

INFORMATION SYSTEMS MGMT (ISM)

ISM 3011 Introduction to Information Technology Management

Credit Hours: 3

Prerequisites: Departmental approval or admission to Bachelor's program required

Lab Fee: Yes

This course introduces fundamental concepts and methods related to the management of information technology systems in organizations. A broad range of topics will be covered, that will be kept abreast with technology changes. A successful completion of this course will equip the students with the knowledge of current information technology management and decision support systems.

ISM 3113 Information Systems Analysis and Design

Credit Hours: 3

Prerequisites: Departmental approval or admission to Bachelor's program required

Corequisites: ISM 3011

Lab Fee: Yes

This course covers the fundamental concepts and methods to the management of information systems in organizations which includes analysis, design, implementation, and operation of information systems. Both procedural and object-oriented analysis design approaches are covered. Verification of information requirements against database design and systems development life cycles are also discussed.

ISM 3320 Information Systems Control

Credit Hours: 3

Prerequisites: ISM 3011 with a grade of "C" or higher

Lab Fee: Yes

This course covers the basic structure, control and purpose of information systems including database systems and referential integrity with an overview of the needs of security, integrity, availability, subject privacy, licensing, copyright and access management. It includes an overview of all aspects of network information systems in terms of both strategic and operational requirements, with discussions regarding the appropriate systems for specific environment and applications.

ISM 3321 Cybersecurity Fundamentals

Credit Hours: 3

Prerequisites: CTSC 2120 with a grade of "C" or higher and departmental approval or admission to Bachelor's program required

Lab Fee: Yes

This course covers the basic knowledge and awareness of cyber security. The content of the course focuses on the vulnerabilities, attack methods, detection and prevention techniques. It includes the design and maintenance of organizational information security policies and the identification of essential procedures for secure system implementations.

ISM 3322 Advanced Cybersecurity Concepts

Credit Hours: 3

Prerequisites: ISM 3321 with a grade of "c" or higher

This course covers the advanced knowledge and awareness of cybersecurity. The content of the course focuses on web attacks, wireless network defense, session hijacking, mobile device security, and Internet of Things (IoT) vulnerabilities. It includes the prevention of infrastructure security threats and developing control methods for secure system implementations.

ISM 3324 Applications in Information Security

Credit Hours: 3

Prerequisites: COP 3330 with a grade of "C" or higher

Lab Fee: Yes

This course develops important security concepts relative to software application development. Students will learn the role of security in all phases of the Software Development Life Cycle, consider security and privacy concerns in establishing system requirements, reduce opportunities for attackers to exploit potential system weak spots by applying a structured approach to threat scenarios to identify security vulnerabilities, determine risks from threats, and establish appropriate mitigations.

ISM 4041 Emerging Information Technologies

Credit Hours: 3

Prerequisites: ISM 3011 with a grade of "C" or higher

This course will expose students to emerging information technologies with a focus on how such technologies may be effectively and efficiently assessed. Students will learn how to help their organizations define, select, and adopt new information technologies.

ISM 4220 Network Management for Informational Professionals

Credit Hours: 3

Prerequisites: Admission to Bachelor's program required

Lab Fee: Yes

This course applies to students majoring in Computer Science and Information Technology. This course covers the fundamental concepts of data communications and networking with practical applications. Major topics include data communication networks, networking protocols and applications, network technologies, wired and wireless data communications, network security, and network administration.

ISM 4300 Information Systems Operations Management

Credit Hours: 3

Prerequisites: ISM 3113 or ISM 4041 with a grade of "C" or higher

Lab Fee: Yes

This course covers management processes and procedures for planning, implementation, and operation of information systems with an emphasis on operational management. The course stresses the relationship between the strategic and operational planning of information systems. Social issues such as ethics, privacy and legal issues including intellectual property shall also be addressed.

ISM 4314 Project and Change Management for Technology

Credit Hours: 3

Prerequisites: ISM 3011 and ISM 3113 - both courses with a grade of "C" or higher

Lab Fee: Yes

This course covers project related tasks with particular attention given to the information systems context. Topics include project selection and initiation, work structure and scope management, budgeting, procurement, scheduling and cost analysis. Additional topics will include quality control, communication plans, risk analysis and resource leveraging.