

UNDERGRADUATE PROGRAM

Information Systems Option

ADDING/CHANGING OPTIONS

Business majors interested in pursuing an option may select one option at the time of application to the Foster School of Business. Business majors who have earned less than 135 credits may switch from one option to another by meeting with an adviser.

Business majors who have earned more than 135 credits and who wish to switch options or add a second option must meet with an adviser by appointment to create a graduation plan. Approval will be based on a variety of factors, including the total number of credits at graduation and the impact on the graduation date.

An option must be formally declared for it to be noted on the transcript at the time of completion of the Business Administration degree.

Business majors may declare an option as soon as the lower division core are completed (ACCTG 215 and 225, MGMT 200 and QMETH 201).

Business majors may not change options during the first two weeks of Registration Period I.

COURSE REGISTRATION

During Registration Period I, students who have been admitted to the Information Systems Option will have priority when registering for I S courses.

During Registration Period II, students in the Information Systems Option will have the same priority as all other business students.

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Information systems (IS) specialists must possess not only a thorough understanding of the relevant technology, but also the knowledge to use that technology for supporting core business functions. Students enrolled in the Information Systems Option take a set of courses that emphasize technical tools, as well as courses that deal with the development, use, and management of information technology in organizations.

Students completing the IS Option have the essential knowledge and skills for a variety of positions such as:

- information technology consultant or project manager
- business and systems analyst
- business applications developer/analyst

Training in both business fundamentals and cutting-edge technology allows our students to more quickly become leaders who leverage information technology for creating business value. Information Systems is also an ideal second option for students in accounting, finance, or marketing who desire to better understand the role of technology in their core disciplines.

BUSINESS CORE COURSE

All Foster students must complete this course. It lays the groundwork for the Information Systems Option.

I S 300 Introduction to Information Systems (5) Fundamentals of information systems, what they are, how they affect organizations. Technical and organizational foundations of information systems, building information systems, managing information system resources. Laboratory emphasizes using computer to analyze, coordinate, solve organizational decision-making problems. Prerequisite: ACCTG 225; ECON 200; calculus and statistics; may be taken concurrently with I S 410; may not be repeated.

REQUIRED INFORMATION SYSTEMS COURSES

I S 310 Fundamentals of Business Information Technologies (4) Exposure to fundamental programming and scripting concepts, conceptual data modeling, database management, and XML Applying data types and control structures. Continues the concepts of I S 300 of entity-relationship diagrams and record structure diagrams. Database management component includes relational databases, basic SQL, data architecture issues. Prerequisite: I S 300.

I S 320 Fundamentals of Application Programming (4) Fundamental programming concepts including data types, control structures, modularization, and structure programming. Developing solutions for problems in interactive business applications. Introduction to data and file structures. Extensive use of an event-driven programming language. Prerequisite: I S 300; I S 310, which may be taken concurrently; may not be repeated.

I S 410 Business Data Communications (5) Technology and applications of business data communications including characteristics of data, fundamentals of transmission, communications hardware and software, network configurations (LAN, MAN, WAN), management, and security. Laboratory provides hands-on experience with these applications. Prerequisite: I S 300, which may be taken concurrently; may not be repeated.

THE INFORMATION SYSTEMS OPTION

STUDENT ORGANIZATION

Business Information Technology Society (BITS)

bits@u.washington.edu
<http://students.washington.edu/bits>

TRANSCRIPT NOTATION

The notation "(Information Systems)" is put on the academic record (transcript) when the student has earned the Bachelor of Arts in Business Administration degree and has completed the required upper division information systems courses with a minimum cumulative GPA of 2.5.

ACADEMIC STANDING

Students in the Information Systems Option will be placed on academic probation at the end of any quarter in which the cumulative GPA in required upper-division information systems courses falls below the 2.5 minimum.

CAREERS

UW Career Center
134 Mary Gates Hall
206.543.0535
<http://careers.washington.edu>

Also, the Occupational Outlook Handbook offers recent information for students interested in researching careers. www.bls.gov/oco

CONTACT INFORMATION

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206.685.3400
bizinfo@u.washington.edu
foster.washington.edu/undergrad

Information Systems and Operations Management
370 Mackenzie Hall
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foster.washington.edu/departments/isom/

I S 445 Database Management (4) Examines the business need for database processing. Discusses database design, development, and administration. Students practice real-world database design and implementation using SQL. Discusses issues related to transaction management, data warehouse, etc. Prerequisite: I S 310; I S 320, which may be taken concurrently; may not be repeated.

I S 460 Systems Analysis and Design (4) Analysis and design of business information systems. Concentrates on the analysis phase of systems development. Covers systems development life cycle, feasibility studies, analysis of user requirements, and development of logical system models. Prerequisite: I S 410; I S 445, which may be taken concurrently; may not be repeated.

THE FOLLOWING COURSES MAY NOT BE USED TO COMPLETE THE OPTION

I S 423 E-Business System Development (4) Introduces key e-business enabling information technologies. Covers object-oriented principles, representing objects in software, object analysis and design, and use of modern programming language, and advanced database technology for web-based application development. Prerequisite: I S 320; may not be repeated.

I S 461 Systems Implementation (4) Develops business information systems integrating knowledge gained in previous 400-level I S courses. Topics include software project management, system/database design, GUI, software testing, systems implementation/support/maintenance, user training, integrating Web, and business environments. Prerequisite: I S 445; I S 460; may not be repeated.

I S 490 Selected Topics in Information Systems (1-6, max. 20) Topics of current concern to faculty and students. Potential topics include networks and distributed information-processing systems, office automation, artificial intelligence and knowledge-based systems, new approaches to systems development, fourth- and fifth-generation languages, economics of information systems. Prerequisite: I S 320.

I S 495 Practical Experience in Information Systems (1-4, max. 8) (Strongly Recommended) Undergraduate substantive I S internship and mentorship. Internships can be repeated up to two quarters for maximum of 4 credits; grades based on weekly status reports, paper, demonstration of knowledge. Mentorship program (maximum 1 credit/quarter) allows student to be matched with I S executive; grade based on status reports, other participatory events.

I S 499 Undergraduate Research (1-6, max. 12) Selected problems in information systems and computer applications.

COMPLEMENTARY ELECTIVES

BUSINESS COURSES

- ACCTG 320 Introduction to Accounting Information Systems (3)
- B CMU 410 Business Reports & Other Specialized Communications (4)
- QMETH 450 Spreadsheet Models in Managerial Decision Making (4)
- QMETH 490 Special Problems in Quantitative Analysis (1-6, max. 20)
- OPMGT 450 Introduction to Project Management (4)

NON-BUSINESS COURSES

- CSE 142/ 143 Computer Programming I/II (4/5)
- CSE 373 Data Structures and Algorithms (3)
- CSE 410 Computer Systems (3)
- T C 400 Scientific & Technical Communication (5)
- T C 401 Style in Scientific & Technical Writing (5)
- COM 220 Introduction to Public Speaking (5)

THE INFORMATION SYSTEMS OPTION

POSSIBLE SEQUENCING

Quarter	Option 1	Option 2	Option 3	Option 4	Option 5
1	IS 300	IS 300, IS 410	IS 300	IS 300	IS 300
2	IS 410, IS 310, IS 320	IS 310, IS 320	IS 410	IS 310, IS 410	IS 310
3	IS 445, IS 460	IS 445, IS 460	IS 310, IS 320	IS 320	IS 320
4			IS 445, IS 460	IS 445	IS 410
5				IS 460	IS 445
6					IS 460