ISM: Information Systems Management Courses

Courses

ISM 3011 e-Business Systems Fundamentals
College of Business, Department of Business Administration

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 Introduction to Business Analytics
College of Business, Department of Business Administration

3 sh (may not be repeated for credit)
Prerequisite: ISM 3011

This course 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. Visualization techniques are also shown.

ISM 3323 Information Security Management
College of Business, Department of Business Administration

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
College of Business, Department of Business Administration

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
College of Business, Department of Business Administration

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 4320 Legal, Ethical, and Human Aspects of Cybersecurity
College of Business, Department of Business Administration

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
College of Business, Department of Business Administration

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
College of Business, Department of Business Administration

3 sh (may not be repeated for credit)
Prerequisite: ISM 3011

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
College of Business, Department of Business Administration

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
College of Business, Department of Business Administration

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 4545 Business Analytics with AI
College of Business, Department of Business Administration

3 sh (may not be repeated for credit)
Prerequisite: ISM 3011

This course is designed to equip students with the necessary knowledge and competencies in Artificial Intelligence (AI)-driven analytics to analyze data in business contexts and provide effective data visualization. Students will explore how AI and machine learning techniques enable organizations to transform data into actionable insights, addressing business problems and enhancing decision-making processes. Emphasis will be placed on practical applications, including the use of AI tools to develop data-driven strategies, optimize performance, and support organizational objectives.

ISM 4905 Directed Study
College of Business, Department of Business Administration

1-12 sh (may be repeated indefinitely for credit)

ISM 5208 Business Data Management
College of Business, Department of Business Administration

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
College of Business, Department of Business Administration

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 5327 Legal, Ethical, and Human Aspects of Cybersecurity
College of Business, Department of Business Administration

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
College of Business, Department of Business Administration

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
College of Business, Department of Business Administration

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
College of Business, Department of Business Administration

1-12 sh (may be repeated indefinitely for credit)

ISM 6136 Big Data Mining: A Managerial Perspective
College of Business, Department of Business Administration

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
College of Business, Department of Business Administration

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 Security Auditing and Control
College of Business, Department of Business Administration

3 sh (may not be repeated for credit)

Focuses on the role of management in controlling information and network technology security and understanding the risks of a highly interconnected business environment. Topics include compliance and operational network information security; contingency planning on application, data and host security; systems development controls; access controls and identity management; threats and vulnerabilities controls; and assurance and security of information related to on-line, web-based cloud computing, and other advanced computer topics. This course will cover all the topic areas and prepare the student to take the CompTIA Security+ Certification exam.

ISM 6405 Advanced Business Intelligence Applications
College of Business, Department of Business Administration

3 sh (may not be repeated for credit)

Advanced 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.

ISM 6562 Advanced Business Data Management
College of Business, Department of Business Administration

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. Integrates the strategies, policies, methodologies, techniques, and tools to solve problems and assist decision-making via business data management in firms.

ISM 6574 Advanced Legal, Ethical, and Human Aspects of Cybersecurity
College of Business, Department of Business Administration

3 sh (may not be repeated for credit)

This course addresses the human facets of cybersecurity. Coverage will include advanced legal, ethical, regulatory environment, psychology, and hacker culture. The focus will be on the human element and the motivation and deterrence of cyber-crimes.

ISM 6575 Advanced Cybersecurity Risk Management
College of Business, Department of Business Administration

3 sh (may not be repeated for credit)

This course focuses on the advanced application of risk management theory and principles of 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.

ISM 6905 Directed Study
College of Business, Department of Business Administration

1-12 sh (may be repeated indefinitely for credit)