INFORMATION SYSTEMS MANAGEMENT (ISM)

ISM 525 Computer and Info Systems 3 Credit Hours
This course focuses on the management concepts and information technology needed to create effective information systems. Topics include: a survey of information technology, information systems and organizations, strategic information systems, management support systems, and ethical and social issues in information systems.
Restriction(s):
Can enroll if Class is Graduate

ISM 526 IT Services Management 3 Credit Hours
Students in IT Services Management will learn how to organize and operate in an IT environment centered on processes and services. Students will learn to use major models like ISO 20000 and the Information Technology Library (ITIL) as tools for managing and controlling the IT function within an organization. Upon completion of the course, students should be prepared for the ITIL Foundations examination.
Prerequisite(s): ISM 525* or MIS 525*

ISM 527 Programming & Data Structures 3 Credit Hours
This course introduces the basic concepts of program design, emphasizing an event-driven environment. Students will develop an understanding of fundamental programming logic and learn to use basic programming structures to solve simple business problems. Students are introduced to the program development cycle and programming principles, basic programming logic and structures, and common data types. Topic coverage may include an introduction to object-oriented programming and other next generation programming environments.
Prerequisite(s): ISM 525* or MIS 525*

ISM 575 Information Management 3 Credit Hours
This course examines the basic concepts of information management for business organizations. Database systems are examined as a key tool for managing information. The goal of this course is to provide adequate technical detail while emphasizing the organizational and implementation issues relevant to the management of computerized information in an organizational environment. Topics include data modeling, database design, data definition and manipulation languages, database administration, data standards and policies, data, quality, data integration, data warehousing and data mining.
Prerequisite(s): ISM 525* or MIS 525*

ISM 585 Network App Development 3 Credit Hours
This course is designed for students to explore the unique concerns in developing applications designed to run in a networked environment. The goal of this course is for students to gain proficiency in network-based programming languages, while at the same time understanding concerns specific to networked applications, such as security and latency. Topics include client-server development, distributed object models, training in specific languages such as PHP and PERL, programming and security, and networked application tuning.
Prerequisite(s): MIS 527 or ISM 527

ISM 640 Info Systems Development 3 Credit Hours
This course provides a foundation in systems analysis and design concepts, methodologies, techniques, and tools. Students will learn to analyze an organizational program, define user requirements, design an information system, and plan an implementation. Methodologies covered include the traditional life cycle approach as well as newer methodologies such as an object-oriented approach, joint application development (JAD), and prototyping. A semester-long project gives students the opportunity to apply these techniques to a business problem. This project will use technologies such as computer-aided software engineering (CASE) tool, a database management system (DBMS), fourth generation language.
Prerequisite(s): MIS 575* or ISM 575*

ISM 641 Enterprise Architecture Netwrk 3 Credit Hours
In this class, students will learn the principles of managing the hardware, software, networks, and data centers that are used in modern enterprises. Students will learn the interfacing of IT systems to business goals and objectives. Traditional architecture frameworks will be discussed, along with the integration of more contemporary topics like cloud networking, green computing, mobile enterprise/BYOD, and virtual services.
Prerequisite(s): MIS 525 or ISM 525

ISM 642 Information Assurance 3 Credit Hours
This course will provide the students with an exposure to the unique concerns and realities of assuring information and managing risks in the IT environment today. The course will cover principles of security from a managerial point of view, but will provide the students with enough of a technical focus to actively participate in the process of organizational security. Students will be exposed to the problems and dangers from insecure IS and the means, including physical, technical and administrative controls, to prevent security breaches, while also learning to respond to a breach when it does happen. Students will take this knowledge to learn to develop security plans and conduct security audits. Coursework will include extensive reading and seminar participation as well as time in the laboratory to explore and reinforce concepts.
Prerequisite(s): MIS 525 or ISM 525

ISM 643 Info Tech Project & Chg Mgmt 3 Credit Hours
This course examines the management of information systems projects in business organizations as well as human and organizational reactions to the changes brought about by new information systems. Topics include project planning, change control, project controls, project reporting, information systems projects and organizational change, factors affecting project success and failure, and project management software.
Prerequisite(s): MIS 525* or ISM 525*

ISM 644 IT Policy and Strategy 3 Credit Hours
This course provides an overview and an understanding of the issues involved in the strategic management of the information technology (IT) and information systems (IS) of an organization and the development of organizational strategies and polices considering environmental constraints. A broad range of issues and problems associated with the information assets of the organization and their alignment with the strategic goals of the organization is examined. An example of topics covered might include: ethical, privacy, and social issues arising within the new information environment; current laws and currently proposed laws and their implications; competition and monopoly in software and hardware markets; and online content and access. Since the course focuses on current issues, the reading each week consists of basic text chapters as well as readings contributed by the professor and class. These readings will change to reflect the dynamic environment of IT/IS. The course prepares students for IT strategy and policy analysis and development. Coursework includes extensive reading, seminar participation, case analysis, research projects, and examinations.
Prerequisite(s): MIS 525* or ISM 525*

ISM 645 Global Outsource IS Activities 3 Credit Hours
This course provides an overview and an understanding of the issues involved in extensive outsourcing in the global environmental. There exists a growing relationship between globalization, outsourcing, and information technology and the technological and social issues that support or inhibit this relationship is the focus of this class. An example of topics covered might include: national culture, the global IT manager, managing a global IT project, cultural diversity, and ethical and social issues. Since the course focuses on current issues, the reading each week consists of basic text chapters as well as current academic and practical articles. These readings will change to reflect the dynamic environment of IT/IS. Coursework will include extensive reading, seminar participation, case analysis, research projects, and examinations.
Prerequisite(s): MIS 525 or ISM 525 and (MIS 643 or ISM 643 or MIS 644 or ISM 644)

ISM 646 HCI Interface & Design 3 Credit Hours
This course introduces students to the fields of human computer interaction (HCI), interface design, and usability engineering. The cognitive aspects of HCI will be explored as well as several methods for usability evaluation/inspection. The course will include an examination of the emerging discipline of information architecture. Topics will include: HCI definitions, theories, and history; interface design principles and interaction methods; usability evaluation techniques; usability heuristics and design guidelines; perspectives of designers versus users; and user centered design.
Prerequisite(s): MIS 525 or ISM 525

ISM 647 Advanced Programming 3 Credit Hours
This course allows students to build on their programming skills learned in ISM 527. Students will be exposed to advanced programming topics, such as multi-threading, multimedia, exception handling, networks, database connections, component-based programming, Web-based applications, and non-technical issues in programming and application development. Students will be introduced to a computer-aided software environment and collaborate on building more complex applications based on business requirements.
Prerequisite(s): MIS 527 or ISM 527

ISM 648 Information Management II 3 Credit Hours
This course examines the processes and tools used to develop and administer database systems in business. Database systems used to support both transactions processing and decision-making in organizations are studied. A class project involving the development of a database using a client/server database management system is performed. Topics include database development, client/server databases, concurrency control, database security, administration of database privileges, and complex data retrieval commands.
Prerequisite(s): MIS 575 or ISM 575

ISM 649 Business Intelligence 3 Credit Hours
This course will introduce students to the fundamentals of data warehouses (DW) and data mining (DM). Topics will focus on how to leverage big data to support business decisions. Going through major activities involved in a data warehousing project, students will study the principles of dimensional data models, data warehouse architecture and infrastructure, techniques for data extraction, cleaning, transformation, and loading, online analytical processing (OLAP), and managerial issues of data warehouse implementation. Common data mining techniques and applications, such as decision trees association rules, text mining, rule based classification, cluster analysis, machine learning, will be introduced.
Prerequisite(s): MIS 525 or ISM 525

ISM 650 Info System Quality 3 Credit Hours
This course examines two related areas of study: (1) the concepts of information systems analysis and design in business organizations and (2) the management of information quality in organizations. Students will learn to plan and manage information systems projects, determine information requirements, model information process requirements, model system logic requirements, design user interfaces, and implement and maintain information systems. Students will also gain an understanding of the dimensions of information quality, the assessment and improvement of information quality in organizational settings, cognitive and behavioral aspects of information quality, and the effect of information quality on organizational decision making. The implications of information quality for systems analysis and design and applications of systems analysis and design methodologies for the management of information quality will be examined.
Prerequisite(s): MIS 525 or ISM 525