



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.

Popular Professions in the Field

(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

Average starting salaries - Career Opportunities & Employer Relation Statistics 2017-2018

\$66,512 - for B.S. in Information Science and Technology from S&T

\$83,767 - for M.S. in Information Science and Technology from S&T

\$3,231 - average monthly salary for IST Co-ops

\$3369 -average monthly salary for IST Summer Interns

Top Hiring Employers 2015-2016

Cerner, Boeing, Walmart, MasterCard, Accenture, Deloitte

I. General Education (51 credit hours)

- (1) __ Introduction to College Success, 1810¹

Natural Systems (10 credit hours)

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

Human Institutions (15 credit hours)

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

Quantitative Skills (10 credit hours)

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

Communication Skills (15 credit hours)

- (3) __ Principles of Speech, SP&MS 1185
(3) __ Exposition and Argumentation, ENGL 1120
(3) __ Intro to Tech Com, ENGL/TCH COM 1600
(3) __ Technical Marketing Communication, ENGL/TCH COM 2560
(3) __ Web and Digital Media Development, IST 4654⁵

II. Common Core Courses (27 credit hours)⁵

Information Technology (12 credit hours)

- (3) __ Intro. to Mgt. Info. Systems, IST 1750
(3) __ Algorithms & Programming with Java, IST 1561
(3) __ Java and Data Structures, IST 1562
(3) __ Intro to Enterprise Resource Planning, ERP 2110

Management (12 credit hours)

- (3) __ Mgt. & Entrepreneurship, BUS 1110
(3) __ Financial Accounting, BUS 1210
(3) __ Corporate Finance I, FIN 2150
(3) __ Marketing, MKT 3110

Entrepreneurship & Innovation (3 credit hours)

- (3) __ Bus. Models for Entrepreneurship & Innovation, 5980¹

III. IST Core (18 credit hours)⁵

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

IV. IST Electives (15 credit hours)⁵

Select any 5 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
(3) __ Data Science and Machine Learning in Python IST 5520

Human-Computer Interaction (HCI)

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

Enterprise Resource Planning (ERP)⁴

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

Other IST Electives (IST)

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

V. Free Electives (9 credit hours)

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

1 In-Major Writing Intensive

2 Any 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.

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

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

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

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