



Business and Information Technology

B.S. in Information Science and Technology

As a student in the Information Science and Technology program, your classes will include a core set of courses that will provide you with understanding of programming concepts, data structures, tools for project control, web design, database essentials, computer internals, Internet applications, telecommunications networks, computer networking, technology management, and E-commerce. You will then have the opportunity to take a set of three courses to emphasize an area of interest (identified in the curriculum guide), or work towards a minor from our department. Minors are available in the areas of Business & Management Systems, Business Analytics and Data Science, Digital Supply Chain Management, Enterprise Resource Planning (ERP), Electronic & Social Commerce, Entrepreneurship, Human-Computer Interaction (HCI), Finance, Management, and/or Marketing.

As an IST student, you will join the Business and Management Systems students in common core classes. These classes reflect the theme of integration of business and technology, and represent information technology, management, quantitative, and communication skills. Finally, all of your coursework rests on a broad foundation of general education classes from the humanities, social sciences, physical sciences, and mathematics.

Common Professions (Preparation for some of these careers requires specific courses)

Business Operations - Business Application Design, Database Design, Business Process Design,
Business Operations Analysis, Management of Information Technology
Computer Networks - Network Analysis, Network Support, Network Management
E-Commerce & Internet - Web Site Design, E-Commerce Business Strategy
Entrepreneurship – Business Development
Human-Computer Interaction - Usability Analysis, Interface Design
Multimedia Systems - Multimedia Design, Multimedia Development
Project Management
Sales, Marketing - Customer Operations Analysis, Technical Marketing, Product Support
Software Systems - Software Design, Hardware/Software Needs Assessment
Telecommunications - Internet Services Management, Technology Management and Planning

Career Opportunities & Employer Relation Statistics 2014-2015

\$55,918- Average starting salary for B.S. in Information Science and Technology from S&T
\$77,214- Average starting salary for M.S. in Information Science and Technology from S&T
\$3,470- Average monthly salary for IST Co-ops
\$3,792- Average monthly salary for IST Summer Interns

Top Hiring Employers 2014-2015

Union Pacific, Accenture, Frontier Tech, Midway USA, Caterpillar Inc., The Boeing Company, Junction Solutions

Top Co-Op & Intern Hiring Employers 2014-2015

Monsanto, Nucor Corporation, Turing Consulting, Anheuser-Busch, Bunge, Peabody Energy, Caterpillar Inc., Union Pacific



Information Science and Technology Degree Catalog Year 2016

I. General Education (54 credit hours)

(1) __ Introduction to College Success, BUS 10/1810¹

Natural Systems (10 credit hours)

- (3) __ General Psychology, PSYCH 50/1101
- (3) __ Science Elective³
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- (1) __ Science Laboratory

Human Institutions (18 credit hours)

- (3) __ Fine Art, Social Science, or Humanities Elective²
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- (3) __ History Elective
- (3) __ Microeconomics, ECON 121/1100⁵
- (3) __ Macroeconomics, ECON 122/1200⁵
- (3) __ American Government, POL SCI 90/1200

Quantitative Skills (10 credit hours)

- (3) __ College Algebra, MATH 4/1140 or MATH 2/1120
- (4) __ Business Calculus, MATH 12/1212
- (3) __ Statistics I, STAT 211/3111

Communication Skills (15 credit hours)

- (3) __ Principles of Speech, SP&MS 85/1185
- (3) __ Exposition and Argumentation, ENGL 20/1120
- (3) __ Intro to Tech Com, ENGL/TCH COM 65/1600
- (3) __ Practicum in Tech Com, ENGL/TCH COM 260/2560
- (3) __ Web and Digital Media Development, IST 286/4654⁵

II. Common Core Courses (27 credit hours)⁵

Information Technology (12 credit hours)

- (3) __ Intro. to Mgt. Info. Systems, IST 50/1750
- (3) __ Implementation of IS I, IST 51/1551
- (3) __ Implementation of IS II, IST 151/1552
- (3) __ Intro to Enterprise Resource Planning, ERP 246/2110

Management (9 credit hours)

- (3) __ Financial Accounting, BUS 120/1210
- (3) __ Corporate Finance I, FIN 250/2150
- (3) __ Marketing, MKT 311/3110

Entrepreneurship & Innovation (6 credit hours)

- (3) __ Introduction to Management and Entrepreneurship, BUS 110/1110
- (3) __ Bus. Models for Entrepreneurship & Innovation, BUS 396/5980¹

III. IST Core (18 credit hours)⁵

- (3) __ Computing Internals and Operating Sys, IST 231/3131
- (3) __ Data Networks & Information Security, IST 233/3333
- (3) __ Systems Analysis, IST 243/3343
- (3) __ Intro to Data Science & Management IST 3420
- (3) __ Database Management, IST 223/3423
- (3) __ Electronic and Mobile Commerce, IST 241/4641

IV. IST Electives (9 credit hours)⁵

Select any 3 courses from the following (for an optional emphasis area, choose 3 courses from one group)

Business Analytics & Data Science

- (3) __ Business Analytics & Data Science IST 5420
- (3) __ Intro to Info Visualization IST 4450

Human-Computer Interaction (HCI)

- (3) __ Human-Computer Interaction, IST 385/5885
- (3) __ Prototyping Human-Computer Interactions, IST 386/5886
- (3) __ Human-Computer Interaction Evaluation, IST 387/5887
- (3) __ Intro to Web and New Media Studies IST 380/4680

Enterprise Resource Planning (ERP)⁴

- (3) __ ERP Systems Design & Implementation, ERP 346/5110
- (3) __ Customer Relationship Mgmt in ERP Environ, ERP 342/4610
- (3) __ ERP in Small and Mid Size Enterprises, ERP 5130
- (3) __ Enterprise Portal & Mobile Application Develop, ERP 341/5240
- (3) __ Supply Chain Mgmt Systems in ERP Environ, ERP 347/5310
- (3) __ Use of Business Intelligence, ERP 345/5410
- (3) __ Performance, Dashboard, Scorecard & Data Visualization, ERP 348/5210

Other IST Electives (IST)

- (3) __ Network Performance Design & Mgmt, IST 321/3321
- (3) __ Network Economy, IST 357/4257
- (3) __ Modular Software Systems in Java, IST 353/3553
- (3) __ Information Systems Project Management, IST 361/4261
- (3) __ Fundamentals of Mobil Tech. for Business, IST 335/4335
- (3) __ Tech. Innovation Mgmt & Leadership, IST 351/5251

V. Free Electives (12 credit hours)

- (3) __ _____
- (3) __ _____
- (3) __ _____
- (3) __ _____

¹In-Major Writing Intensive

²Any course in the following areas not used for other degree requirements: Art , Economics, English, Foreign Language, History, Literature, Music, Philosophy, Political Science, Psychology, Sociology, Theater.

³Biology, Chemistry, Geology, Geological Engineering, Physics.

⁴Students with an ERP emphasis will be eligible for a SAP Certificate of Excellence, authorized by the SAP Corporation.

⁵A grade of "C" or better is required in these courses.