# 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. One possible emphasis is to study the aspects needed for effective and usable computer interfaces (Human-Computer Interaction). Another possible emphasis area is one that focuses on the foundation computer systems that integrate information for organizations (Enterprise Resource Planning). You may also create a set of three advanced courses that provides an emphasis to fit your own unique interests.

All Information Science and Technology students will join their Business and Management Systems classmates in a common core. 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.

Career Opportunities (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

# Scholarships

Freshman scholarships are automatically awarded based on the high school transcript and ACT scores. No application is necessary. Scholarships for sophomores, juniors, and seniors require an application and are based on academic record, service activities, and extracurricular activities.

# **Specific Courses**

The back of this sheet shows a checklist that IST students use to ensure they meet requirements. Descriptions of the courses listed are in the Undergraduate Catalog, which is also available online.

# Catalog Year 2012 Information Science and Technology Degree Student Checklist – (120 credit hours)

#### I. General Education (54 credit hours) (0.5) \_\_ Introduction to College Success I, BUS 1810<sup>1</sup> (0.5) \_\_ Introduction to College Success, BUS 1811<sup>1</sup> Natural Systems (10 credit hours) (3) \_\_ General Psychology, PSYCH 1101 (3) \_\_ Science Elective<sup>3</sup> 4654 (3) \_\_\_ Science Elective<sup>3</sup> (1) \_\_ Science Laboratory Human Institutions (18 credit hours) (3) Fine Art, Social Science, or Humanities Elective<sup>2</sup> (3) \_\_\_ Fine Art, Social Science, or Humanities Elective<sup>2</sup> (3) \_\_\_ History Elective (3) \_\_\_ Microeconomics, ECON 1100<sup>6</sup> (3) \_\_\_\_ Macroeconomics, ECON 1200<sup>6</sup> (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) \_\_ Speech or Technical Communication Elective (3) Practicum in Tech Com, ENGL/TCH COM 2560 II. Common Core Courses (27 credit hours)<sup>6</sup> Information Technology (12 credit hours)<sup>4</sup> (3) \_\_ Intro. to Mgt. Info. Systems, IST 1750<sup>4</sup> (3) \_\_ Implementation of IS I, IST 1551<sup>4</sup> (3) \_\_ Implementation of IS II, IST 1552<sup>4</sup> (3) \_\_ Intro to Enterprise Resource Planning, ERP 2110<sup>4</sup> Management (12 credit hours) (3) \_\_ Mgt & Org Behavior, BUS 1110 (3) \_\_\_\_ Financial Accounting, BUS 1210 (3) \_\_ Corporate Finance I, FIN 2150 (3) \_\_\_\_\_ Marketing, MKTG 3110<sup>4</sup> Entrepreneurship (3 credit hours)

- (1) Senior Design I, BUS 4970<sup>1</sup>
- (2) Senior Design II, BUS 4980<sup>1</sup>

#### III. IST Core (18 credit hours)<sup>6</sup>

- (3) \_\_\_ Database Management, IST 3423
- (3) Computing Internals and Operating Sys, IST 3131
- (3) \_\_\_\_ Networks and Communications, IST 3333
- (3) \_\_\_ E-Commerce, IST 4641
- (3) \_\_\_ Systems Analysis, IST 3343
- (3) \_\_\_\_ Web and New Media Design & Development, IST

## IV. Emphasis Areas (9 credit hours)<sup>6</sup>

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

#### Human-Computer Interaction (HCI)

- (3) \_\_\_\_ Human-Computer Interaction, IST 5885 and two of the following courses:
- (3) \_\_\_\_ Multimedia Development and Design, IST 5654
- (3) \_\_\_ Human-Computer Interaction Prototype, IST 5886
- (3) \_\_\_\_ Human-Computer Interaction Evaluation, IST 5887

#### **Enterprise Resource Planning (ERP)**<sup>5</sup>

- (3) \_\_\_\_ ERP Systems Design & Implementation, ERP 5110 and two of the following courses:
- (3) \_\_ CRM in ERP Environment, ERP 4610
- (3) \_\_\_\_ Use of Business Intelligence, ERP 5410
- (3) \_\_\_\_ Supply Chain Management, ERP 5310
- (3) \_\_\_\_ Strategic Enterprise Management Systems, ERP 5210
- (3) \_\_\_ ERP Systems Administration, ERP 5510

#### **Other IST Electives**

Any upper level courses designated ERP or IST

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

- (3) \_\_\_\_\_

<sup>1</sup>In-Major Writing Intensive

<sup>2</sup>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.

<sup>3</sup>Biology, Chemistry, Geology, Geological Engineering, Physics.

<sup>4</sup>A minor in Information Science & Technology consists of these four courses and one course designated IST or ERP.

<sup>5</sup>Students with an ERP emphasis will be eligible for a SAP Certificate of Excellence, authorized by the SAP Corporation. <sup>6</sup>A grade of "C" or better is required in these courses.