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, 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.

NEW for Fall 2015 We have added two new Minors; Business Analytics & Data Science in the field of “Big Data”, and Human-Computer Interaction & User Experience (HCI).

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 Catalog Year 2015

## Student Checklist – (120 credit hours)

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

1. **Introduction to College Success**, BUS 10/18101

#### Natural Systems (10 credit hours)

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

1. **Science Laboratory**

#### Human Institutions (18 credit hours)

1. **Fine Art, Social Science, or Humanities Elective**
2. **Fine Art, Social Science, or Humanities Elective**
1. **History Elective**
2. **Microeconomics**, ECON 121/1100
3. **Macroeconomics**, ECON 122/1200
3. **American Government**, POL SCI 90/1200

#### 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&M S 85/1185
2. **Exposition and Argumentation**, ENGL 20/1120
3. **Intro to Tech Com**, ENGL/TCH CO 65/1600
3. **Practicum in Tech Com**, ENGL/TCH COM 260/2560
3. **Web and Digital Media Development**, IST 286/4654

### 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
3. **Intro to Enterprise Resource Planning**, ERP 246/2110

#### Management (9 credit hours)

1. **Financial Accounting**, BUS 120/1210
2. **Corporate Finance I**, FIN 250/2150
3. **Marketing**, MKT 311/3110

#### Entrepreneurship & Innovation (6 credit hours)

1. **Introduction to Management and Entrepreneurship**, BUS 110/1110

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

1. **Computing Internals and Operating Sys**, IST 231/3131
2. **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)

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

#### Business Analytics & Data Science

1. **Business Analytics & Data Science IST 5420**
2. **Intro to Info Visualization IST 4450**

#### Human-Computer Interaction (HCI)

1. **Human-Computer Interaction, IST 385/5885**
2. **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)

1. **ERP Systems Design & Implementation, ERP 346/5110**
2. **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)

1. **Network Performance Design & Mgmt, IST 321/3321**
2. **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)

1. **____________________________**
2. **____________________________**
3. **____________________________**
4. **____________________________**

---

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. **Biological, 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.**