**ISM - INFORMATION SYSTEMS MANAGEMENT**

**ISM 3630 Business Information Systems Cr. 3**
Introductory information systems management course, which establishes a foundation for understanding the value of information systems in organizations. Provides a management-oriented study of computer-based information systems in organizations and an overview of the manner in which information systems and technology supports business processes, managerial decision-making, and organizational strategy. Offered Every Term.

**Restriction(s):** Enrollment limited to students in the School of Business.

**ISM 4500 Business Co-op Assignment Cr. 0**
Provides students with practical application of theory to on-the-job experience. Students must be admitted to the University's Cooperative Education Program during the work semester that the course is to be taken. Students will normally be assigned to a cooperating business organization for internship periods of one semester. Offered Yearly.

**Restriction(s):** Enrollment is limited to Undergraduate level students; enrollment limited to students in the School of Business.

**ISM 4575 IT Security Cr. 3**
Provides an investigation of contemporary issues in computer security. Students are exposed to the spectrum of security activities, procedures, and methodologies. Topics include: inspection and protection of information assets; detection of and reaction to threats to information assets; examination of pre- and post-incident procedures, and technical and managerial responses; and an overview of information security planning and staffing functions. Offered Yearly.

**Prerequisite:** ISM 3630 with a minimum grade of C

**Restriction(s):** Enrollment is limited to Undergraduate level students; enrollment limited to students in the School of Business.

**ISM 4990 Directed Study in Information Systems Management Cr. 1-3**
Provides the student with the opportunity to focus on advanced readings, projects (e.g., tutorials, certifications), and research in a particular area of information systems management that is of interest to the student and faculty member. Offered Every Term.

**Prerequisites:** ISM 3630 with a minimum grade of C

**Restriction(s):** Enrollment is limited to Undergraduate level students; enrollment limited to students in the School of Business.

**ISM 5200 ERP Systems: Concepts and Practice Cr. 3**
Discusses the role and function of ERP systems within organizations; analyzes the major business processes in their organization and their implementation using ERP software; provides hands-on use of ERP tools for transaction processing and decision support; and describes the use of ERP systems for customer relationship management (CRM), supply chain management (SCM), and electronic commerce. Offered for undergraduate credit only. Offered Winter.

**Prerequisites:** ACC 3010 with a minimum grade of C, ACC 3020 with a minimum grade of C, and ISM 3630 with a minimum grade of C

**Restriction(s):** Enrollment is limited to Undergraduate level students; enrollment limited to students in the School of Business.

**Course Material Fees:** $117

**Equivalent:** ACC 5200

**ISM 5210 Blockchain Fundamentals for Accounting and Business Cr. 3**
Introduces blockchain, which is a public, transparent, secure, immutable and distributed ledger. Blockchains can be used to record and transfer any digital asset, not just currency. Progressing from a detailed study of how blockchain works in Bitcoin; this course also discusses alternative blockchain platforms; potential uses of blockchain in accounting, other areas of business, and society; and this technology's potential impact on accounting systems, business transactions, financial services, government, and banking management. This course is taught completely online. Offered Spring/Summer.

**Prerequisite:** ACC 3010 with a minimum grade of C and ACC 3020 with a minimum grade of C

**Equivalent:** ACC 5210

**ISM 5530 Ethics in Information Technology Cr. 3**
An awareness of the wider social, legal and ethical issues of information technology. Relationship between technological change, society and the law. Student is introduced to legal issues such as intellectual property and liability for defective software. Offered for undergraduate credit only. Offered Yearly.

**Prerequisites:** ISM 3630 with a minimum grade of C

**Restriction(s):** Enrollment is limited to Undergraduate level students; may be taken concurrently.

**Restriction(s):** Enrollment is limited to Undergraduate level students; enrollment limited to students in the School of Business.

**ISM 5560 Survey of e-Commerce Cr. 3**
Provides an introduction to electronic commerce. Topics include: e-commerce scope, business-to-business (B2B) and business-to-consumer (B2C) activities; supporting software, hardware, networking, security technologies; readings and online discussions. Offered for undergraduate credit only. Offered Yearly.

**Prerequisite:** ISM 3630 with a minimum grade of C

**Restriction(s):** Enrollment is limited to Undergraduate level students; enrollment limited to students in the School of Business.

**ISM 5570 Introduction to Business Analytics Cr. 3**
Focuses on developing techniques to analyze large datasets and using techniques, algorithms, and software to automate the analysis and exploration of those datasets. Covers the methodology, major software tools, and applications in the data mining and analytics field. Offered for undergraduate credit only. Offered Yearly.

**Prerequisite:** ISM 3630 with a minimum grade of C

**Restriction(s):** Enrollment is limited to Undergraduate level students; enrollment limited to students in the School of Business.

**ISM 5580 Introduction to Data Visualization for Business Cr. 3**
The purpose of this course is to teach students how to convert raw data into insightful visualizations that aid business decision making. Students will learn how to work with large complex data sets using the R environment and its various graphics packages. Basic programming experience is recommended but not required. Offered Yearly.

**Prerequisite:** ISM 3630 with a minimum grade of C

**Restriction(s):** Enrollment is limited to Undergraduate level students; enrollment limited to students in the School of Business.

**ISM 5670 Special Topics in Information Systems Cr. 3**
Topics range from JAVA to digital video creation and analytics. Offered for undergraduate credit only. Offered intermittently.

**Prerequisite:** ISM 3630 with a minimum grade of C

**Restriction(s):** Enrollment is limited to Undergraduate level students; enrollment limited to students in the School of Business.

**Repeatable for 6 Credits**
ISM 5705 Inbound Information Technology Cr. 3
Provides insights and practical guidelines to help students learn how to create an appealing and engaging digital presence for businesses. The discussion focuses on topics relevant to planning, managing, and implementing on-line and social media interactivity such as: search engine organization (SEO), inbound links, page ranking, tagging content, pillar content, publishing content, analytic reports, blogging, tweeting and other social media. Offered for undergraduate credit only. Offered Fall.
Prerequisites: ISM 3630 with a minimum grade of C
Restriction(s): Enrollment is limited to Undergraduate level students; enrollment limited to students in the School of Business.
Course Material Fees: $50

ISM 5820 Systems Analysis and Design Cr. 3
Presents a structured and formal approach to information systems development. Analysis, logical requirements specification, general and detailed design, control, and implementation of information systems are discussed. Offered for undergraduate credit only. Offered Every Term.
Prerequisites: ISM 3630 with a minimum grade of C
Restriction(s): Enrollment is limited to Undergraduate level students; enrollment limited to students in the School of Business.

ISM 5860 Data Communications and Networks Cr. 3
Data communication concepts and terminology, communication system design approaches, data communications standards, data communications software and hardware, network architecture, distributed management information systems. Offered for undergraduate credit only. Offered Yearly.
Prerequisites: ISM 3630 with a minimum grade of C
Restriction(s): Enrollment is limited to Undergraduate level students; enrollment limited to students in the School of Business.
Course Material Fees: $13

ISM 5890 Internship in Information Systems Cr. 3
Student performs assigned tasks and responsibilities in a professional manner under supervision of host-employer for a minimum of 160 hours during the semester, abiding by the rules and regulations established by the employer and expected by all employees; student must satisfactorily complete all course requirements outlined in the internship program for the School of Business Administration. Offered for undergraduate credit only. Offered Every Term.
Prerequisites: ISM 3630 with a minimum grade of C
Restriction(s): Enrollment is limited to Undergraduate level students; enrollment limited to students in the School of Business.

ISM 5900 Project Management Cr. 3
Understanding and appreciation of the different knowledge areas of project management. Insight into developing the inputs, tools, techniques, and outputs to successfully manage projects. Offered for undergraduate credit only. Offered Yearly.
Prerequisites: ISM 3630 with a minimum grade of C
Restriction(s): Enrollment is limited to Undergraduate level students; enrollment limited to students in the School of Business.
Equivalent: MGT 5900

ISM 5992 Database Systems Cr. 3
Details the importance of data in today's enterprise and describes the theories, models, and techniques for designing, developing, creating, and manipulating a database. Students will practice data modeling, physical database design, database implementation, and complete introductory SQL exercises. Offered for undergraduate credit only. Offered Yearly.
Prerequisites: ISM 3630 with a minimum grade of C
Restriction(s): Enrollment is limited to Undergraduate level students; enrollment limited to students in the School of Business.
Course Material Fees: $13

ISM 5994 Software Tools for Business Applications Cr. 3
Introduces the student to the use of the Internet to create a digital presence. Students design and develop websites, create responsive web pages to provide an optimal viewing experience, and integrate database functionality allowing all web pages to "know" who is looking at the information using HTML, Javascript, Hubl, HubDB, Wistia, and cascading style sheets (CSS). Smart design includes content complete with video, progressive forms, and focused calls-to-action. Offered for undergraduate credit only. Offered Yearly.
Prerequisite: ISM 3630 with a minimum grade of C
Restriction(s): Enrollment is limited to Undergraduate level students; enrollment limited to students in the School of Business.
Course Material Fees: $115

ISM 5997 Information Systems Policy and Management Cr. 3
Within the overall structure of the systems approach, this capstone course integrates the managerial, technical, and strategic planning and control concepts developed throughout the undergraduate courses. It also focuses on the concepts and methodologies necessary for management of information systems projects. Offered for undergraduate credit only. Offered Yearly.
Prerequisites: ISM 3630 with a minimum grade of C
Restriction(s): Enrollment is limited to Undergraduate level students; enrollment limited to students in the School of Business.

ISM 7290 Blockchain: An Accounting and Business Perspective Cr. 3
Introduces blockchain: a public, transparent, secure, immutable, and distributed ledger. Blockchains can be used to record and transfer any digital asset, not just currency. The course covers the workings, applications, and potential impact of this revolutionary technology. Offered Fall.
Prerequisite: BA 7000 with a minimum grade of C
Restriction(s): Enrollment is limited to Graduate level students.

ISM 7500 Business Information Systems Cr. 2
Teaches students how IT can influence, support, and advance organizational operations, performance, and decision making. The course will also teach students, as managers or employees, how to effectively define their information needs and utilize IT to increase their effectiveness. No credit after ISM 4630 or ACC 6070. Offered Fall, Winter.
Restriction(s): Enrollment is limited to Graduate level students.

ISM 7505 Information Analytics: Inbound Information Technology Cr. 3
The evolving cyberspace organization. Insights and practical guidelines to create an appealing and engaging digital presence. Discussion focuses on topics relevant to planning, managing, and implementing online and social media interactivity such as search engine organization (SEO), inbound links, blogging, page ranking, tagging content, tweeting, publishing content, analytic reports, and social media. No credit after ISM 5705. Offered Fall.
Restriction(s): Enrollment is limited to Graduate level students.
Course Material Fees: $113

ISM 7507 Application Development with Swift Cr. 3
Establishes a foundation for understanding the value of mobile applications in the enterprise and how to design, create, and publish mobile applications for the Apple iOS using Swift and Xcode. These tools allow you to quickly develop a mobile application so you can focus your energy on your design. Offered Yearly.
Restriction(s): Enrollment is limited to Graduate level students.
Course Material Fees: $115
ISM 7508 Application Development on Android Cr. 3
Establishes a foundation for understanding the value of mobile applications in the enterprise, and how to design, create, and publish mobile applications for the Android OS using MIT's App Inventor. This tool allows the user to quickly develop a mobile application using building blocks, so energy can be focused on design and not on programming language syntax. Offered Yearly.
Restriction(s): Enrollment is limited to Graduate level students.

ISM 7510 Database Management Cr. 3
Overall examination of database management and knowledge management systems. Theories, models, and techniques for designing, developing, understanding, utilizing and creating competitive advantage through database systems. Topics include data modeling, logical and physical database design, strategic value of data, introductory SQL, knowledge management, and emerging database technologies. No credit after ISM 5992. Offered Yearly.
Restriction(s): Enrollment is limited to Graduate level students.

Course Material Fees: $13

ISM 7512 Digital Video Creation and Analytics Cr. 3
Helps users to shoot professional looking video to post on YouTube or another website, and to analyze the video's impact. Offered Yearly.
Restriction(s): Enrollment is limited to Graduate level students.

ISM 7520 Information Systems Design Cr. 3
Non-technical course in how to use information systems to add value to an organization. Use of system analysis techniques to study and identify information needs of organizations and integration of IT specialists and manager-users. Topics include: IT and organizational design, inter-networking infrastructure, organization and leading the IT function. How information systems professionals link MIS to specific business operations and objectives to increase value; how managers may use information systems to support activities and increase individual productivity. No credit after ISM 5820. Offered Yearly.
Restriction(s): Enrollment is limited to Graduate level students.

ISM 7530 Societal and Ethical Issues in the Information Age Cr. 3
Issues such as computer crime, privacy, copyrighting of software; other ethical issues related to use of business systems and information systems. No credit after ISM 5530. Offered Yearly.
Restriction(s): Enrollment is limited to Graduate level students.

ISM 7560 Survey of E-Commerce Cr. 3
Introduction to electronic commerce: scope, business-to-business and business-to-consumer activities; supporting software, hardware, networking, security technologies; readings and online discussions. Offered Every Term.
Restriction(s): Enrollment is limited to Graduate level students.

ISM 7570 Business Analytics Cr. 3
This course focuses on learning skills necessary for generating insights from data to aid business decision making. Students will learn how to ingest, prep, transform, visualize and analyze data using the popular open source data science tool - R. Specifically, the course will cover descriptive analytics (e.g., data visualization, query, data slicing), and, predictive analytics (e.g., regression, clustering, classification). Basic programming experience is recommended but not required. No credit after ISM 5570. Offered Every Term.
Restriction(s): Enrollment is limited to Graduate level students.
Course Material Fees: $16

ISM 7575 Corporate Computer Networks and IT Security Cr. 3
Broad selection of contemporary issues in computer security. Security activities, methods, methodologies, and procedures including inspection and protection of information assets, detection of and reaction to threats to information assets, and examination of pre- and post-incident procedures, technical and managerial responses, and an overview of the Information Security Planning and Staffing functions. Includes many topics for Security+ exam by CompTIA. No credit after ISM 4575. Offered Yearly.
Restriction(s): Enrollment is limited to Graduate level students; enrollment limited to students in the School of Business.

ISM 7680 Information Visualization for Business Cr. 3
The purpose of this course is to teach students how to use information visualization tools and techniques to inform and persuade decision makers in organizations, government, and the public. Specifically, students will learn how to visualize large and complex data using the R environment and its various graphic packages. Basic programming experience is recommended but not required. Offered Yearly.
Restriction(s): Enrollment is limited to Graduate level students.

ISM 7890 Internship in Information Systems and Management Cr. 1-3
Students work a minimum of 160 hours for fifteen weeks in an entry-level management position in information systems. Offered Yearly.
Prerequisites: ISM 7500 with a minimum grade of C
Restriction(s): Enrollment is limited to Graduate level students; enrollment limited to students in the School of Business.
Repeatable for 3 Credits

ISM 7900 Project Management Cr. 3
Management of resources (budget, personnel, materials, etc.) within the scope of a given project; understanding and appreciation for the different knowledge areas of project management; insight into identification of inputs, tools, and techniques of project management. No credit after ISM/ MGT 5900. Offered Yearly.
Restriction(s): Enrollment is limited to Graduate level students.
Equivalent: MGT 7900

ISM 7994 Digital Content Development Cr. 3
Development of responsive, smart, and personalized web sites using leading web development tools and technologies. Offered Yearly.
Restriction(s): Enrollment is limited to Graduate level students.

ISM 7995 Directed Study in Information Systems and Management Cr. 1-3
Advanced independent readings and research under supervision of a graduate faculty member in areas of special interest to student and faculty member. Offered Yearly.
Prerequisites: ISM 5700 with a minimum grade of C
Restriction(s): Enrollment is limited to Graduate level students; enrollment limited to students in the School of Business.

ISM 7996 Principles for Customer Relationship Management Cr. 3
Investigation of the antecedents and consequences of implementing a customer-relationship management strategy. The course will provide students with insight on: What CRM and its conceptual foundations are; How CRM forces the interaction between corporate strategy, organizational structure, supply chain, and customer facing front end; The role of measuring and managing customer satisfaction, customer loyalty and customer profitability; Hands-on application with salesforce.com. Offered Intermittently.
Restriction(s): Enrollment is limited to Graduate level students.

Course Material Fees: $75

ISM 8000 Seminar in Information Systems and Management Cr. 3
Current developments and emerging trends. Offered Every Term.
Restriction(s): Enrollment is limited to Graduate level students.