Bachelor of Science in Information Systems

Information Systems (IS) is a multidisciplinary STEM-designated bachelor's degree program that equips students with IS competencies and business knowledge required to plan for, design, implement, and manage digital assets to support operations and strategic management of organizations. The IS degree addresses a range of strategic, managerial, and operational activities associated with the development and use of technologies to organize, process, and apply information. Topics include application development/programming, systems analysis and design, data and information management, data/ business analytics, IT infrastructure, IS management and strategy, secure information systems, and business and management theory and practice.

A STEM-designated degree allows eligible graduates an Optional Practical Training (OPT) extension for up to 36 months, helping graduates gain additional real-world skills and experiences.

Because the Harrisburg area is the center of industry and economic development for South Central Pennsylvania, students are provided with many opportunities to experience the exciting and challenging world of business through guest speakers, experiential learning, internships, and career placement.

Recent IS graduates have been employed by top organizations across the region and United States such as Computer Aid, Inc., Capital Blue Cross, Deloitte, Ernst & Young, Highmark Health, Lookheed Martin, Select Medical Corporation, Shell Oil Company, and Universal Health Service, Inc.

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School of Business Administration



Curriculum

Students will obtain:

- Knowledge in technologies that support the information environment.
- Knowledge in business or organizational processes that are supported by technology.
- General skills and abilities that promote good communication, problem-solving and analytical abilities, and the ability to work in a team environment.
- Skills to participate in and lead multidisciplinary teams in the development, implementation, and management of information technology solutions.

The program meets the objectives through varied experiences and an emphasis on good communication skills.

For a B.S. in Information Systems, a minimum of 122 credits is required. At least 30 percent of the final 60 credits must be taken at Penn State Harrisburg. At least 50 percent of the business credit hours required for the degree must be taken at Penn State Harrisburg. No more than 61 credits should be from Business and Business-related courses.

Courses

GENERAL EDUCATION: 45 credits

(12 of these 45 credits are included in the REQUIREMENTS FOR THE MAJOR) (See description of <u>General Education Course Requirements</u> in this bulletin.)

FIRST-YEAR SEMINAR: (Included in ELECTIVES 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: 79 credits

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

PRESCRIBED COURSES (49 credits)

ACCTG 211(4) (Sem: 1-4) ECON 102 GS(3), FIN 301(3), MGMT 301(3), MKTG 301(3) (Sem: 1-4) ENGL 202D GWS(3) (Sem: 3-4) B A 364Y US;IL(3), B A 462(3), ECON 104 GS(3), MIS 204(3), MIS 307(3)[1], MIS 390(3)[1], MIS 448(3)[1], MIS 450(3)[1], MIS 465(3)[1], SCM 301(3) (Sem: 5-8)

ADDITIONAL COURSES (24 credits)

Select 3 credits from CMPSC 101 GQ(3) or CMPSC 121 GQ(3) (Sem: 1-4) Select 4 credits from MATH 110 GQ(4) or MATH 140 GQ(4) (Sem: 1-4) Select 4 credits from SCM 200 GQ(4) or STAT 200 GQ(4) (Sem: 1-4) Select 4 credits from B A 243(4) or B A 241(2) and B A 242(2) (Sem: 5-6)

Select 9 credits [1] from one of the following three areas of concentration A, B, or C:

A. Application Development Concentration

IST 302(3); MIS 413(3); MIS 466(3); MIS 489(3) (Sem: 5-8).

B. Network Security Concentration

IST 302(3); IST 451(3); IST 456(3); MIS 489(3) (Sem: 5-8)

C. Individualized Concentration

IST 302(3); IST 451(3); IST 456(3); MIS 413(3); MIS 446 (3); MIS 461(3); MIS 466(3); MIS 489(3) (Sem: 5-8)

SUPPORTING COURSES AND RELATED AREAS (6 credits)

Select 6 credits from 200-400 level business courses from: ACCTG, B A, ECON, FIN, MGMT, MIS, MKTG, or SCM in consultation with an academic adviser and in support of the student's interests. (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.

Undergraduate Admissions Requirements

Minimum high school course requirements for admission to baccalaureate (four-year) degree programs are listed below. Keep in mind that specific programs may have additional requirements or recommendations.

English

Four units, including one unit each in composition and literature, are required.

Social Studies/Art/Humanities

Three units in any combination of social studies, arts, and humanities are required.

World Language

Two units in a single world language other than English are required. However, a student may be admitted with fewer than two units in a world language other than English, but must correct this deficiency by the time s/he earns 60 credits or graduates from Penn State, whichever comes first. This deficiency may be corrected by passing one three- or four-credit college level world language course or by demonstrating proficiency equivalent to two units of high school world language study.

Either a third unit in the same language or an additional unit in a second world language other than English is recommended.

Science

Three units of science are required Preparation in chemistry and physics is recommended but not required for our Science and Engineering/Engineering Technology programs

Math

Three units of mathematics are required (four are recommended), selected from any combination of algebra, geometry, and trigonometry

Some programs have additional mathematics requirements. Our Business, Engineering/Engineering Technology, and Science programs require one-half unit of trigonometry or higher level math within the required three units

Penn State requires proof of graduation or a GED for admission to four-year degree programs.

*In most high school curricula, one unit = one year.

Visit Undergraduate Admissions: Admissions Requirements for more information (<u>http://goo.gl/eVGAMB</u>)