including the Brodhead Cultural Center and the Adult Literacy Action offices, which are located in the town of Beaver.

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 Beaver 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 Beaver 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: <a href="http://www.dus.psu.edu/semplans.htm">http://www.dus.psu.edu/semplans.htm</a>. Questions concerning the Recommended Academic Plans should be directed to the college or campus involved or the Division of Undergraduate Studies.

# **Baccalaureate Degrees**

# **Administration of Justice**

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

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

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

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

# **GENERAL EDUCATION: 45 credits**

(4-7 of these 45 credits are included in the REQUIREMENTS FOR THE MAJOR) (See description of General Education in this bulletin.)

### FIRST-YEAR SEMINAR:

(Included in ELECTIVES or GENERAL EDUCATION course selection)

### **UNITED STATES CULTURES AND INTERNATIONAL CULTURES:**

(Included in ELECTIVES, GENERAL EDUCATION course selection, or REQUIREMENTS FOR THE MAJOR)

# WRITING ACROSS THE CURRICULUM:

(Included in ELECTIVES, GENERAL EDUCATION course selection, or REQUIREMENTS FOR THE MAJOR)

**ELECTIVES:** 14-18 credits

# **REQUIREMENTS FOR THE MAJOR:** 64-65 credits[1]

(This includes 4-7 credits of General Education courses; 0-3 credits of GH courses; 4 credits of GQ courses.)

# PRESCRIBED COURSES (13 credits)

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

# **ADDITIONAL COURSES** (39-40 credits)

(Some of the courses in this category may have prerequisites that are not included in the major.)

Select 3-4 credits in values and ethics from BA 243(4) or BA 241(2) and BA 242(2), CRIMJ 465(3), PHIL 003 GH(3), PHIL 103 GH(3), PHIL 105 GH(3), PHIL 106 GH(3), or PHIL/STS 107 GH(3), STS 100 GH(3), STS 101 GH(3) or STS/PHIL 107 GH(3) (Sem: 5-6)

Select 3 credits from CRIMJ 451 US(3) or CRIMJ 453 US(3) (Sem: 5-8)

Select 18 credits in CRIMJ, with at least 9 credits in the 400 level from: CRIMJ 013 GS(3),

CRIMJ 083 GS(3), CRIMJ 113 US(3), CRIMJ 200(3), CRIMJ 201(3), CRIMJ 210(3), CRIMJ 200(3), CRIMJ 200(4), CRIMJ 200(

220(3), CRIMJ 230(3), CRIMJ 234(3), CRIMJ 241(3), CRIMJ 296(1-18), CRIMJ 297(1-9), CRIMJ 300(3), CRIMJ 301(3), CRIMJ 302(3), CRIMJ 304(3), CRIMJ 310(3), CRIMJ 311(3),

CRIMJ 345(3), CRIMJ 389(3), CRIMJ 406(3), CRIMJ 407(3), CRIMJ 408(3), CRIMJ 410(3),

CRIMJ 412(3), CRIMJ 413(3), CRIMJ 414(3), CRIMJ 415(3), CRIMJ 420(3), CRIMJ 421(3),

CRIMJ 422(3), CRIMJ 423 US(3), CRIMJ 424(3), CRIMJ 425(3), CRIMJ 426(3), CRIMJ 430(3).

CRIMJ 431(3), CRIMJ 432(3), CRIMJ 435(3), CRIMJ 439(3), CRIMJ 441(3), CRIMJ 450(3),

CRIMJ 460(3), CRIMJ 462(3), CRIMJ 467(3), CRIMJ 469(3), CRIMJ 471(3), CRIMJ 473(3),

CRIMJ 482(3), CRIMJ 489(3), CRIMJ 497(3) (Sem: 5-8)

Select 15 credits -- emphasis a or b:

a. Field Research emphasis: CRIMJ 240(4), CRIMJ 290(1-3), CRIMJ 494(5), CRIMJ 495(5) (Sem: 5-8)

b. Research and Policy Analysis emphasis: Select 15 credits, at least 6 at the 400 level from: AMST 491W(3-6), CRIMJ 424W(3), any CMPSC (3), ECON 104 GS(3), LER 100 GS(3), LST 370(3), PLSC 002(3), PLSC 419 US(3), PLSC 490(3), SOC 409 US(3), SOC 419(3), SOC 422(3), or SOC 423(3) (Sem: 5-8)

# **SUPPORTING COURSES AND RELATED AREAS** (12 credits)

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

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

Last Revised by the Department: Fall Semester 2011

Blue Sheet Item #: 40-04-100

Review Date: 01/10/2012 UCA Revision #2: 7/26/07

# **Business**

Abington College (BSBAB) Altoona College (BSBAL) Berks College (BSBBL)

University College (BSBCC): Penn State Beaver, Penn State Brandywine, Penn State DuBois, Penn State Fayette, Penn State Greater Allegheny, Penn State Hazleton, Penn State Lehigh Valley, Penn State Mont Alto, Penn State New Kensington, Penn State Schuylkill, Penn State Shenango, Penn State Wilkes-Barre, Penn State Worthington Scranton, Penn State York University College(BSBIC) via the World Campus

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

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

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

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

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

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

INDIVIDUALIZED BUSINESS OPTION: This option provides the opportunity for students to

pursue an approved business-focused interdisciplinary program of study.

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

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

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

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

# **GENERAL EDUCATION: 45 credits**

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

# FIRST-YEAR SEMINAR:

(Included in ELECTIVES or GENERAL EDUCATION course selection)

# **UNITED STATES CULTURES AND INTERNATIONAL CULTURES:**

(Included in ELECTIVES or GENERAL EDUCATION course selection)

# WRITING ACROSS THE CURRICULUM:

(Included in REQUIREMENTS FOR THE MAJOR)

**ELECTIVES:** 10 credits

# **REQUIREMENTS FOR THE MAJOR: 77 credits**

(This includes 12 credits of General Education courses: 6 credits of GQ courses; 6 credits of GS courses.)

# **COMMON REQUIREMENTS FOR THE MAJOR (ALL OPTIONS): 59 credits**

# PRESCRIBED COURSES (41 credits)

ECON 102 GS(3) (Sem: 1-4)

ACCTG 211(4), ECON 104 GS(3), MIS 204(3) (Sem: 3-4)

BA 321(3)[1], BA 322(3)[1], BA 420(1)[1], FIN 301(3)[1], MGMT 301(3)[1], MKTG

301(3)[1], SCM 301(3)[1] (Sem: 5-6)

IB 303 IL(3)[1] (Sem: 5-8)

BA 421(3)[1], BA 422(3)[1] (Sem: 7-8)

# **ADDITIONAL COURSES** (15-18 credits)

MATH 110 GQ(4) or MATH 140 GQ(4) (Sem: 1-4) SCM 200 GQ(4) or STAT 200 GQ(4) (Sem: 1-4)

BA 243(4) or BA 241(2) and BA 242(2) (Sem: 3-4)

Select 3 or 6 credits from BA 495A(3 or 6)[1], BA 495B(3 or 6)[1] (Sem: 7-8)

# **SUPPORTING COURSES AND RELATED AREAS** (0-3 credits)

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

# **REQUIREMENTS FOR THE OPTION:** 18 credits [1]

**ACCOUNTING OPTION:** (18 credits)

# PRESCRIBED COURSES (9 credits)

ACCTG 404(3), ACCTG 471(3), ACCTG 472(3) (Sem: 5-6)

# **ADDITIONAL COURSES** (6 credits)

ACCTG 403(3) or 403W(3) (Sem: 7-8) ACCTG 405(3) or FINSV 411(3) (Sem: 7-8)

# **SUPPORTING COURSES AND RELATED AREAS (3 credits)**

Select 3 credits of 400-level courses from: ACCTG, BA, ECON, ENTR, FIN, FINSV, HPA, IB, MGMT, MIS, MKTG, RM, or SCM (Sem: 7-8)

# **ENTREPRENEURSHIP OPTION:** (18 credits)

# PRESCRIBED COURSES (9 credits)

ENTR 300(3), ENTR 320(3) (Sem: 5-6)

ENTR 400(3) (Sem: 7-8)

# **ADDITIONAL COURSES** (0-3 credits)

Select 0-3 credits in CAS 352(3) or ENGL 419(3) (Sem: 7-8)

# **SUPPORTING COURSES AND RELATED AREAS** (6-9 credits)

Select 6 to 9 credits of 400-level ENTR courses in consultation with your advisor (Sem: 5-8)

# FINANCIAL SERVICES OPTION: (18 credits)

# PRESCRIBED COURSES (3 credits)

FIN 420(3) (Sem: 5-8)

# **ADDITIONAL COURSES** (3 credits)

Select 3 credits from ACCTG 405 or FINSV 411 (Sem: 5-8)

# **SUPPORTING COURSES AND RELATED AREAS** (12 credits)

Select 12 credits in 300 or 400-level (with at least 3 credits at the 400-level) from ACCTG, FIN, FINSV or RM (Sem: 5-8)

# **HEALTH SERVICES OPTION:** (18 credits)

(Minimum 6 credits at the 400-level)

# **PRESCRIBED COURSES** (6 credits)

HPA 101(3) (Sem: 5-6) HPA 332(3) (Sem: 5-8)

# **ADDITIONAL COURSES** (0-3 credits)

Select 0-3 credits from BBH 302(3), CAS 352(3), CAS 404(3), ENGL 416(3), ENGL 419(3), LER 424(3), LER 472(3), PSYCH 281 GS(3), PSYCH 484(3), or PSYCH 485(3) (Sem: 5-8)

# **SUPPORTING COURSES AND RELATED AREAS (9-12 credits)**

Select 3-9 credits from 300 or 400-level HPA courses (Sem: 5-8)

Select 0-6 credits of 300-400-level courses from ACCTG, BA, ECON, ENTR, FIN, FINSV, HPA, IB, MGMT, MKTG, MIS, RM or SCM (Sem: 6-8)

# **INDIVIDUALIZED BUSINESS OPTION:** (18 credits)

Select 18 credits of study (with at least 3 credits at the 400-level) as submitted by the student and approved by the campus BSB Program Coordinator (Sem: 5-8)

# MANAGEMENT AND MARKETING OPTION: (18 credits)

# **ADDITIONAL COURSES** (0-6 credits)

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

# **SUPPORTING COURSES AND RELATED AREAS** (12-18 credits)

A minimum of 3 credits of supporting courses must be selected at the 400-level.

Select 3 credits from 300 or 400-level MGMT courses (Sem: 5-8)

Select 3 credits from 300 or 400-level MKTG courses (Sem: 5-8)

Select 6-12 additional credits in 300 or 400-level courses from MGMT or MKTG courses

(Sem: 6-8)

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

Last Revised by the Department: Fall Semester 2013

Blue Sheet Item #: 42-04-065

Review Date: 01/14/2014

UCA Revision #1: 8/3/06

**Comments** 

# **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, strategic communication, and public relations to the digital age, this option prepares students 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:

(Included in REQUIREMENTS FOR THE MAJOR)

**ELECTIVES:** 5-17 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: 49-56 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): 22 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** (9 credits)

COMM 100 GS(3) or COMM 110 GH(3) (Sem: 1-2)[1] CAS 201 GH(3)[1]; CAS 202 GH(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), CAS 471 US;IL(3), COMM 304(3)[1] (Sem: 5-6)

**REQUIREMENTS FOR THE OPTION: 27-34 credits** 

# **CORPORATE COMMUNICATIONS OPTION:** (30-34 credits)

# PRESCRIBED COURSES (6 credits)[1]

CAS 252(3) (Sem: 3-4)

COMM 403(3)

# ADDITIONAL COURSES (24-28 credits)[1]

Choose one of the following two tracks:

# PR/MARKETING TRACK:

COMM 370(3) (Sem: 5-6)

COMM 471(3) Sem: 7-8)

ECON 102 GS(3); ECON 104 GS(3) (Sem: 2-3)

MKTG 301(3) (Sem: 5-6)

OR

# STRATEGIC COMMUNICATION TRACK:

COMM 428A(3) (Sem: 5-6) COMM 428C(3) (Sem: 7-8) COMM 428E(3) (Sem: 7-8) (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 1, 2, 3 may apply. Only 3 credits maximum of COMM 297 may apply. Only 3 additional credits maximum of COMM 299 may apply. Only 3 additional credits of COMM 495 may apply. Courses from selected tracks (PR/MARKETING TRACK OR STRATEGIC COMMUNICATION TRACK) may not double count in this category. STAT 200 may double count as GQ. Courses may double count toward IL and US requirements.)

Select 15-16 credits from the following (at least 3 credits must be at the 400 level): CAS 203 GS(3), CAS 206(3), CAS 222 GS;US;IL(3), CAS 271 US;IL(3), CAS 352(3), CAS 404(3), CAS 426(3), COMM 1(1-3), COMM 2(1-3), COMM 3(1-3), COMM 205 US(3), COMM 215(3), COMM 241(3), COMM 251(3), COMM 282(3), COMM 292 GH(3), COMM 297(1-3), COMM 299 IL(1-3), COMM 320(3), COMM 370(3), COMM 407A(3), COMM 407B(3), COMM 407C(3), COMM 409(3), COMM 410 IL(3), COMM 412(3), COMM 413W(3), COMM 428A(3), COMM 428C(3), COMM 428D(3), COMM 462(3), COMM 468(3), COMM 471(3), COMM 473(3), COMM 476(3), COMM 495(3), COMM 496(3), ENGL 420(3), MKTG 301(3), STAT 200 GQ(4) (Sem: 5-8)

**JOURNALISM OPTION:** (27-28 credits)

PRESCRIBED COURSES (9 credits)[1]

COMM 403(3), COMM 409(3), COMM 460(3) (Sem: 5-8)

ADDITIONAL COURSES (18-19 credits)[1]

Take 3 Additional Credits in Professional Practices: COMM 462(3); COMM 470A(3) (Sem: 7-8)

(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 1, 2, 3, may apply. Only 6 credits maximum of COMM 297 may apply. Only 3 credits maximum of COMM 299 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.)

Select 15-16 credits from the following: CAS 203 GS(3), CAS 222 GS;US;IL(3), CAS 271 US;IL(3), CAS 404(3), COMM 1(1-3), COMM 2(1-3), COMM 3(1-3), COMM 205 US(3), COMM 215(3), COMM 241(3), COMM 251(3), COMM 269(3), COMM 282(3), COMM 292 GH(3), COMM 2971-(3), COMM 299 IL(1-3), COMM 370, COMM 410 IL(3), COMM 412(3), COMM 413W(3), COMM 428A(3), COMM 428C, COMM 428D(3); COMM 464(3), COMM 467(3), COMM 468(3), COMM 470B(3), COMM 470C(3), COMM 471(3), COMM 476(3), COMM 495(1-3), COMM 496(1-18), ENGL 420(3), STAT 200 GQ(4) (Sem: 3-8)

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

Last Reviewed by the Department: Fall Semester 2016

Blue Sheet Item #:45-03-065

Review Date: 10/4/2016 UCA Revision #1: 8/3/06

UC

# 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 140(3) (or equivalent CMPSC 101 GQ(3) or CMPSC 121 GQ(3)), IST 210(3), and IST 220(3).
- 2. have achieved a minimum cumulative grade point average of 2.00 prior to and through the end of the semester during which the entrance-to-major procedure is carried out.

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

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

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

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

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

### **GENERAL EDUCATION:** 45 credits

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

# FIRST-YEAR SEMINAR:

(Included in ELECTIVES or GENERAL EDUCATION course selection)

# **UNITED STATES CULTURES AND INTERNATIONAL CULTURES:**

(Included in REQUIREMENTS FOR THE MAJOR)

# WRITING ACROSS THE CURRICULUM:

(Included in REQUIREMENTS FOR THE MAJOR)

**ELECTIVES:** 8 credits

**REQUIREMENTS FOR THE MAJOR:** 84 credits

(This includes 12 credits of General Education courses: 6 credits of GQ courses; 3 credits of GS courses; and 3 credits of GWS courses.)

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

# PRESCRIBED COURSES (26 credits) IST 110 GS(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 440(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 14 GS(3), ECON 102 GS(3), or ECON 104 GS(3) (Sem: 1-4)

ENGL 202C GWS(3) or ENGL 202D GWS(3) (Sem: 1-4)

MATH 110 GQ(4) or MATH 140 GQ(4) (Sem: 1-4)

# **SUPPORTING COURSES AND RELATED AREAS (21 credits)**

Attainment of third-level proficiency in a single foreign language (12 credits). Proficiency must be demonstrated by either examination or course work. See the admission section of the general information in this *Bulletin* for the placement policy for Penn State foreign language courses. (Sem: 1-4)

Select 6 credits of international courses in foreign culture from College-approved list (Sem: 5-8)

Select 3 credits[1] at the 400 level in emerging issues and technologies from College-approved list (Sem: 5-8)

# **REQUIREMENTS FOR THE OPTION: 24 credits**

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

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

# ADDITIONAL COURSES (6 credits)[1]

IST 240(3) or IST 242(3) (Sem: 1-4) IST 302(3) or IST 413(3) (Sem: 1-4)

# **SUPPORTING COURSES AND RELATED AREAS** (12 credits)

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

# INFORMATION SYSTEMS: DESIGN & DEVELOPMENT OPTION: 24 credits

# PRESCRIBED COURSES (6 credits)[1]

IST 242(3) (Sem: 1-4) IST 311(3) (Sem: 5-8)

# ADDITIONAL COURSES (9 credits)[1]

Select 3 credits from IST 261(3) or IST 361(3) (Sem: 5-8) Select 6 credits from IST 411(3), IST 412(3), or IST 413(3) (Sem: 5-8)

# **SUPPORTING COURSES AND RELATED AREAS (9 credits)**

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

# INFORMATION TECHNOLOGY: INTEGRATION & APPLICATION OPTION: 24 credits

# PRESCRIBED COURSES (9 credits)[1]

IST 302(3), IST 420(3), IST 421(3) (Sem: 5-8)

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

# **SUPPORTING COURSES AND RELATED AREAS** (12 credits)

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

# Integrated B.S. in Information Sciences and Technology / M.S. in Information Sciences and Technology

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

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

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

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

The objectives of the Integrated Undergraduate Graduate Program include:

- 1. To offer highly qualified students the opportunity to earn two degrees in less time than it would take to do two sequential degrees. In particular, IUG students may count up to 12 credits towards both their B.S. and M.S. degree requirements.
- To permit coherent planning of studies through the graduate degree, with advising informed by not only the requirements of the baccalaureate program, but also the

- longer-range goals of the graduate degree.
- 3. To introduce undergraduate students to the rigors of both graduate study and graduate faculty.
- 4. To make the resources of the Graduate School available to IUG students.
- 5. To allow students with IUG status to benefit from their association with graduate students whose level of work and whose intensity of interest and commitment parallel their own.

# **Admission Requirements**

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

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

- 1. Must be enrolled in the ISTBS undergraduate degree program.
- 2. Must have completed 60 credits of an ISTBS undergraduate degree program.
- 3. Must apply to the IUG program by the end of their junior year.
- 4. Must 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.
- Must present an approved plan of study. The plan should cover the entire time period of the integrated program, and it should be reviewed periodically with an adviser.
- 7. Must present two letters of recommendation from faculty members. (Note: For Schreyer Honors College students, these can be the same two letters required by the Schreyer Honors College.)
- 8. Must meet with both the Director of Undergraduate Academic Affairs and the Graduate Program Coordinator to declare interest and receive information about the IUG program.

For Schreyer Honors College students, students must also follow guidelines and procedures for applying for IUG in the Schreyer Honors College:

# http://www.shc.psu.edu/students/iug/program/

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

Sample Sequence of Graduate Coursework in Addition to Undergraduate Courses

Year	Fall	Spring	MS Credits
Year 1 (Senior Undergraduate Year)	IST 504: Foundations 3 Methods course (3)**	IST 505: Research Design (3) Methods course (3)**	
Year 2 (Super Senior Undergraduate Year)	IST 600 or IST 594 Thesis Research (3) Grad Speciality Course (3)** Grad Speciality Course (3)**	Methods course (3)**  IST 600 or IST 594 Thesis Research (3)  Grad Speciality Course (3)**  Grad Speciality Course (3)**	30*

<sup>\*</sup> 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.

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

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

Student performance will be monitored on an on-going basis by the student's adviser and Graduate Programs. Students admitted to the integrated program must maintain a minimum cumulative GPA of a 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

<sup>\*\*</sup> Choose graduate level methods course after consultation in advance with the student's faculty adviser.

<sup>\*\*\*</sup> 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.

Bulletin: <a href="http://bulletins.psu.edu/graduate/degreerequirements/masters#">http://bulletins.psu.edu/graduate/degreerequirements/masters#</a>) For Schreyer Honors College students in the IUG program, students must maintain a minimum cumulative GPA of 3.4 overall and a minimum 3.0 GPA in all courses used toward the M.S. degree in order to maintain good academic standing and meet graduation requirements. Successful completion of a Schreyer Scholar's Master's thesis will be accepted as completion of the honors thesis requirement.

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

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

Last Revised by the Department: Fall Semester 2017

Blue Sheet Item #: 46-01-087

Review Date: 8/22/2017

IS

# **Project and Supply Chain Management**

Penn State Erie, The Behrend College (PSCM)
Penn State Harrisburg, Capital College (PSMCA)
University College: Penn State Beaver, Penn State Fayette, Penn State Greater Allegheny,
Penn State Lehigh Valley, Penn State New Kensington, and Penn State Shenango

The Project and Supply Chain Management major concentrates on developing knowledge, skills, and abilities in both project and supply chain management, dynamic and important disciplines in modern corporations. Project management skills include the development of new projects, and coordinating procurement and project delivery systems. Supply chain management emphasizes the integration of manufacturing and service operations, logistics, purchasing, and distribution that enable organizations to develop value-creating supply chain networks. The major provides students with an opportunity to develop the quantitative and people skills necessary to design and operate today's complex management systems. Students learn how to manage critical components in organizational supply chains, and apply business analytic methods for organizing and fully integrating supply chain practices throughout the organization.

Graduates are uniquely well-prepared for careers in some of the highest in-demand professions in the modern business and government environments, managing the supply chain and project initiatives in world-class business firms, public sector organizations, construction, IT organizations, third-party logistics providers, and goods and services distribution operations.

### **Entry to Major Requirements:**

Entry to the Management major requires the completion of 5 entry-to-major courses: ACCTG 211(4); ECON 102 GS(3); ENGL 15 GWS(3) or ENGL 30 GWS(3); MATH 110 GQ(4) or MATH 140 GQ(4); STAT 200 GQ(4) or SCM 200(4), and a 2.00 or higher cumulative grade-point average.

For the B.S. degree in Project and Supply Chain Management, a minimum of 120 credits is required. Each student must earn at least a grade of C in each 300- and 400-level course in the major field.

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 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:** 2 credits

# **REQUIREMENTS FOR THE MAJOR:** 88 credits

(This includes 15 credits of General Education courses: 6 credits of GQ courses; 6 credits

of GS courses; 3 credits of GWS courses.)

# PRESCRIBED COURSES (43 credits)

ACCTG 211(4), ECON 102 GS(3), ECON 104 GS(3), ENGL 202D GWS(3) (Sem: 3-4)

FIN 301(3)[1], MGMT 301(3)[1], MIS 204(3), MKTG 301(3)[1], SCM 301(3)[1] (Sem: 3-6)

MGMT 341(3)[1], MGMT 410(3)[1] (Sem: 5-6)

MGMT 418(3)[1], SCM 445(3)[1], SCM 460(3)[1] (Sem: 6-8)

# **ADDITIONAL COURSES** (33 credits)

MATH 110 GQ(4) or MATH 140 GQ(4) (Sem: 1-2)

SCM 200 GQ(4) or STAT 200 GQ(4) (Sem: 3-4)

BA 241(2) and BA 242(2); or BA 243(4) (Sem: 3-6)

Select 3 credits from BA 364(3)[1], ECON 470(3)[1], FIN 471(3)[1], MGMT 461 IL(3)[1],

MKTG 445 IL(3)[1], or other 400-level international business courses[1] (Sem: 5-8)

Select 6 credits of 300- or 400-level courses in one business supporting area or PSCM electives from MGMT 420(3)[1], MGMT 431(3)[1], MGMT 432(3)[1], MGMT 433(3)[1],

MGMT 440(3)[1], MGMT 453(3)[1], MGMT 466(3)[1], or MGMT 483(3)[1] (Sem: 5-8)

Select 3 credits from ECON 481(3)[1] or MIS 336(3)[1] or MIS 390(3)[1] (Sem: 6-8)

MGMT 415(3)[1] or SCM 416(3)[1] (Sem: 6-8)

SCM 320(3)[1] or SCM 455(3)[1] (Sem: 6-8)

BA 462(3)[1] or MGMT 471W(3)[1] (Sem: 7-8)

# **SUPPORTING COURSES AND RELATED AREAS** (12 credits)

Select 12 credits of approved electives courses from any area (see school list of suggested courses) (See the admission section in the general information section in this bulletin for the placement policy for Penn State foreign language courses.) (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 2014

Blue Sheet Item #: 43-02-015

Review Date: 10/7/2014

UCA Revision #1: 8/8/06 UCA Revision #2: 7/27/07

BD

# **Psychology**

Altoona College (PSCBA)

University College (PYACC) - Penn State Beaver, Penn State Brandywine, Penn State Fayette, Penn State Greater Allegheny, Penn State Hazleton, Penn State Lehigh Valley, Penn State Mont Alto, Penn State New Kensington, Penn State Schuylkill, 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.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 301(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

- 1. Learning and Cognition: PSYCH 256 GS(3), PSYCH 261 GS(3), PSYCH 268(3), PSYCH 426(3), PSYCH 427(3), PSYCH 452(3), PSYCH 456(3), PSYCH 457(3), PSYCH 458(3), PSYCH 459(3), PSYCH 461(3) (Sem: 2-8)
- Social and Personality Psychology: PSYCH 221 GS(3), PSYCH 231 GS;US(3), PSYCH 232 GS;US;IL(3), PSYCH 238 GS(3), PSYCH 419(3), PSYCH 420(3), PSYCH 421(3), PSYCH 423(3), PSYCH 424(3), PSYCH 432 US(3), PSYCH 438(3), PSYCH 479 US(3) (Sem: 2-8)
- 3. Biological Bases of Behavior: PSYCH 253 GS(3), PSYCH 260(3), PSYCH 269(3), PSYCH 441(3), PSYCH 460(3), PSYCH 462(3), PSYCH 463(3), PSYCH 464(3), PSYCH 475(3), PSYCH 478(3) (Sem: 2-8)
- 4. Developmental Psychology: PSYCH 212 GS(3), PSYCH 410(3), PSYCH 412(3), PSYCH 413(3), PSYCH 414(3), PSYCH 415(3), PSYCH 416(3)/HDFS 445(3), PSYCH 474(3) (Sem: 2-8)
- Applied and Clinical Psychology: PSYCH 243 GS(3), PSYCH 244 GS(3), PSYCH 270(3), PSYCH 281 GS(3), PSYCH 370 US(3), PSYCH 404(3), PSYCH 408(3), PSYCH 443(3), PSYCH 444(3), PSYCH 445(3), PSYCH 470(3), PSYCH 471(3), PSYCH 473(3), PSYCH 476(3), PSYCH 477(3), PSYCH 481(3), PSYCH 482(3), PSYCH 484(3), PSYCH 485(3) (Sem: 2-8)
- 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 301 (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

ΑL

# **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 Mont Alto, Penn State New Kensington, Penn State Schuylkill, 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

# **REQUIREMENTS FOR THE MAJOR:** 65 credits [1]

(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 301(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:

- 1. Learning and Cognition: PSYCH 256 GS(3), PSYCH 261 GS(3), PSYCH 268(3), PSYCH 426(3), PSYCH 427(3), PSYCH 452(3), PSYCH 456(3), PSYCH 457(3), PSYCH 458(3), PSYCH 459(3), PSYCH 461(3) (Sem: 2-8)
- 2. Social and Personality Psychology: PSYCH 221 GS(3), PSYCH 231 GS;US(3), PSYCH 232 GS;US;IL(3), PSYCH 238 GS(3), PSYCH 419(3), PSYCH 420(3), PSYCH 421(3), PSYCH 423(3), PSYCH 424(3), PSYCH 432 US(3), PSYCH 438(3), PSYCH 479 US(3) (Sem: 2-8)
- 3. Biological Bases of Behavior: PSYCH 253 GS(3), PSYCH 260(3), PSYCH 269(3), PSYCH 441(3), PSYCH 460(3), PSYCH 462(3), PSYCH 463(3). PSYCH 464(3), PSYCH 475(3), PSYCH 478(3) (Sem: 2-8)
- 4. Developmental Psychology: PSYCH 212 GS(3), PSYCH 410(3), PSYCH 412(3), PSYCH 413(3), PSYCH 414(3), PSYCH 415(3), PSYCH 416(3)/HDFS 445(3), PSYCH 474(3) (Sem: 2-8)
- 5. Applied and Clinical Psychology: PSYCH 243 GS(3), PSYCH 244 GS(3), PSYCH 270(3),

PSYCH 281 GS(3), PSYCH 370 US(3), PSYCH 404(3), PSYCH 408(3), PSYCH 443(3), PSYCH 444(3), PSYCH 445(3), PSYCH 470(3), PSYCH 471(3), PSYCH 473(3), PSYCH 476(3), PSYCH 477(3), PSYCH 481(3), PSYCH 482(3), PSYCH 484(3), PSYCH 485(3) (Sem: 2-8)

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 301 (Sem: 2-8)

# **REQUIREMENTS FOR THE OPTION: 24 credits**

**SCIENCE OPTION:** (24 credits)

# **ADDITIONAL COURSES** (15 credits)

Select 15 credits from: ANTH 21 GN(3); ANTH 22 GN(3); BBH 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; BA 100 GS(3); BA 241(2), BA 242(2) or BA 243(4); Any ECON course; any FIN course; any HPA course; any IB 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 22 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 #1: 8/31/06

AL

# **Associate Degrees**

# **Minors**

# **Business Minor**

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

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

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

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

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

**REQUIREMENTS FOR THE MINOR:** 19 credits

PRESCRIBED COURSES: (10 credits)

ACCTG 211(4) (Sem: 1-5)

MGMT 301(3), MKTG 301(3) (Sem: 5-8)

**ADDITIONAL COURSES:** (3 credits)

Select 3 credits from ECON 102 GS(3) or ECON 104 GS(3) (Sem: 1-5)

# **SUPPORTING COURSES AND RELATED AREAS:** (6 credits)

Select 3-6 credits at the 400 level from:

ACCTG, BA, BLAW, EBF, ECON, ENTR, FIN, FINSV, HPA, IB, LER, MIS, MGMT, MKTG, RM,

SCM, or STAT (Sem: 5-8)

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

CAS 404(3), CAS 452(3), CAS 483(3), CC 401(3), CC 403(3), COMM 421W(3), COMM 427(3), COMM 471(3), CRIMJ 408(3), CRIMJ/SOC 467(3), ENGL 419(3), ENGL 420(3), ENGR 425(3), HDFS 401(3), HDFS 424(3), HDFS 425(3), HDFS 455(3), HIST 458(3), HM 435(3), HM 471(3), HM 484(3), IST 402(3), IST 420(3), IST 425(3), IST 431(3), IST 432(3), IST 461(3), KINES 438(3), KINES 492(3), PHIL 406(3), PLSC 440 US;IL(3), PSYCH 404(3), PSYCH 408(3), PSYCH 423(3), PSYCH 482(3), PSYCH 484(3), PSYCH 485(3), RPTM 410(3), RPTM 415(3), RPTM 470(3), SOC 455(3), SOC 456(3) (Sem: 5-8)

Last Revised by the Department: Fall Semester 2014

Blue Sheet Item #: 43-03-174

Review Date: 11/18/2014

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AB/BK/UC

# **Civic and Community Engagement Minor**

College of the Liberal Arts (CIVCM)

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Penn State Berks - Laurie Grobman, leg8@psu.edu

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

is substantial, sustained, and includes structured opportunities for student reflection and critical assessment; and

is integrated with and supported by traditional, classroom-based course work.

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

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

Must have a minimum overall GPA of 2.0.

Must present a proposed plan of study in the application process. The plan of study

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

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

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

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

**REQUIREMENTS FOR THE MINOR:** 18 credits

PRESCRIBED COURSES (3 credits)

CIVCM 211 GS(3) (Sem: 5)

# **SUPPORTING COURSES AND RELATED AREAS** (15 credits)

at least 6 credits must be taken at the 400 level

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

Last Revised by the Department: Summer Session 2007

Blue Sheet Item #: 35-04-233

Review Date: 1/16/07

**UE** 

# Information Sciences and Technology Minor

Abington College - contact: Joe Oakes, jxo19@psu.edu

Berks College Capital College

University College: Penn State Beaver, Penn State Brandywine, Penn State Greater Allegheny, Penn State Hazleton, Penn State Lehigh Valley, Penn State New Kensington, Penn State Schuylkill, Penn State Wilkes-Barre, Penn State Worthington Scranton, Penn State York, World Campus

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

This minor is structured to provide students with the theoretical frameworks and skill sets necessary to compete and be productive in the information technology-intensive global context that defines the new "Information Age." Specifically, the minor will be focused on a program that will build an understanding of core information technologies and related

areas of study; will prepare students for the practical application of various information sciences and related technologies; and engage students in sharpening their abilities to think critically and to work in teams. All this will be done with the intent to expose students to the cognitive, social, institutional, and global environments of Information Sciences and Technology and to then apply that knowledge as a supplement to their major.

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

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

**REQUIREMENTS FOR THE MINOR:** 18 credits

PRESCRIBED COURSES (9 credits)

IST 110 GS(3), IST 210(3), IST 220(3) (Sem 1-6)

**ADDITIONAL COURSES** (9 credits)

Select 3 credits from IST 140(3), IST/COMM 234 GS(3), IST/WMNST 235 US(3), IST 250(3), IST 301(3), or IST 302(3) (Sem 5-8)

Select 6 credits from IST 402(3), IST 431(3), IST 432(3), IST 442 IL(3), IST 445(3), IST 452(3), IST 453(3) (Sem 5-8)

Last Revised by the Department: Spring Semester 2017

Blue Sheet Item #: 45-06-037

Review Date: 4/4/2017

IS

# **Security and Risk Analysis Minor**

Penn State Abington - contact: Joe Oakes, jxo19@psu.edu Penn State Berks

University College: Penn State Beaver, Penn State Mont Alto, Penn State New Kensington, Penn State Worthington Scranton, Galen Grimes, gag5@psu.edu, World Campus University Park, College of Information Sciences and Technology (SRA)

The minor in Security and Risk Analysis (SRA) is intended to familiarize students with the general frameworks and multidisciplinary theories that define security and related risk analysis. Course work will engage students in the challenges and problems of assuring information confidentiality and integrity (e.g., social, economic, technology, and policy issues) as well as the strengths and weaknesses of various methods for assessing and mitigating associated risk in the students' major field.

The minor provides a grounding in analysis and modeling used in information search, visualization and creative problem solving. This knowledge is set in the context of legal, ethical and regulatory issues of security including analysis of privacy and security law, internal control standards, regulatory policies and basic investigative processes and principles. Such understanding overviews the information technology that plays a critical role in identifying, preventing and responding to security-related events in the student's major field.

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:** 21 credits[1]

(At least 6 credits must be at the 400 level.)

# PRESCRIBED COURSES (9 credits)

SRA 111 GS(3), SRA 211(3), SRA 221(3) (Sem: 1-6)

# **ADDITIONAL COURSES** (12 credits)

Select 3 credits from: IST 140(3); CMPSC 101 GQ(3) (Sem: 1-6)

Select 3 credits from: IST 220(3); SRA 231(3) (Sem: 1-6)

Select 6 credits from: IST 432(3), IST 451(3), IST 452(3), IST 453(3), IST 454(3), IST 456(3),

SRA 421(3), SRA 468(3), SRA 471(3), SRA 480(3) (Sem: 5-8)

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

Last Revised by the Department: Spring Semester 2017

Blue Sheet Item #: 45-06-038

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