MANAGEMENT AND INFORMATION SYSTEMS

Office: 393 Mike Ilitch School of Business; 313-577-4525
Chairperson: Christine Jackson

Information Systems Management Major

Information Systems Management (ISM) refers to the use of computer-based systems to gather and analyze complex information about all aspects of a business. This information is used by managers to make business decisions. Students specializing in ISM frequently pursue career positions as business analysts, data base analysts, ERP specialists, social media specialist, web content manager, and information systems managers. The courses offered in the ISM program emphasize hands-on technical application of relevant software and coverage of content for course-related certification exams.

Management Major

The Management major prepares individuals to compete in a technology-intensive manufacturing or service economy. The required courses have students analyze contemporary management problems, participate in team projects and develop skills in managing people to drive organizational effectiveness.

GOEDDEKE, FRANK: Ph.D., University of Florida; M.B.A., Rollins College; M.A.S., B.S., Embry-Riddle Aeronautical University; Assistant Professor (Teaching)

HEINRICHIS, JOHN: Ph.D., B.S., University of Toledo; M.B.A., Bowling Green State University; Associate Professor

JACKSON, CHRISTINE: Ph.D., University of Florida; B.S., Michigan State University; Professor and Chair

JULIAN, SCOTT: Ph.D., Louisiana State University; B.S., B.A., University of Central Florida; Professor

KIRCHMEYER, CATHERINE: Ph.D., M.B.A., York University; B.S., B.A., University of Guelph; Associate Professor Emeritus

LÉE, JÆGUL: Ph.D., Carnegie Mellon; M.S., Georgia Institute of Technology; M.S., University of Missouri; B.S., Korean Advance Institute of Science and Technology; Associate Professor

LEVI, ARIEL: Ph.D., Yale University; B.A., University of California at Los Angeles; Associate Professor (Teaching)

LIU, XING: Ph.D., University of South Carolina; Assistant Professor

MARTIN, JAMES E.: Ph.D., M.B.A., Washington University; B.A., Antioch College; Professor Emeritus

MASTERS, MARICK: Ph.D., B.S., University of Illinois; M.P.A., Southern Illinois University; Professor

MAURER, JOHN G.: Ph.D., M.B.A., Michigan State University; B.S., University of Detroit; Professor Emeritus

NAUGHTON, THOMAS J.: Ph.D., State University of New York at Buffalo; M.A., Boston College; B.A., Northeastern University; Associate Professor Emeritus

OSBORN, RICHARD M.: D.B.A., Kent State University; M.B.A., Washington State University; B.A., Indiana University; Professor Emeritus

PERELLI, SHERI: D.M., Case Western Reserve University; M.B.A., University of Chicago; M.A., B.A., University of Michigan; Associate Professor (Teaching)

PISZCZEK, MATTHEW: Ph.D., M.S., B.S., Michigan State University; Assistant Professor

PONNAPALLI, AJAY RAMI: Ph.D., Florida International University; Assistant Professor

QUINN-GRZEBYK, TAMARA: Ph.D., Wayne State University; M.B.A. Walsh College; M.S. University of Phoenix; Assistant Professor (Teaching)

RAGOWSKY, ARIK A.: Ph.D., M.Sc., Tel-Aviv University; B.A., Bar-Ilan University; Associate Professor

REID, IRVIN D.: Ph.D., M.A., Wharton School of Business, University of Pennsylvania; M.S., B.S., Howard University; Professor Emeritus

SHARMA, AJIT: Ph.D., M.B.A., University of Michigan; M.S., National Institute of Industrial Engineering, India; B.Tech., National Institute of Foundry and Forge Technology, India; Assistant Professor

SHIELDS, GARY: M.B.A., Wayne State University; B.B.A., Kent State University; Assistant Professor (Teaching)

SOMERS, TONI M.: Ph.D., M.Ed., B.A., University of Toledo; M.B.A., Bowling Green State University; Professor and Associate Dean

SUN, JING: Ph.D., University of Pittsburgh; M.S., Peking University; B.A., Beijing Foreign Studies University; Assistant Professor

TAINSKY, SCOTT: Ph.D., M.A., University of Michigan; B.A., New York University; Professor

TEKLEAB, AMANUEL: Ph.D., University of Maryland; B.S., Addis Ababa University; Professor

ZHANG, YUXIN: Ph.D., University of Texas at Austin; M.A., Columbia University; Assistant Professor

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. Blockchain 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 (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 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.

ISM 5590 Introduction to Data Visualization for Business 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 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: $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 Every Year.
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 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 core requirements outlined in the internship program for the School of Business Administration. Offered for undergraduate credit only. Offered Every Year.
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 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 products. Offered for undergraduate credit only. Offered Every Year.
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 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 Every Year.
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 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 Every Year.
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: $13

ISM 6997 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 Every Year.
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.

Management

MGT 2530 Management of Organizational Behavior Cr. 3
Applied issues in management examined through a focus on the organization and its external environment, group functions and processes, and employee attitudes and behaviors. Offered Every Term.
Prerequisites: PSY 1010 with a minimum grade of D- or PSY 1020 with a minimum grade of D-

MGT 4500 Business Co-op Assignment Cr. 0
Must be elected by Professional Development Co-operative Program students during week semester. Offered for S and U grades only. No credit toward degree. Opportunity to put theory into practice on the job. Students will normally be assigned to cooperating business organizations for internship periods of one semester. Offered Every Term.
Equivalent: ACC 4500, FIN 4500, MKT 4500

MGT 4990 Directed Study in Management Cr. 1-3
Advanced readings and research or tutorial under the supervision of a faculty member in areas of special interest to student and faculty member. Offered Every Term.
Prerequisites: MGT 5510 with a minimum grade of D- and MGT 5530 with a minimum grade of D-
Restriction(s): Enrollment is limited to Undergraduate level students; enrollment limited to students in the School of Business.
Repeatable for 6 Credits

MGT 4991 Study Abroad Cr. 3
Study abroad programs in various countries. Programs run 10-15 days in length. Recent country programs have been in China; Netherlands, Germany, Poland; Italy and Canada. Travel within a given country with visits to various companies and cultural attractions. Traveling costs are over and above tuition and vary by country. Various reading and assignments required. Offered Winter, Spring/Summer.
Equivalent: GSC 4991, MKT 4991
Repeatable for 6 Credits

MGT 5100 Introduction to Sport & Entertainment Management Cr. 3
Provides an overview of the sport & entertainment industry, and examines issues encountered by sport and entertainment managers with special emphasis on the use of business principles to identify, attract and retain consumers. Offered Every Term.
Restriction(s): Enrollment is limited to Undergraduate level students.
Equivalent: SEM 5100

MGT 5510 Managing Organizational Structure and Processes Cr. 3
Analysis of strategic pressures on the organization. Application of advanced concepts of structured organizational change to contemporary organizational design problems. Offered for undergraduate credit only. Offered Fall, Winter.
Prerequisites: MGT 2530 with a minimum grade of D-
Restriction(s): Enrollment is limited to Undergraduate level students; enrollment limited to students in the School of Business.
MGT 5530 Advanced Organizational Behavior Cr. 3
Analysis and application of advanced organizational behavior concepts relevant to managing in a complex and changing environment. Topics include: leading and managing organizational change; solving workplace problems creatively; communicating effectively in a diverse work environment; building and empowering effective teams. Offered for undergraduate credit only. Offered Fall, Winter.
Prerequisites: MGT 2530 with a minimum grade of D-
Restriction(s): Enrollment is limited to Undergraduate level students; enrollment limited to students in the School of Business.

MGT 5550 Special Topics in Management Cr. 3
This course covers critical management topics relevant to today's current and aspiring managers and leaders. Offered Intermittently.
Prerequisite: MGT 2530 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

MGT 5560 Building Leadership Competencies Cr. 3
The course is designed to provide an understanding of how and why effective leaders do what they do. The instructor will integrate theory, practice, scientific evidence, hands-on experience, and personal reflections to help students achieve the following goals: 1) gain awareness of personal attributes and a unique style of leadership, 2) understand what effective leadership is and how to build a leadership skillset, and 3) identify leadership solutions to real-world challenges in organizations. Offered Yearly.
Prerequisite: MGT 2530 with a minimum grade of D-
Restriction(s): Enrollment is limited to Undergraduate level students; enrollment limited to students in the School of Business.

MGT 5570 The Entrepreneur and Venture Creation Cr. 3
Nature of entrepreneurship and the role of the entrepreneur in society. Focus on the critical factors and special problems associated with the process of creating new business ventures. Emphasis on development of a business plan. Offered for undergraduate credit only. No credit after EI 5000. Offered Yearly.
Prerequisites: ACC 3010 with a minimum grade of C, FIN 3290 with a minimum grade of D-, MGT 2530 with a minimum grade of D-, and MKT 2300 with a minimum grade of D-
Restriction(s): Enrollment is limited to Undergraduate level students; enrollment limited to students in the School of Business.

MGT 5700 Human Resource Management Cr. 3
Theory, policies, procedures and practices in employment relationships. Topics: strategic HRM, legal environment of HRM, equal employment opportunity, job analysis and design, employment planning, recruitment, selection, training and development, performance appraisal, compensation and benefits, labor relations, health and safety. Managerial and policy implications; linkages between HRM practices and organizational effectiveness. Offered for undergraduate credit only. Offered Every Term.
Prerequisites: MGT 2530 with a minimum grade of D-
Restriction(s): Enrollment is limited to Undergraduate level students; enrollment limited to students in the School of Business.

MGT 5730 Introduction to People Analytics Cr. 3
Most people-related decisions in organizations are based on intuition and experience rather than on employee data. In this course, students will gain an understanding of the types of people-related decisions that can be addressed using people analytics in an organizational setting. Students will develop critical thinking skills to draw meaningful conclusions across a range of HR contexts. Students will also utilize software to apply basic statistics concepts and principles to people-related data. Offered Yearly.
Prerequisite: MGT 5700 with a minimum grade of C-
Restriction(s): Enrollment is limited to Undergraduate level students; enrollment limited to students in the School of Business.

MGT 5710 Human Resource Management Cr. 3
This course covers critical management topics relevant to today's current and aspiring managers and leaders. Offered Intermittently.
Prerequisite: MGT 2530 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

MGT 5711 Personnel and Compensation Cr. 3
Nature of the personnel function in management, including selection, and administration and creation of employment contracts and handbooks, and management of employee attitudes and behaviors. Students typically complete a collective bargaining simulation. Offered for undergraduate credit only. Offered Yearly.
Prerequisites: MGT 2530 with a minimum grade of C-
Restriction(s): Enrollment is limited to Undergraduate level students; enrollment limited to students in the School of Business.

MGT 5720 Staffing and Selection Cr. 3
This is an advanced course that covers the Human Resource Management (HRM) functions of staffing (HR planning and recruitment) and selection. These functions are responsible for bringing talent—the central source of competitive advantage—into organizations. It is assumed that students have a basic familiarity with the major concepts, functions, and activities of HRM. Recent developments in recruitment and selection will be emphasized, with a particular focus on innovative methods that alignment with organizational strategy and mission, metrics for assessing the effectiveness of such methods, and the legal implications and challenges posed by these methods. Offered Fall, Winter.
Prerequisites: MGT 5700 with a minimum grade of D-
Restriction(s): Enrollment is limited to Undergraduate level students; enrollment limited to students in the School of Business.

MGT 5721 Training and Development Cr. 3
Practical, scientific evidence, hands-on experience, and personal reflections to help students achieve the following goals: 1) gain awareness of personal attributes and a unique style of leadership, 2) understand what effective leadership is and how to build a leadership skillset, and 3) identify leadership solutions to real-world challenges in organizations. Offered Yearly.
Prerequisites: ACC 3010 with a minimum grade of D, FIN 3090 with a minimum grade of C, MGT 2530 with a minimum grade of D, and MKT 2300 with a minimum grade of D-
Restriction(s): Enrollment is limited to Undergraduate level students; enrollment limited to students in the School of Business.

MGT 5731 Total Quality Management Cr. 3
Most people-related decisions in organizations are based on intuition and experience rather than on employee data. In this course, students will gain an understanding of the types of people-related decisions that can be addressed using people analytics in an organizational setting. Students will develop critical thinking skills to draw meaningful conclusions across a range of HR contexts. Students will also utilize software to apply basic statistics concepts and principles to people-related data. Offered Yearly.
Prerequisite: MGT 5700 with a minimum grade of C-
Restriction(s): Enrollment is limited to Undergraduate level students; enrollment limited to students in the School of Business.

MGT 5740 Employee Relations Cr. 3
Development and maintenance of employee-management relations, including employee and management rights and responsibilities, administration and creation of employment contracts and handbooks, and management of employee attitudes and behaviors. Students typically complete a collective bargaining simulation. Offered for undergraduate credit only. Offered Yearly.
Prerequisites: MGT 2530 with a minimum grade of C-
Restriction(s): Enrollment is limited to Undergraduate level students; enrollment limited to students in the School of Business.

MGT 5750 Management Information Systems Cr. 3
This course covers critical management topics relevant to today's current and aspiring managers and leaders. Offered Intermittently.
Prerequisite: MGT 2530 with a minimum grade of D-
Restriction(s): Enrollment is limited to Undergraduate level students; enrollment limited to students in the School of Business.
Repeatable for 6 Credits

MGT 5770 Internship in Management Cr. 3
Offered for undergraduate credit only. Offered Every Term.
Prerequisite: MGT 2530 with a minimum grade of D-
Restriction(s): Enrollment is limited to Undergraduate level students; enrollment limited to students in the School of Business.

MGT 5790 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 products. Offered for undergraduate credit only. Offered Yearly.
Prerequisites: ISM 3630 with a minimum grade of C and MGT 2530 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: ISM 5900
MGT 6890 Strategic Management and Business Policy Cr. 3
Managing the firm as an integrated unit under conditions of uncertainty. Integration of concepts and skills covered in previous specialized courses. Offered for undergraduate credit only. Offered Every Term.
Restriction(s): Enrollment is limited to Undergraduate level students; enrollment limited to students in the School of Business.

MGT 6995 Management Capstone: Applying Management and Leadership Principles Cr. 3
Capstone course that focuses on 1) integrating and applying management theory and best practices to applied projects, 2) increasing students' self-awareness of their own management and leadership strengths, and 3) strengthening students' leadership and professional skill sets. Offered Every Term.
Prerequisites: MGT 5530 with a minimum grade of C-, MGT 5700 with a minimum grade of C-, and 6 credits from MGT 5000-9999
Restriction(s): Enrollment is limited to Undergraduate level students; enrollment limited to students in the School of Business.