

Information Systems

Department Chair, Fan Tseng

355 Business Administration Building

Telephone: 256.824.6680

Email: tsengf@uah.edu

In the BSBA in Information Systems, students may choose one of two concentrations:

- Business Analytics and Supply Chain Management (<http://catalog.uah.edu/undergrad/colleges-departments/business/information-systems/information-systems-bsba-business-analytics-supply-chains-concentration>)
- Cybersecurity and Information Assurance (<http://catalog.uah.edu/undergrad/colleges-departments/business/information-systems/information-systems-bsba-cyber-security-information-assurance-concentration>)

Mission

The Department of Management, Marketing and Information Systems provides academically rigorous instruction on the use of analytical tools and theoretical concepts in information systems, management, management science, and marketing to help students understand and apply them to practical business problems in scientific, technological and traditional business environments, non-profits, and government agencies. The departmental faculty also develops and disseminates knowledge on diverse topics related to the information systems and assurance, management, management science, and marketing.

Information Systems

The major in information systems (IS) is designed for students who want to become administrators or designers of information systems that utilize computers in business or administrative environment. IS subject matter includes computer hardware, computer software, database design, data communication, electronic commerce, systems analysis and design methodologies, information assurance, and behavioral issues and business or administrative context within which computer systems are applied.

We encourage Information Systems majors to use one of the electives in their degree program to take IS 495, Internship in Information Systems.

Majors in Information Systems

Students who major in Information Systems may focus their programs toward analytics or cybersecurity. The specifics about these two options are provided at the links below.

- Information Systems, BSBA - Business Analytics and Supply Chains Concentration (<http://catalog.uah.edu/undergrad/colleges-departments/business/information-systems/information-systems-bsba-business-analytics-supply-chains-concentration>)
- Information Systems, BSBA - Cybersecurity and Information Assurance Concentration (<http://catalog.uah.edu/undergrad/colleges-departments/business/information-systems/information-systems-bsba-cyber-security-information-assurance-concentration>)

IS 146 - COMPUTER APPL IN BUSINESS

Semester Hours: 3

Study of computer solutions to business problems. Overview of hardware/software systems and of data and information processing in organizations. Extensive use of Microsoft Office and other software for word processing, spreadsheet, presentation, and database applications related to business.

IS 210 - INTRO COMP PROG IN BUS

Semester Hours: 3

Fundamentals of business programming using languages such as Python, PHP, JavaScript, JQuery and HTML5. Prerequisite: IS 146.

IS 301 - INFO SYSTEMS IN ORGANIZATIONS

Semester Hours: 3

Understanding the role of information systems in organizations and how they relate to organizational objectives and organizational structure. Introduce information system applications and the SAP software to illustrate the concepts covered in this course. Prerequisite: IS 146.

IS 310 - ADV COMP PROGRAMMING IN BUS

Semester Hours: 3

Advanced business language features, control language and file handling, object oriented programming, software quality and maintenance. Workflow programming is also covered. Prerequisite: IS 210.

IS 340 - DATA BASES FOR MANAGEMENT

Semester Hours: 3

The management of data resources to effectively support the information systems of organizations. The course focuses on relational database model and Oracle SQL. It provides students with extensive experiences in formulating and executing SQL queries to retrieve and manipulate information from a relational database management system. Prerequisite: IS 310.

IS 351 - ENTERPRISE SYSTEMS

Semester Hours: 3

This course examines the concepts and uses of enterprise systems to integrate all aspects of an organization into one information system. Specific attention is given to how ERP systems facilitate the flow of information supporting core business processes and the organization's supply chain. The course will emphasize the adaptation of ERP systems to support the organizational structures and business processes of the particular company to efficiently and effectively manage a firm's business. Prerequisites: IS 301.

IS 401 - SURV OF INFORMATION ASSURANCE

Semester Hours: 3

Provides a managerial and technical overview of cybersecurity and introduces students to the complexity of the security issues facing organizations. Presents practices and standards for assessing security risks and managerial and technical approaches to minimize such risks. Prerequisite: IS 301.

IS 412 - MODERN SYSTEM ANALYSIS & DESGN

Semester Hours: 3

Identifying, analyzing, developing and acquiring information systems are central to the information systems discipline. The course covers identifying, conceptualizing and analyzing business opportunities where information systems applications can add value followed by design, development, and implementation of such applications. Planning for and management of this core IS activity is a critical organizational competence. Prerequisites: IS 301, IS 310, and IS 340.

IS 422 - SUPPLY CHAIN MANAGEMENT SYSTEM

Semester Hours: 3

This course presents the main concepts of supply chain management systems and software including ERP, CRM and SCM systems as well as the underlying technologies and managerial implications. It provides hands on familiarity with SAP supply chain modules. Prerequisite: IS 301.

IS 460 - TELECOMMUNICATIONS & NETWORK'G

Semester Hours: 3

An overview of the IT infrastructure in modern organizations. The course starts from basic telecommunications networking concepts to digital platforms and ecosystems in the market. Prerequisite: IS 301.

IS 463 - COMPUTER FORENSICS

Semester Hours: 3

Provides an introduction to the area of computer forensics. Examines the problems and concerns related to computer investigations. Blends traditional investigation methods with classic systems-analysis problem-solving techniques and applies them to computing investigations. This course is lab intensive and students are expected to gain hands-on experience through learning to use various forensic software. Several information security topics nonspecific to forensics will also be covered. Prerequisite: IS 301.

IS 471 - BUSINESS INTELLIGENCE & ANALYT

Semester Hours: 3

Fosters data-analytical thinking. Uses real-world examples and cases to explore the use of big data for business decision-making and how Business Intelligence and Analytics (BIA) enhances business competitiveness. Provides hands-on experience mining data using many BIA tools. Prerequisite: IS 301.

IS 477 - NETWORK DEFENSE/OPERATING SYS

Semester Hours: 3

Introduction to network security issues and practical applications. Addresses translation, packet filtering, proxy servers, and firewalls, and Virtual Private Networks. This course assumes familiarity with Internet and basic networking concepts such as TCP/IP, gateways, routers, and Ethernet. Prerequisites: IS 301 and IS 460.

IS 480 - CURRENT TOPICS IN MGT INFO SYS

Semester Hours: 3

Prerequisite: IS 301.

IS 490 - SPECIAL PROJECTS

Semester Hours: 3

IS 491 - IS MANAGEMENT & STRATEGY

Semester Hours: 3

This course emphasizes the integration of various principles, theories, and techniques for implementing, deploying and managing enterprise information systems in organizations to gain strategic and operational advantages. Includes lectures, tours, readings, cases, and the completion of a major project. Normally taken during a student's last semester of studies. Prerequisites: IS 340 and either IS 351 or 460. Prerequisite with concurrency: IS 412.

IS 495 - INTERN IN INFO SYSTEMS

Semester Hours: 1-3