ISM: Information Systems Management Courses

Courses

ISM 3011  e-Business Systems Fundamentals
3 sh (may not be repeated for credit)
Prerequisite: Completion of 45 hours of college course work is required prior to taking this course.
Use and application of information system technology in the business environment, with emphasis on the fundamental e-Business models, technology concepts and systems used to enable and conduct electronic business. Concepts include the components of an I.S., the systems development process, the functions of the various types of communication networks, hardware, and software, including practical, hands-on projects designed to enhance e-Business analytical skills.

ISM 3116  Business Intelligence Fundamentals
3 sh (may not be repeated for credit)
Prerequisite: ISM 3011
Business Intelligence Fundamentals uses spreadsheets to identify trends and relationships in business data and how to apply them in a business environment. The focus of the course is on the managerial application of the results rather than the algorithmic derivation of the results.

ISM 3235  Business Development Environments
3 sh (may not be repeated for credit)
Prerequisite: CGS 2570
Explores the concepts involved in the development of event-driven business applications. Concepts covered include GUI application design and development, object-oriented systems linking business objects, and client-server environments. Uses an object-oriented programming language to demonstrate the concepts. Prior programming experience preferred but not required.

ISM 3323  Information Security Management
3 sh (may not be repeated for credit)
Prerequisite: ISM 3011 OR COP 2253
Information Security in the modern organization is both a management and a technology issue. Course recognizes that technology alone cannot address all the security issues; Prepares students for management and control of security of information systems in organizations; prepares students to make informed decisions regarding administration of information security infrastructure.

ISM 4113  Business Systems Design
3 sh (may not be repeated for credit)
Prerequisite: ISM 3011
A project-based introduction to the principles of business information systems design, including the basic methods and procedures involved in planning and controlling the development and modification of a computer-based information system in an organization. Students use modern microcomputer-based, computer-aided systems design tools and techniques to complete design projects. Focuses on the importance of end-user specifications for information systems projects.

ISM 4114  Business Information Systems Development
3 sh (may not be repeated for credit)
Prerequisite: ISM 4113
An advanced course in the application of emerging information technologies to the development of business information systems. Students integrate knowledge from previous courses to plan, analyze, design, and implement a comprehensive, real-world, project. Emphasis is on the integration of business requirements with emerging information technologies to develop the business information systems framework.

ISM 4117  Business Intelligence Applications
3 sh (may not be repeated for credit)
Prerequisite: ISM 3116 OR ISM 4481 OR COP 4710
Business Intelligence Applications uses various information technologies to identify, locate, acquire, transform, visualize and analyze business data in an effort to create new data products within an organizational context. The focus of the course is on using methodologies from design science to create new data products for management use in decision making. Offered concurrently with ISM 5404; graduate students will be assigned additional work.

ISM 4300  Systems Planning, Design and Control
3 sh (may not be repeated for credit)
Prerequisite: ISM 3011
Techniques for the planning, design and control of information systems. Stresses link between strategic planning of the organization and strategic planning of the management information system.

ISM 4320  Legal, Ethical, and Human Aspects of Cybersecurity
3 sh (may not be repeated for credit)
Prerequisite: ISM 3011
This course address the human facets of cybersecurity. Coverage will include ethics, legal and regulatory environment, psychology, and hacker culture. The focus will be on the human element and the motivation and deterrence of cyber-crimes. Offered concurrently with ISM 5327; graduate students will be assigned additional work.

ISM 4321  Cybersecurity Risk Management
3 sh (may not be repeated for credit)
Prerequisite: ISM 3011
The course focuses on the application of risk management theory and principles to information security policy. An additional major area of focus is incident response and contingency planning consisting of incident response planning, disaster recovery planning, and business continuity planning. Offered concurrently with ISM 5328; graduate students will be assigned additional work.

ISM 4400  Decision Support and Data Integration Systems
3 sh (may not be repeated for credit)
Prerequisite: ISM 3011 AND ISM 3235
Current tools and techniques available to support managerial decision-making. Analysis and practice in the building and use of decision support systems and expert/knowledge-based systems.

ISM 4481  Business Data Management
3 sh (may not be repeated for credit)
Prerequisite: ISM 3011
Explores the complexities of data management in the digital world of big data. Uses advanced information technology and software tools to analyze data and create business intelligence. Offered concurrently with ISM 5208; graduate students will be assigned additional work.
ISM 4483 Business Data Communication  
3 sh (may not be repeated for credit)  
Prerequisite: ISM 3011  
Explores the technology and management concepts, issues and decisions related to the infrastructure required to support end-to-end, partner-to-partner electronic business processes required to support end-to-end, partner-to-partner electronic business processes. Additionally, the course provides an overview of basic network management and security concepts. Offered concurrently with ISM 5222; graduate students will be assigned additional work.

ISM 4905 Directed Study  
1-12 sh (may be repeated indefinitely for credit)  
ISM 4943 Internship in Management Information Systems  
1-3 sh (may not be repeated for credit)  
On as "as available" basis, MIS majors may request an internship by submitting written proposals to their advisor. Proposals must be approved by the advisor, chairperson, and sponsor. Summer semester internships are offered only during the A term. Senior status, 2.5 GPA overall, and a 3.0 GPA in MIS is required. All internships include report on internship experience, including weekly journals, written reports, and an oral presentation to department chairperson. Graded on a satisfactory / unsatisfactory basis only. Permission is required.

ISM 5208 Business Data Management  
3 sh (may not be repeated for credit)  
Explores the complexities of data management in the digital world of big data. Uses advanced information technology and software tools to analyze data and create business intelligence. Offered concurrently with ISM 4481; graduate students will be assigned additional work. Graduate student status is required.

ISM 5222 Business Data Communication  
3 sh (may not be repeated for credit)  
Explores the technology and management concepts, issues and decisions related to the infrastructure required to support end-to-end, partner-to-partner electronic business processes required to support end-to-end, partner-to-partner electronic business processes. Additionally, the course provides an overview of basic network management and security concepts. Offered concurrently with ISM 4483; graduate students will be assigned additional work. Graduate student status is required.

ISM 5227 Legal, Ethical, and Human Aspects of Cybersecurity  
3 sh (may not be repeated for credit)  
This course address the human facets of cybersecurity. Coverage will include ethics, legal and regulatory environment, psychology, and hacker culture. The focus will be on the human element and the motivation and deterrence of cyber-crimes. Offered concurrently with ISM 4320; graduate students will be assigned additional work. Graduate student status is required.

ISM 5328 Cybersecurity Risk Management  
3 sh (may not be repeated for credit)  
The course focuses on the application of risk management theory and principles to information security policy. An additional major area of focus is incident response and contingency planning consisting of incident response planning, disaster recovery planning, and business continuity planning. Offered concurrently with ISM 4321; graduate students will be assigned additional work. Graduate student status is required.

ISM 5404 Business Intelligence Applications  
3 sh (may not be repeated for credit)  
Business Intelligence Applications uses various information technologies to identify, locate, acquire, transform, visualize and analyze business data in an effort to create new data products within an organizational context. The focus of the course is on using methodologies from design science to create new data products for management use in decision making. Offered concurrently with ISM 4117; graduate students will be assigned additional work. Graduate student status is required.

ISM 5905 Directed Study  
1-12 sh (may be repeated indefinitely for credit)  
ISM 6026 Management of Information Systems and Technology  
3 sh (may not be repeated for credit)  
Provides the M.B.A. student with a contemporary managerial perspective on the effective use of information systems in global organizations through case analyses and class discussions. Topics include the business value of information systems, integration of information systems with enterprise strategy, the use of information systems to achieve organizational redesign for strategic advantage, and applying the processes of leadership and management to information systems planning and implementation. Contains a portfolio project.

ISM 6136 Big Data Mining: A Managerial Perspective  
3 sh (may not be repeated for credit)  
Prerequisite: QMB 6305  
Covers the new management paradigm of data-driven decision making from both a technology and managerial perspective. Principles of big data and data mining will be discussed in class lectures and employed through assignments and projects.

ISM 6137 Business Analytics  
3 sh (may not be repeated for credit)  
Prerequisite: QMB 6305  
This course focuses on development of quantitative and analytical skills required to model, analyze, interpret and solve managerial decision making problems.

ISM 6326 Information Systems Auditing and Control  
3 sh (may not be repeated for credit)  
Focusses on the role of management in controlling information technology and understanding the risks of a highly interconnected business environment. Topics include information security; contingency planning; desktop computer controls; systems development controls; computer center operation controls; and assurance of information related to on-line, client-server, web-based, internet, cloud computing, virtualization and other advanced computer topics. This course will cover all the topic areas and prepare the student to take the Certified Information Systems Auditor (CISA) exam.

ISM 6905 Directed Study  
1-12 sh (may be repeated indefinitely for credit)