B.S. 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, Enterprise Resource Planning (ERP), Electronic & Social Commerce and Entrepreneurship, Finance, Management, and 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.

NEW for Fall 2014  We are excited to begin offering “Introduction to Big Data Analytics”, and “Information Visualization and Analytics”. We are in the process of expanding our curriculum programs in order to prepare students for the field of Business Analytics and Data Science, or “BIG DATA”.

Career Professions  (Preparation for some of these careers requires specific courses)
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 2013-2014
$61,021- Average starting salary for B.S. in Information Science and Technology from S&T
$71,360- Average starting salary for M.S. in Information Science and Technology from S&T
$3,298- Average monthly salary for IST Co-ops
$3,025- Average monthly salary for IST Summer Interns

Top Hiring Employers 2013-2014: Union Pacific, Accenture, Frontier Tech, Midway USA, Caterpillar Inc., The Boeing Company, Junction Solutions

# Information Science and Technology Degree

## Student Checklist – (120 credit hours)

### I. General Education (54 credit hours)

1. Introduction to College Success, BUS 10/1810

### Natural Systems (10 credit hours)

1. General Psychology, PSYCH 50/1101
2. Science Elective
3. Science Elective
4. Science Laboratory

### Human Institutions (18 credit hours)

1. Fine Art, Social Science, or Humanities Elective
2. Microeconomics, ECON 121/1100
3. Macroeconomics, ECON 122/1200

### Quantitative Skills (10 credit hours)

1. College Algebra, MATH 4/1140 or MATH 2/1120
2. Business Calculus, MATH 12/1212
3. Statistics I, STAT 211/3111

### Communication Skills (15 credit hours)

1. Principles of Speech, SP&MS 85/1185
2. Exposition and Argumentation, ENGL 20/1120
3. Intro to Tech Com, ENGL/TCH COM 65/1600
4. Speech or Technical Communication Elective
5. Practicum in Tech Com, ENGL/TCH COM 260/2560

### II. Common Core Courses (27 credit hours)

#### Information Technology (12 credit hours)

1. Intro. to Mgt. Info. Systems, IST 50/1750
2. Implementation of IS I, IST 51/1551
3. Implementation of IS II, IST 151/1552
4. Intro to Enterprise Resource Planning, ERP 246/2110

#### Management (12 credit hours)

1. Introduction to Management and Entrepreneurship, BUS 110/1110
2. Financial Accounting, BUS 120/1210
3. Corporate Finance I, FIN 250/2150
4. Marketing, MKT 311/3110

#### Entrepreneurship (3 credit hours)

1. Bus. Models for Entrepreneurship & Innovation, BUS 396/5980

### III. IST Core (18 credit hours)

1. Database Management, IST 223/3423
2. Computing Internals and Operating Sys, IST 231/3131
3. Networks and Communications, IST 233/3333
4. Electronic and Mobile Commerce, IST 241/4641
5. Systems Analysis, IST 243/3343
6. Web and Digital Media Development, IST 286/4654

### IV. IST Electives (9 credit hours)

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

#### Human-Computer Interaction (HCI)

1. Human-Computer Interaction, IST 385/5885
2. Human-Computer Interaction Prototype, IST 386/5886
3. Human-Computer Interaction Evaluation, IST 387/5887
4. Advanced Web Development IST 352/5552
5. Intro to Web and New Media Studies IST 380/4680

#### Enterprise Resource Planning (ERP)

1. Enterprise Portal & Mobile Application Develop ERP 341/5240
2. Customer Relationship Mgmt in ERP Environ ERP 342/4610
3. Use of Business Intelligence ERP 345/5410
4. ERP Systems Design & Implementation ERP 346/5110
5. Supply Chain Mgmt Systems in ERP Environ ERP 347/5310
6. Performance, Dashboard, Scorecard & Data Visualization ERP 348/5210

#### Other IST Electives (IST)

1. Introduction to Data Analytics, IST 5420
2. Network Performance Design & Mgmt IST 321/3321
3. Fundamentals of Mobil Tech. for Business IST 335/4335
4. Tech. Innovation Mgmt & Leadership IST 351/5251
5. Modular Software Systems in Java IST 353/3553
6. Network Economy IST 357/4257
7. Information Systems Project Management IST 361/4261
8. Law & Ethics in E-Commerce IST 368/5168

### V. Free Electives (12 credit hours)

1. Law and Ethics in E-Commerce
2. Information Systems Management
3. Information Systems Project Management

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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.
4. Students with an ERP emphasis will be eligible for a SAP Certificate of Excellence, authorized by the SAP Corporation. A grade of "C" or better is required in these courses.