

Information Systems (IS)

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 - ADVANCED PROGRAMMING

Semester Hours: 3

This second level programming course introduces advanced programming concepts with more complex I/O, file and data handling, object oriented programming, testing and quality and maintenance. The course focuses on developing solutions for business problems. Prerequisite: IS 210 or equivalent programming course.

IS 340 - DATABASE MANAGEMENT

Semester Hours: 3

Organizing and managing the data resources of an organization using information technology. The course covers modeling and design of databases for organizations. It will also cover query, reporting and visualization of data for supporting decision making by managers. Students will be introduced to the technologies that support business analytics and basics of analytics.. Prerequisite: IS 301.

IS 351 - ENT & SUPPLY CHAIN MGT SYSTS

Semester Hours: 3

This course emphasizes the importance of integration of processes within an enterprises and across enterprises in a supply chain and the systems used to support these processes. Enterprise systems support the internal logistics chain within a firm integrating processes across all functions. Students will learn about the digital transformation taking pace within the firm and across the firm's supply chain. The course will introduce students to processes and systems that firms use to harness the capabilities of their supply chain partners and supply networks. Prerequisites: IS 301.

IS 401 - CYBERSECURITY PRINCIPLES

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 - SYSTEMS ANALYSIS & DESIGN

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 450 - CYBERSECURITY MANAGEMENT

Semester Hours: 3

Examines management issues associated with cybersecurity system planning, implementation, control and assurance. Specific emphasis is on security system controls and their evaluation, compliance, governance, security policies, ethical and legal issues, and risk management. Recent developments in IT, such as client-server systems, cloud computing and the Internet, and their impact on policies, laws are also considered. Prerequisite: IS 301.

IS 460 - NETWORKING & IT INFRASTRUCTURE

Semester Hours: 3

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

IS 463 - DIGITAL FORENSICS

Semester Hours: 3

Provides an introduction to the area of digital forensics. Examines the problems and concerns related to Cybersecurity forensic 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 401.

IS 471 - BUSINESS ANALYTICS & AI

Semester Hours: 3

The course covers the use of data analytics to support decision making in organizations and gain insights to support tactics and strategy. In addition to analytics, students will also be introduced to Artificial Intelligence (AI) techniques for analytics. Students will use many Business Analytics tools and gain experience in mining data. The course is designed to develop data-analytic thinking in the era of big data. Prerequisite: IS 301, IS 310 and MSC 288.

IS 477 - NETWORK DEFENSE & SECURITY

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 401 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