DEPARTMENT OF
MANAGEMENT AND
INFORMATION SYSTEMS

Ambassador Crawford College of Business and Entrepreneurship
Department of Management and Information Systems
A432 Business Administration Building
Kent Campus
330-672-1140
mis@kent.edu
www.kent.edu/business/mis

Undergraduate Programs
• Business Management - B.B.A.
• Business Analytics - B.B.A.
• Computer Information Systems - B.B.A.
• General Business - B.B.A.
• Human Resource Management - B.B.A.

Minors
• Business
• Computer Information Systems
• Healthcare Systems Management for Business Majors
• Healthcare Systems Management for Non-Business Majors
• Human Resource Management
• International Business for Business Majors
• International Business for Non-Business Majors
• Leadership
• Management for Business Majors
• Management for Non-Business Majors
• Military and Leadership Studies

Graduate Certificate
• Business Analytics
• Financial Management
• Human Resource Management
• Leadership and Management

Graduate Programs
• Business Administration - M.B.A.
• Business Administration - Executive M.B.A. - M.B.A.
• Business Analytics - M.S.

Department of Management Information
Systems Faculty
• Akpan, Ikpe A. (2012), Associate Professor, Ph.D., Lancaster University, 2006
• Arikan, Asli M. (2014), Associate Professor, Ph.D., The Ohio State University, 2004
• Arikan, Ilgaz (2014), Associate Professor

• Berardi, Victor L. (1993), Associate Professor, Ph.D., Kent State University, 1998
• Blundell, Gregory E. (2001), Professor, Ph.D., Kent State University, 2015
• Brandyberry, Alan A. (2000), Associate Professor, D.B.A., Southern Illinois University, Carbondale, 1995
• Datta, Pratim (2007), Professor, Ph.D., Louisiana State University, 2003
• Derubertis, Diane E. (2008), Associate Lecturer, M.Ed., Kent State University, 1983
• Dragan, Natalia (2003), Associate Professor, Ph.D., Kent State University, 2010
• Gomez, Claudia (2013), Associate Professor, Ph.D., New Mexico State University, 2012
• Hogue, Mary B. (2001), Professor, Ph.D., University of Akron, 2000
• Kaur, Vaneet (2019), Assistant Professor, Ph.D., University of Jammu, 2018
• Knapp, Deborah K. (1992), Associate Professor, Ph.D., Kent State University, 1994
• Kwak, Dong-Heon (2014), Associate Professor, Ph.D., University of Wisconsin, Milwaukee, 2014
• Landingham, Velvet L. (2004), Associate Professor, Ph.D., Case Western Reserve University, 2004
• Levashina, Julia (2008), Professor, Ph.D., Purdue University, 2005
• Palmer-Johnson, Catarina E. (2004), Assistant Professor
• Patuwo, Eddy B. (1988), Professor, Ph.D., Virginia Polytechnic Institute and State University, 1989
• Polites, Greta L. (2012), Associate Professor
• Razavi, Rouzbeh (2017), Associate Professor, Ph.D., University of Essex, 2008
• Ricco, Steve (2014), Associate Lecturer, M.H.A., Xavier University, 1982
• Shanker, Murali S. (1990), Professor, Ph.D., University of Minnesota-Twin Cities, 1990
• Steinberg, Geoffrey (1991), Associate Professor, Ph.D., Temple University, 1991
• Whitmore, Mark D. (2011), Associate Professor, Ph.D., The Ohio State University, 1985
• Wu, Chaojiang (2019), Assistant Professor, Ph.D., University of Cincinnati, 2013

Computer Information Systems (CIS)
CIS 24053 INTRODUCTION TO COMPUTER APPLICATIONS 3 Credit Hours
(Equivalent to IT 11000) Develop competency in the operation of contemporary software and hardware applications. To develop an appreciation for the contribution of computers, software and the Internet to society.

Prerequisite: None.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter
Attributes: TAG Business
CIS 24065  WEB PROGRAMMING  3 Credit Hours
Principles of visual design as applied to Web site interface development. The course exposes students to the basics of programming and relational database and how to develop a Web-based database driven interactive information system.
Prerequisite: CIS 24053.
Schedule Type: Lecture
Contact Hours: 2 lecture, 2 lab
Grade Mode: Standard Letter

CIS 24093  VARIABLE TITLE WORKSHOP IN MANAGEMENT AND INFORMATION SYSTEMS  1-6 Credit Hours
(Repeatable for credit) Special workshop in management and information systems. Credits depend on scope of project.
Prerequisite: Special approval.
Schedule Type: Workshop
Contact Hours: 1-6 other
Grade Mode: Satisfactory/Unsatisfactory

CIS 24165  CLOUD SYSTEMS COMPUTING  3 Credit Hours
This course explores the history, current state, and projected future of cloud approach to providing computing resources. Almost all new startups today use "the cloud" because it allows fast time to market, flexibility, and the ability to "test" new ideas and product offerings very quickly. Kent State even uses this approach for things like student email and Blackboard. Most existing companies realize the "cloud" is in their future, the goal of the course is to expose students to the knowledge they need to be able to help their future employers with cloud migration.
Prerequisite: Minimum C+ grade in CIS 24053.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

CIS 24176  CLOUD INFRASTRUCTURE AND APPLICATIONS  3 Credit Hours
Information systems is critical to the efficient operation of any organization today, such as in hiring employees, performing background checks, ordering/creating products, transacting businesses, and providing follow-up services, among others. These can be large "integrated systems" or ERPs or loose collection of "Apps." This class explores the various alternatives available today and the likely future of new products in the future. Different viewpoints and debates will be explored in the class with opportunities for students to discuss and present their thoughts.
Prerequisite: Minimum C+ grade in CIS 24053; and minimum 2.250 overall GPA.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

CIS 34034  BUSINESS MODELING AND AGILE DESIGN  3 Credit Hours
Introduction to methods, tools, and techniques used to analyze and develop information systems, with emphasis on application of methods and concepts to real-world problems. The course is the cornerstone upon which all subsequent IS activities are based. Skills developed in the course would have immediate applicability for IS students and help non-IS students gain knowledge they need to appreciate the role of IS in their organization, so they can better understand how to manage and support IS-related projects.
Prerequisite: Minimum 2.250 overall GPA.
Pre/corequisite: CIS 24167.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

CIS 34036  ENTERPRISE SYSTEMS AND BUSINESS PROCESSES  3 Credit Hours
Overview of the basics of business processes and Enterprise Resource Planning systems solutions in the cloud. The course prepares students for business process and other cloud related courses, with hands-on experience with a professional ERP system such as SAP. Topics covered include data navigation, client server systems, virtualization, database, security, accounting and procurement processes, and ERP simulation games.
Prerequisite: CIS 34034; and minimum 2.250 overall GPA.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

CIS 34045  SMALL SYSTEMS TECHNOLOGY  3 Credit Hours
An examination of the role of small computer systems within an organization's information systems environment.
Prerequisite: CIS 34068.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

CIS 34080  COMPUTER PROGRAMMING FOR BUSINESS I  3 Credit Hours
Introduces a programming language currently used in business and industry for data processing, decision making and other information systems applications.
Prerequisite: CIS 34070.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

CIS 34167  CREATING INTUITIVE SYSTEMS  3 Credit Hours
The process of creating products that are intuitive, simple, useful and easy-to-use is difficult and always evolving. However, organizations such as Apple Incorporated and Google that can adopt this approach to product or service development are often on top of their industry. This course will explore this process, its value and how to make it work to help a business prosper and thrive in today's highly competitive market and short product lifecycles.
Prerequisite: Minimum C+ grade in CIS 24053; and minimum 2.250 overall GPA.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter
CIS 34191 TECHNOLOGY BOOTCAMP 3 Credit Hours
(Repeattable for credit) The course covers important current topics and innovations in information system technologies. Students are taught to develop skills that help them to identify and investigate emerging important technologies and learn how to research and master them. Topics covered each semester will be different from those covered in past semesters, with examples of what were covered in the past.
Prerequisite: Minimum C+ grade in CIS 24053; and minimum 2.250 overall GPA.
Schedule Type: Seminar
Contact Hours: 3 lecture
Grade Mode: Standard Letter
CIS 44007 PROJECT MANAGEMENT AND TEAM DYNAMICS 3 Credit Hours
Overview and hands-on experience of the principles, tools, and techniques of project management with emphasis on practical aspects of initiating, planning, executing, costing and closing out information systems related projects. The course begins with the Myers-Briggs personality inventory which will help in later class team exercises and uses the PMBOK. Students will work in teams to perform exercises that will help them learn team dynamics and leadership.
Prerequisite: Minimum C+ grade in CIS 24053; and minimum 2.250 overall GPA.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter
CIS 44040 PROGRAMMING FOR THE CLOUD 3 Credit Hours
Cloud development programming course that is based on the client-server architecture. The course begins with a review of HTML and CSS used to build the user interface. Document Object Model (DOM) is investigated as the basis for all web interfaces. Interface stylistic formatting is achieved by use of CSS, and JavaScript for interface in the web browser, while server-based language such as PHP and Python are used to process user actions. The course also introduces jQuery for interface animation.
Prerequisite: CIS 24165; and minimum 2.250 overall GPA.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter
CIS 44043 DATA MANAGEMENT AND BUSINESS INTELLIGENCE I 3 Credit Hours
The processing, storage, retrieval, manipulation, and management of often massive and complex business data is an essential part of most information systems. This course will expose students to key database concepts such data integrity, conceptual and logical data modeling, and structured query language (SQL). Some of the SQL skills include data definition language (DDL), data manipulation language (DML), transaction control concepts, joins, grouping, and subqueries. The course will also introduce database management concepts related to managing users and physical storage space. Current and future database trends and issues will also be discussed including security, introduction to emerging topics in big data, data acquisition, analytics and visualization.
Prerequisite: CIS 44040; and minimum 2.250 overall GPA.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter
CIS 44044 SYSTEMS ANALYSIS II 3 Credit Hours
Physical system implementation: mapping logical data models and process models to physical data bases and system design; system coding, testing, installation, conversion, training and automated tools.
Prerequisite: CIS 34068.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter
CIS 44045 INFORMATION SYSTEMS MANAGEMENT 3 Credit Hours
Management of information systems resources in organizations of all types and sizes; IT best practices; the effective and efficient use of IS in support of the organization’s mission and to achieve competitive advantage in today’s global economy; the impact of IT on enterprises, users, customers, society and the environment.
Prerequisite: CIS 24053 with a minimum C grade; and CIS 24065; minimum overall 2.500 GPA; and senior standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter
CIS 44048 CLOUD SYSTEMS INTEGRATION (ELR) (WIC) 3 Credit Hours
As a writing intensive course the primary objective is that students or team of students write and rewrite their reports to consistently produce high quality, clear, and to the point written and verbal communication with feedback from their instructor. Students participate as a member of a project development team that builds cloud-based information system using a cloud platform for a real client. To be completed successfully, the projects often require knowledge, content, and skills from all prior IS courses.
Prerequisite: Minimum 2.250 overall GPA.
Pre/corequisite: CIS 44043.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter
Attributes: Experiential Learning Requirement, Writing Intensive Course
CIS 44049  NETWORK MANAGEMENT AND CYBERSECURITY  3 Credit Hours
The course explores technologies and business issues related to computer networking and security, with emphasis on the protocols in modern business networking such as Ethernet and TCP-IP. Topics also include cybersecurity threats and defenses, privacy, cloud and parallel computing, and map-reduce.
Prerequisite: Minimum C+ grade in CIS 24053 and minimum C grade in CIS 24065; and minimum 2.250 overall GPA.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

CIS 44095  SPECIAL TOPICS IN COMPUTER INFORMATION SYSTEMS  3 Credit Hours
(Repeatable for credit) Offered on a semester basis with different CIS topics and different faculty involved each time the course if offered.
Prerequisite: Minimum 2.500 overall GPA.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

CIS 44140  APPLICATION DESIGN AND DEVELOPMENT  3 Credit Hours
The focus of this course is about making apps for mobile and other devices. Techniques that permit apps to be developed and then used as native on Android and iOS platforms are covered, with emphasis on interface design, client programming, server programming, database use for storage and retrieval, and security. The Model-View-Controller (MVC) architecture is used as the basis for app development, including interface, programming and data management.
Prerequisite: CIS 44040; and minimum 2.250 overall GPA.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

CIS 44292  BUSINESS EXPERIENCE AND INTERNSHIP (ELR)  3 Credit Hours
(Repeatable for credit) Learning by experience and practice in an IT related company. The course exposes students to the various areas and activities related to the information systems profession in a cooperating organization.
Prerequisite: Minimum C+ grade in CIS 24053; and minimum 2.250 overall GPA.
Schedule Type: Practical Experience
Contact Hours: 9 other
Grade Mode: Standard Letter
Attributes: Experiential Learning Requirement

CIS 44293  WORKSHOP IN PROFESSIONAL INFORMATION SYSTEMS CERTIFICATION  3 Credit Hours
Supervised workshop designed to help students pass at least one VMware, Microsoft or other vendors’ professional certification credentials. The student chooses the exam to take, with the course providing a supported self-study opportunity to prepare for the exam.
Prerequisite: Minimum C+ grade in CIS 24053; and minimum 2.250 overall GPA.
Schedule Type: Workshop
Contact Hours: 3 other
Grade Mode: Standard Letter

Human Resource Management (HRM)

HRM 34180  HUMAN RESOURCE MANAGEMENT  3 Credit Hours
Focuses on the importance of the management of human resources for any organization, its employees, customers, shareholders, and the community where it is located. The topic helps students understand the important issues that derive from managing people at work and the changing environment organizations face. Students will learn the integral role human resources management plays to the success or failure of an organization. Both practical and theoretical perspectives are presented.
Prerequisite: MGMT 24163 or BMRT 11009; and minimum 2.000 overall GPA.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter
HRM 34189 INTERNATIONAL EXPERIENCE IN HUMAN RESOURCE MANAGEMENT (ELR) 3 Credit Hours
Guided introduction to applied Human Resource Management in another culture by examining opportunities and challenges. Via select company tours, tour of historical sites and meetings with management from local companies as well as U.S. companies doing business in foreign countries, students will be exposed to the current HR functions and practices in a foreign country, such as selecting and managing a workforce, compliance with the employment laws, employee training and development, expatriation repatriation, performance management, and compensation issues.
Prerequisite: HRM 34180 with a minimum C grade; and minimum 2.500 overall GPA; and sophomore standing; and special approval.
Schedule Type: International Experience
Contact Hours: 9 other
Grade Mode: Standard Letter
Attributes: Experiential Learning Requirement

HRM 44091 SEMINAR IN HUMAN RESOURCE MANAGEMENT 3 Credit Hours
(Repeatable for credit) (Slashed with MIS 54091) In-depth readings, discussion projects and presentations in a specialized area of human resource management.
Prerequisite: HRM 34180; and minimum 2.000 overall GPA.
Schedule Type: Seminar
Contact Hours: 3 lecture
Grade Mode: Standard Letter

HRM 44183 DEVELOPING AND TRAINING HUMAN RESOURCES IN ORGANIZATIONS 3 Credit Hours
(Slashed with MIS 54183) Course focus is quality training design, based upon theory and empirical research. Implications for practice and current challenges in employee training and development are also highlighted.
Prerequisite: HRM 34180 with a minimum C grade; and minimum 2.000 overall GPA.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

HRM 44185 STAFFING HUMAN RESOURCES 3 Credit Hours
(Slashed with MIS 54185) Staffing, development of systems to select, place, promote, and retain employees to enhance organizational effectiveness and maintain legal compliance are core HRM activities in organizations. This course will provide students with an understanding of the technical components of selection, including how to determine which applicant characteristics should be examined, what procedures should be used to gather information, and how that information should be combined to identify qualified job applicants. In addition, this course focuses on promotion and retention of employees.
Prerequisite: HRM 34180 with a minimum C grade; and a minimum 2.000 overall GPA.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

HRM 44195 ADVANCED TOPICS IN HUMAN RESOURCE MANAGEMENT 3 Credit Hours
(Repeatable for credit) Advanced topics course that are offered on a yearly basis. Topics can span the full range of HR functions. This course can also have a practicum format.
Prerequisite: HRM 34180; and minimum 2.000 overall GPA.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

HRM 44445 GLOBAL HUMAN RESOURCE MANAGEMENT (WIC) 3 Credit Hours
(Slashed with MIS 54445) The course examines the impact of internationalization and cross-cultural challenges on organizations, the factors involved in selecting and managing an international workforce, the evaluation of employee relations and employment law, and address issues such as employee training and development, expatriation repatriation, performance management, and compensation issues, all from the perspective of managing an international organization.
Prerequisite: HRM 34180 with a minimum C grade; and minimum 2.000 overall GPA; and student must be enrolled in the human resource management major or minor; and senior standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter
Attributes: Writing Intensive Course

HRM 44492 BUSINESS EXPERIENCE AND INTERNSHIP IN HUMAN RESOURCE MANAGEMENT (ELR) 3 Credit Hours
(Repeatable for credit) Learning by experience by performing activities related to the Human Resource Management profession in a cooperating organization.
Prerequisite: HRM 34180 with a minimum C grade; and minimum 2.500 overall GPA; and must be enrolled in the human resource management major or minor.
Schedule Type: Practical Experience
Contact Hours: 1 lecture, 14 other
Grade Mode: Standard Letter
Attributes: Experiential Learning Requirement

HRM 44495 SPECIAL TOPICS IN HUMAN RESOURCE MANAGEMENT 3 Credit Hours
(Repeatable for credit) Offered on a semester basis with different human resource management topics and different faculty involved each time the course is offered.
Prerequisite: Minimum 2.000 overall GPA; and junior standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

HRM 44499 HUMAN RESOURCE BUSINESS CONSULTING AND PROJECTS (ELR) 3 Credit Hours
This course bridges between Human Resource Management coursework and the world of HRM practice. The course will provide a variety of learning experiences to help students gain knowledge and practical experience to prepare them to embark on careers in the HRM profession. Upon completion of this course, students should have much to discuss in a job interview and a useful entry on their resumes.
Prerequisite: HRM 34180 minimum C grade; and minimum 2.000 overall GPA; and student must be enrolled in the human resource management minor or major.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter
Attributes: Experiential Learning Requirement
HRM 44660  PERFORMANCE MANAGEMENT AND COMPENSATION SYSTEMS  3 Credit Hours
(Slashed with MIS 54660) The course provides overview of the performance management process, examines various approaches to performance management, and discusses sources of performance management information. Also considers the nature of the compensation systems and pay system mechanics, as well as methods for recognizing employee contributions through compensation.
Prerequisite: HRM 34180 with a minimum C grade; and minimum 2.500 overall GPA.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

HRM 44763  HUMAN RESOURCE ANALYTICS AND ERP SYSTEMS  3 Credit Hours
The course examines the use of HR data, metrics, analytics, and ERP systems to guide human resource management decision making and support the strategic goals of the organization. The course will introduce students to the characteristics of high quality data, introduce common analysis techniques, data interpretation and visualization, and report assessment. Through lecture, readings, and problem solving exercises using enterprise resource planning systems (SAP and Oracle), students will gain the knowledge and skills necessary to assess various human resource management initiatives and formulate solutions to common human-resource-related problems. Upon completion of the course, students will understand how HR analytics and ERP systems help an organization achieve its strategic goals.
Prerequisite: HRM 34180 with a minimum C grade; and minimum 2.000 overall GPA.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

Management (MGMT)

MGMT 24056  BUSINESS ANALYTICS I  3 Credit Hours
(Equivalent to BMRT 21004) Introduction to concepts in statistical methods and their applications to real world problems. Examines both the theoretical and practical side of the different methods.
Prerequisite: MATH 11010 or MATH 11012 or MATH 12002.
Schedule Type: Laboratory, Lecture, Combined Lecture and Lab
Contact Hours: 2 lecture, 2 lab
Grade Mode: Standard Letter
Attributes: TAG Business

MGMT 24153  PRINCIPLES OF MANAGEMENT  3 Credit Hours
(Equivalent to BMRT 11009) Introductory course in management and organizational design. The leading contributions in the area are reviewed and practical implications are developed. The course covers the principles that most management professors have come to expect in an introductory course: planning, organizing, leading, and controlling. In addition, the students need to be aware of critical issues managers must be aware of to succeed: diversity, globalization, ethics, technology, sustainability among them. The course serves as an introduction to many upper level business courses.
Prerequisite: Sophomore standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MGMT 34054  USING INFORMATION SYSTEMS FOR SOLVING BUSINESS PROBLEMS  3 Credit Hours
Course examines key concepts about information systems that are relevant for business managers. Students will complete hands-on assignments. Course is not open to students in the Computer Information Systems major.
Prerequisite: CIS 24053 or IT 11000; and minimum 2.000 overall GPA.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MGMT 34055  COMPUTER DECISION MODELING  3 Credit Hours
Introduces students to the scientific decision-making tools of operations research and management science, and also to the use of spreadsheet modeling for problem formulation and solution without the need for mathematics. The concepts of modeling and better decision making are stressed along with illustrations from the various functional areas of business. Course not open to computer information systems majors.
Prerequisite: CIS 24053 or IT 11000; and MGMT 24056 or MATH 10041 or BMRT 21004; and minimum 2.500 overall GPA.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MGMT 34059  SERVICE OPERATIONS MANAGEMENT  3 Credit Hours
Provide students with the concepts and tools necessary to effectively manage service operations and to prepare students for management opportunities in service firms that represent the fastest-growing sector of the economy. The service management will be presented from an integrated viewpoint with a focus on customer satisfaction. The course materials are organized around four modules (1) understanding services (2) designing the service enterprise, (3) managing service operations and (4) toward world class-service.
Prerequisite: MGMT 34060; and minimum 2.500 overall GPA.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MGMT 34060  OPERATIONS MANAGEMENT  3 Credit Hours
A survey course in operations management that covers the managerial concepts and the quantitative tools used in the design, planning operation and control of operations systems.
Prerequisite: CIS 24053 or IT 11000; and MGMT 24056 or MATH 10041 or BMRT 21004.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MGMT 34064  MANUFACTURING RESOURCE PLANNING  3 Credit Hours
Introduce students to the basic tools operations managers use to inform their decisions on a daily basis. The course involves hands-on coverage of manufacturing resource planning tools, including forecasting and master production schedules, bill of materials structuring, order entry and purchasing, capacity requirements planning, routing, costing, customer service, shipping, invoicing and using an enterprise resource planning (ERP) software.
Prerequisite: MGMT 34060; and minimum 2.500 overall GPA.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter
MGMT 34065 QUALITY ASSURANCE  3 Credit Hours
Introduction to importance of quality assurance and tools used to accomplish better quality in goods and services. Topics TQM, Six Sigma, quality philosophies, sampling plans and statistical process control, ISO, quality competition and awards.
Prerequisite: MGMT 34060; and minimum 2.500 overall GPA.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MGMT 34156 BUSINESS ANALYTICS II  3 Credit Hours
This course provides an introduction and application of business analytics to real-world problems. Specifically, students are exposed to methods and models that allows business users to make better decisions based on data. We discuss methods for collecting, cleaning, and visualizing data, linear, non-linear, and optimization models to help decision makers choose the best decision, and some advanced forms of modeling. The goal of this course is for students to be exposed to essential topics in business analytics, and to apply these techniques to real-world problems.
Prerequisite: BMRT 21004 or MATH 10041 or MGMT 24056.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MGMT 34157 INTRODUCTION TO HEALTHCARE SYSTEMS MANAGEMENT  3 Credit Hours
Provides an overview of the management, economic and policy issues facing the healthcare, pharmaceutical, biotechnology and medical device industries. The course perspective is global, with emphasis on the U.S. as the largest and most profitable market.
Prerequisite: None.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MGMT 34158 MANAGERIAL AND TECHNOLOGICAL ASPECTS OF HEALTHCARE SYSTEMS MANAGEMENT  3 Credit Hours
Introduce the main components of health care information technology, with emphasis on the components that distinguish the health care delivery system from other business enterprises. Prepares students as clinical managers and consultants who must rely upon or manage information technology to accomplish their objectives.
Prerequisite: MGMT 34157.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MGMT 34159 MANAGING HEALTHCARE SYSTEMS OPERATIONS  3 Credit Hours
Operational process management, cost-control and productivity is critical to cost-effective healthcare. Covers topics in improving operations such as patient flow, quality (concepts and mechanics) and process improvement. Students become familiar with methods and resources for implementing change in a health care setting, such as a hospital or outpatient clinic. Provides skills to assess current hospital operations and to identify the appropriate tools to address various functional areas, useful for managers, consultants, clinical providers and others. Process improvement methods such as lean thinking, six sigma, statistical tools, flowcharting, queuing models and other tools are covered. Health care settings beyond the hospital, such as outpatient clinics, are included.
Prerequisite: MGMT 34157.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MGMT 34164 ORGANIZATIONAL MENTORING  3 Credit Hours
Course promotes leadership development through the study of leadership principles, styles, and role models. Students will learn through class lecture and discussion as well as hand-on leadership experience in Exploring Business Interactive Business Seminars (i.e., business labs). Students will work with course instructor to develop a personal leadership plan.
Prerequisite: BUS 10123; and minimum 2.500 overall GPA; and special approval.
Schedule Type: Laboratory, Lecture, Combined Lecture and Lab
Contact Hours: 2 lecture, 2 lab
Grade Mode: Standard Letter

MGMT 34165 DYNAMICS OF LEADERSHIP  3 Credit Hours
This course discusses management and leadership concepts and does so by blending theory and practice. The courses uses case studies, practical application approaches, personal assessment and provides opportunities for students to develop individual and group leadership skills. In addition, many organizational behavior concepts are blended throughout the course.
Prerequisite: MGMT 24163 or BMRT 11009.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MGMT 34175 LEARNING TO LEAD  3 Credit Hours
This is a hands-on learning and leadership course. Classroom time occurs over 4 days at a residential camp before the semester begins. Students learn about leadership from professors, experts in the field, and each other through interactive discussions and activities. During the semester students continue their leadership development working with a personal mentor, and practice their skills through community service projects.
Prerequisite: Special approval.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter
MGMT 34185  INDIVIDUAL AND GROUP BEHAVIOR IN ORGANIZATIONS  3 Credit Hours
Determinants of individual and group behavior within work organizations. Topics covered include, motivation, job design, learning, decision making, leadership and group behavior as they relate to performance and other outcomes in work organizations.
Prerequisite: MGMT 24163 or BMRT 11009.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MGMT 34280  ORGANIZATIONAL CHANGE MANAGEMENT  3 Credit Hours
This course focuses on understanding the processes and challenges involved in responsible organizational change management. The course will provide students a blend of both research and best practice professional applications.
Prerequisite: MGMT 24163 or BMRT 11009; and MGMT 34165; and minimum 2.500 overall GPA.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MGMT 44009  THE BUSINESS CASE FOR SUSTAINABILITY  3 Credit Hours
(Slashed with MIS 54285) This course describes major global trends in the environment, society, and technology; and explores how they are transforming business and how they are deeply changing work, careers and our quality of life. We examine global markets and needs, as expressed by the United Nations Sustainable Development Goals (SDGs). Understanding these trends will help you make sense of the world you in which you live and work and provide insight into an array of career and entrepreneurial opportunities.
Prerequisite: Minimum 2.500 overall GPA; and junior standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MGMT 44111  SYSTEMS SIMULATION  3 Credit Hours
(Slashed with MIS 54011) Techniques and applications of computer simulation of existing or proposed real-world systems. Use of simulation language, simulations studies, analysis and interpretation of results.
Prerequisite: MGMT 24056.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MGMT 44050  DATA VISUALIZATION  3 Credit Hours
(Slashed with MIS 54050) Introduces students to data visualization, and specifically, how to use visualization to communicate information effectively from data. All aspects of effective data visualization, including understanding the context, choosing appropriate graphs and visuals, and communicating the information from data will be considered. While theoretical aspects of effective visualizations will be covered, the focus will be on implementing such designs. Concentrating significantly on the practice of effective visualizations.
Prerequisite: MGMT 24056; and senior standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MGMT 44051  MACHINE LEARNING  3 Credit Hours
Machine Learning is one of the required courses for the Bachelor of Business Analytics (BANA) program. In this course, students learn the fundamentals of machine learning as applied to business problems. Specifically, the course concentrates on regression and classification methods, including regression, random forests, boosting trees, and neural networks, on unsupervised learning including k-means and hierarchical clustering, and on recommendation systems, and ensemble learning.
Prerequisite: MGMT 34156; and senior standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MGMT 44061  OPERATIONS MANAGEMENT AND CONTROL  3 Credit Hours
Introduces the student to the key functions of an operations planning and control system. Operations planning and control systems provide information for the efficient flow of materials, the effective utilization of people and equipment and the proper coordination of internal activities with suppliers and customers.
Prerequisite: Minimum 2.500 overall GPA.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MGMT 44062  SUPPLY CHAIN MANAGEMENT  3 Credit Hours
Students learn the basic analytical tools needed to coordinate business operations across the value chain. Course involves hands-on coverage of supply chain management with emphasis on supplier partnering and development, customer relations management, strategic sourcing and pricing, e-business, measuring supply chain performance, mass customization, planning supply and demand coordination in the supply chain.
Prerequisite: Minimum 2.500 overall GPA; and junior standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MGMT 44065  STRATEGIES IN PRODUCTION AND OPERATIONS MANAGEMENT (WIC)  3 Credit Hours
Senior project in industrial management. Applies concepts from all prior coursework to the solution of real and simulated operating problems.
Prerequisite: Minimum 2.500 overall GPA.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter
Attributes: Writing Intensive Course

MGMT 44096  INDIVIDUAL INVESTIGATION IN MANAGEMENT  3 Credit Hours
(Repeatable for credit) Presents opportunity to undertake research. Approval of topic and agreement to work with student must be secured from faculty member and the chairperson of the department prior to registration.
Prerequisite: Special approval.
Schedule Type: Individual Investigation
Contact Hours: 3 other
Grade Mode: Standard Letter
MGMT 44099  CAPSTONE IN BUSINESS ANALYTICS (ELR) (WIC)  3 Credit Hours
In this culminating project, students draw on the breadth and depth of the curriculum to address an industry supplied problem individually or in small teams. Specifically, students will improve, and present their solutions to their respective stakeholders, who will grade your final presentation and report.
Prerequisite: MGMT 44051; and senior standing.
Schedule Type: Lecture, Project or Capstone
Contact Hours: 3 lecture
Grade Mode: Standard Letter
Attributes: Experiential Learning Requirement, Writing Intensive Course

MGMT 44152  PROJECT MANAGEMENT  3 Credit Hours
This course covers the fundamental concepts, procedures and processes related to managing projects from initiation through planning, execution and closing. It also introduces the principles, tools and methods used in project management, and the use of project management software (ProjectLibre) in managing projects. The topics covered in the course can be helpful in preparing for Project Management Professional (PMP) certification.
Prerequisite: Minimum 2.000 overall GPA; and junior standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MGMT 44163  GLOBAL BUSINESS MANAGEMENT (WIC)  3 Credit Hours
Provides an overview of contemporary issues and theoretical frameworks in the field of international strategic management using traditional lecture and practical application cases.
Prerequisite: Minimum C grade in ENG 21011, COMM 15000 and MATH 11010; minimum 2.000 overall GPA; and senior standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter
Attributes: Writing Intensive Course

MGMT 44187  INTERNATIONAL MANAGEMENT EXPERIENCE  3 Credit Hours
This course focuses on strategy and policy development and execution for gaining and sustaining global competitive advantage. Strategic management of entrepreneurial and well-established firms, and operational and financial structures of international firms and markets are discussed.
Prerequisite: MGMT 24163 with a minimum C grade; and minimum 2.500 overall GPA; and sophomore standing; and special approval.
Schedule Type: Lecture
Contact Hours: 9 other
Grade Mode: Standard Letter

MGMT 44191  SENIOR RESEARCH SEMINAR IN MANAGEMENT  3 Credit Hours
(Repeatable for credit) Combination of individual or group research and class discussion for superior students. Investigations in administration and organization conducted in accordance with scholarly interests of participants.
Prerequisite: Special approval.
Schedule Type: Seminar
Contact Hours: 3 other
Grade Mode: Standard Letter

MGMT 44192  INTERNSHIP IN MANAGEMENT (ELR)  3 Credit Hours
(Repeatable for credit) A supervised field experience requiring a minimum of 145 hours of work at a cooperating organization. Requires regular contact with instructor and preparation of an internship report connecting academic coursework to on the job experiences.
Prerequisite: MGMT 24163 with minimum C grade; and minimum 2.500 overall GPA; and special approval.
Schedule Type: Practical Experience
Contact Hours: 15 other
Grade Mode: Standard Letter
Attributes: Experiential Learning Requirement

MGMT 44285  INTEGRATED BUSINESS POLICY AND STRATEGY  3 Credit Hours
Integration of the functional areas of business in the formulation and implementation of policy. Projects and case analyses of business situations provide students with the opportunity to apply analytical and creative problem solving skills.
Prerequisite: ACCT 23020 and ACCT 23021 and ECON 22060 and ECON 22061 and MKTG 24056 and MGMT 24056 and MGMT 24163 and MGMT 34060 and FIN 26074 and FIN 36053; and minimum 2.000 overall GPA; and major within the college of business administration; and senior standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MGMT 44299  MANAGEMENT CAPSTONE (ELR) (WIC)  3 Credit Hours
Course integrates various management concepts in informing a manager's strategic decision making process. Students use case analyses and class lectures to demonstrate their leadership abilities in different business scenarios.
Prerequisite: ACCT 23020 and ACCT 23021 and CIS 24053 and ECON 22060 and ECON 22061 and FIN 26074 and FIN 36053 and MGMT 24056 and MGMT 24163 and MGMT 34060 and MKTG 25010; and minimum 2.000 overall GPA; and declared in General Business major; and senior standing.
Schedule Type: Project or Capstone
Contact Hours: 3 other
Grade Mode: Standard Letter
Attributes: Experiential Learning Requirement, Writing Intensive Course

MGMT 44392  BUSINESS CONSULTING AND PRACTICUM (ELR)  3 Credit Hours
Provides decision-making tools for solving real-world problems by building synergies in prior knowledge to create a synthesis of real life solutions delivery mechanisms underpinning them to pressing problems of the local and international community. The practicum component includes consulting experience with both for profit and not-for-profit business clients.
Prerequisite: MGMT 24163; and minimum 2.000 overall GPA; and senior standing.
Schedule Type: Practical Experience
Contact Hours: 15 other
Grade Mode: Standard Letter
Attributes: Experiential Learning Requirement
MIS 54009  THE BUSINESS CASE FOR SUSTAINABILITY  3 Credit Hours
(Slashed with MGMT 44009) This course describes major global trends in the environment, society, and technology, and explores how they are transforming business and how they are deeply changing work, careers and our quality of life. We examine global markets and needs, as expressed by the United Nations Sustainable Development Goals (SDGs). Understanding these trends will help you make sense of the world you in which you live and work and provide insight into an array of career and entrepreneurial opportunities.
Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 54183  DEVELOPMENT AND TRAINING HUMAN RESOURCES IN ORGANIZATIONS  3 Credit Hours
(Cross-listed with HRM 44183) Course focus is quality training design, based upon theory and empirical research. Implications for practice and current challenges in employee training and development are also highlighted.
Prerequisite: Business administration major within the master of business administration degree; and graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 54185  STAFFING HUMAN RESOURCES  3 Credit Hours
(Cross-listed with HRM 44185) Staffing, development of systems to select, place, promote, and retain employees to enhance organizational effectiveness and maintain legal compliance are core HRM activities in organizations. This course will provide students with an understanding of the technical components of selection, including how to determine which applicant characteristics should be examined, what procedures should be used to gather information, and how that information should be combined to identify qualified job applicants. In addition, this course focuses on promotion and retention of employees.
Prerequisite: Business administration major within the master of business administration degree.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 54445  GLOBAL HUMAN RESOURCE MANAGEMENT  3 Credit Hours
(Cross-listed with HRM 44445) The course examines the impact of internationalization and cross-cultural challenges on organizations, the factors involved in selecting and managing an international workforce, the evaluation of employee relations and employment law, and address issues such as employee training and development, expatriation repatriation, performance management, and compensation issues, all from the perspective of managing an international organization.
Prerequisite: Business administration major within the master of business administration degree; and graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 54660  PERFORMANCE MANAGEMENT AND COMPENSATION SYSTEMS  3 Credit Hours
(Slashed with HRM 44660) The course provides overview of the performance management process, examines various approaches to performance management, and discusses sources of performance management information. Also considers the nature of the compensation systems and pay system mechanics, as well as methods for recognizing employee contributions through compensation.
Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 64005  ANALYTICS FOR DECISION MAKING  2 Credit Hours
This course uses computer capabilities to analyze and understand a variety of statistical and business analytics techniques and how to apply these techniques to solving business problems.
Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 2 lecture
Grade Mode: Standard Letter
MIS 64013 NONPARAMETRIC AND ROBUST STATISTICS 3 Credit Hours
( Slashed with MIS 74013) A presentation of statistically sound techniques for those who need to be able to use nonparametric or robust methods to deal with non-normal distributions or outliers ( common problems) in their data. 
Prerequisite: MIS 64005 or 74005; and graduate standing. 
Schedule Type: Lecture 
Contact Hours: 3 lecture 
Grade Mode: Standard Letter

MIS 64017 MULTIVARIATE STATISTICS 3 Credit Hours
This course is devoted to a study of multivariate statistical methods. Topics include multivariate analysis of variance, canonical correlation, principal component analysis, discriminant analysis cluster analysis and factor analysis. 
Prerequisite: MIS 64023 or 74023; and graduate standing. 
Schedule Type: Lecture 
Contact Hours: 3 lecture 
Grade Mode: Standard Letter

MIS 64018 QUANTITATIVE MANAGEMENT MODELING 3 Credit Hours
A variety of optimization and heuristic modeling techniques are explored. Decision-making environments, model selection, and interpretation are emphasized. Various linear and nonlinear mathematical programming techniques are the primary topic but are supplemented with other optimization and heuristic techniques. 
Prerequisite: Graduate standing. 
Schedule Type: Lecture 
Contact Hours: 3 lecture 
Grade Mode: Standard Letter

MIS 64019 RESEARCH SEMINAR IN SUPPLY CHAIN MANAGEMENT 3 Credit Hours
Research seminar designed primarily for students who seek an in-depth understanding of the current research literature in supply chain management and who are interested in doing research in supply chain management. Students study the academic literature with emphasis on the development and use of analytical tools and models to solve supply chain management problems. Specifically, the course will address quantitative modeling to support operational, tactical and strategic decision-making in supply chain management. 
Prerequisite: Graduate standing. 
Schedule Type: Seminar 
Contact Hours: 3 lecture 
Grade Mode: Standard Letter

MIS 64020 ADVANCED STATISTICAL MODELS 3 Credit Hours
This is a special focus course for which the topics will vary. It will generally include sampling techniques, experimental designs, similar statistical methods, internal and external validity and reliability issues. 
Prerequisite: MIS 64023 or 74023; and graduate standing. 
Schedule Type: Lecture 
Contact Hours: 3 lecture 
Grade Mode: Standard Letter

MIS 64023 LINEAR STATISTICAL MODELS AND APPLICATIONS 3 Credit Hours
Models and applications of simple and multiple regression, correlation and analysis of variance. 
Prerequisite: MIS 64005 or 74005; and graduate standing. 
Schedule Type: Lecture 
Contact Hours: 3 lecture 
Grade Mode: Standard Letter

MIS 64026 GLOBAL SUPPLY CHAIN MANAGEMENT AND SUSTAINABLE STRATEGIES 3 Credit Hours
Introduces the knowledge base needed to coordinate business operations across global supply chains. Addresses how to integrate traditional business operations so as to align them in support of inter-firm collaboration required to compete globally. Investigates specific topics relevant to supply chain management and offers a managerial orientation towards supporting global supply chain operations. Immerses students into responsible supply chain practices around the globe with strong emphasis and orientation towards sustainable (green) supply chains. 
Prerequisite: MIS 64041; and graduate standing. 
Schedule Type: Lecture 
Contact Hours: 3 lecture 
Grade Mode: Standard Letter

MIS 64028 GLOBAL SUPPLY CHAIN BUSINESS MODELS 3 Credit Hours
Focus on modeling techniques for supporting decision making in supply chain management. Introduces students to the problems facing a global supply chain manager and the implementation of spreadsheet-based models for solving problems that arise in the operation of a supply chain. Emphasis is placed on model formulation and interpretation in support of decisions to coordinate and improve supply chain operations. 
Prerequisite: MIS 64026 or 64036; and graduate standing. 
Schedule Type: Lecture 
Contact Hours: 3 lecture 
Grade Mode: Standard Letter

MIS 64029 SUPPLY CHAIN AND VENDOR MANAGEMENT STRATEGIES 3 Credit Hours
Building global "relationships" are central pillars to effective supply chain management. There are strategic relationships, tactical relationships, transactional relationships, internal relationships, and of course, relationships with the government. As supply chains become global, managers have to consider cultural, regulatory, and communication differences to create and operate within the global village. Students learn how to deal with a rapidly changing landscape and understand how to deal with distributed resources, vendors, and people across cultures and convictions. 
Prerequisite: MIS 64026; and graduate standing. 
Schedule Type: Lecture 
Contact Hours: 3 lecture 
Grade Mode: Standard Letter

MIS 64036 BUSINESS ANALYTICS 3 Credit Hours
Overview of business analytics and its appropriate applications in various industries and functional areas. Critical thinking, problem definition, problem solving, effective communication, and leadership are emphasized. Methods such as data visualization and descriptive, predictive, and prescriptive analytics are covered from a broad perspective. This course is applied, hands-on, and case-based. Cases emphasize the communication of quantitative solutions to laypeople and required leadership during decision-making and implementation stages. 
Prerequisite: Graduate standing. 
Schedule Type: Lecture 
Contact Hours: 3 lecture 
Grade Mode: Standard Letter
MIS 64037 ADVANCED DATA MINING AND PREDICTIVE ANALYTICS 3 Credit Hours
Course extends the coverage of data mining and predictive analytics. Topics focus on the applied use of these techniques in realistic settings. Covers statistical and machine learning techniques.
Prerequisite: MIS 64036 or MIS 64060; and graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 64038 ANALYTICS IN PRACTICE 3 Credit Hours
Course focuses on supporting techniques and managerial and professional skills necessary to being an effective business analyst. Other topics include project management, requirements analysis, change management, team dynamics, leadership, ethics and effective communication between all stakeholders.
Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 64041 OPERATIONS, SERVICE AND SUPPLY CHAIN MANAGEMENT 2 Credit Hours
Develops a framework for analysis of operating problems. Uses computer, quantitative and behavioral models to develop operating plans consistent with organizations’ competitive (or service) strategy.
Prerequisite: MIS 64005; and graduate standing.
Schedule Type: Lecture
Contact Hours: 2 lecture
Grade Mode: Standard Letter

MIS 64042 GLOBALIZATION AND TECHNOLOGY STRATEGY 2 Credit Hours
This course is designed to provide both, general managers and Information Technology (IT) managers, an overview of the issues that are related to the management of an organization's IT assets. For general managers, the course offers frameworks for evaluating and guiding IT activities in their organizations. For the IT managers, the course offers frameworks for understanding and managing the management challenges related to deployment of IT in their organizations. The course focuses on issues made by organizations as they attempt to deal with the challenges posed by IT in various functional areas of an organization.
Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 2 lecture
Grade Mode: Standard Letter

MIS 64043 MANUFACTURING TECHNOLOGY AND STRATEGY 3 Credit Hours
This course provides the student with an introduction to modern techniques in manufacturing and the necessary strategic concepts to implement them. A similar discussion of service industries is also included.
Prerequisite: Graduate standing; and special approval of instructor.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 64050 ESSENTIALS OF BUSINESS MANAGEMENT 3 Credit Hours
This is an introductory management course that discusses functional areas of business and their strategic positioning in delivering business solutions.
Prerequisite: Non-college of business administration majors; and graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 64060 FUNDAMENTALS OF MACHINE LEARNING 3 Credit Hours
In this course, you learn some fundamentals of machine learning. Specifically, we concentrate on classification modelling, segmentation and clustering and recommendation systems.
Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 64081 DATA COMMUNICATIONS AND NETWORKING IN BUSINESS 3 Credit Hours
An introduction to telecommunications and computer networks. Topics include telecommunications technologies and services communication standards and protocols local area networks and network management.
Prerequisite: Graduate standing; and special approval of instructor.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 64082 DATABASE MANAGEMENT AND DATABASE ANALYTICS 3 Credit Hours
The design, implementation and management of database management systems within organizations are studied from an applied perspective. Additional emphases include data warehousing, structured query language for analytics, and introductions to NoSQL databases and big data analytics.
Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter
MIS 64083 INFORMATION SECURITY: A MANAGERIAL PERSPECTIVE 3 Credit Hours
Introduction to the information security areas that managers must understand in order to deal with today's security threat-laden environment. The emphasis is on the important principals and concepts that managers utilize to develop effective security risk management programs.
Prerequisite: Admission to MBA program or admission to MS IAKM program; and graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 64092 INTERNSHIP IN BUSINESS ANALYTICS 3 Credit Hours
(Repeatable for credit) A supervised field experience at a cooperating organization. Requires regular contact with instructor and preparation of an internship report connecting academic coursework to on-the-job experiences.
Prerequisite: Graduate standing.
Schedule Type: Lecture, Practical Experience
Contact Hours: 1 lecture, 17 other
Grade Mode: Standard Letter

MIS 64099 CAPSTONE PROJECT IN BUSINESS ANALYTICS 3 Credit Hours
(Repeatable for credit) In this culminating project, students draw on the breadth and depth of the curriculum to address an industry supplied problem individually or in small teams. Projects will explore prescriptive analytics as is appropriate to their design project. In-progress (IP) mark permissible.
Prerequisite: MIS 64036 or MIS 64060; and graduate standing.
Schedule Type: Project or Capstone
Contact Hours: 3 other
Grade Mode: Standard Letter

MIS 64108 APPLIED TOPICS IN HUMAN RESOURCE MANAGEMENT 3 Credit Hours
Course provides students an opportunity to learn about human resource management through an application of the material to real-world problems. Topics covered may include but not be limited to job analysis, selection methods, employee training, and performance evaluation.
Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 64158 LEADERSHIP AND MANAGERIAL ASSESSMENT 2 Credit Hours
Students develop an understanding of the leadership process. Through critical thinking, class discussions and class activities, they build skills in leading others, leading themselves, and teamwork.
Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 2 lecture
Grade Mode: Standard Letter

MIS 64160 LEADERSHIP AND ORGANIZATIONAL CHANGE 3 Credit Hours
Course provides students in-depth knowledge of leading organization change. Covers analysis of existing conditions, drivers of change and readiness for change along with methods of change and change implementation.
Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 64185 BUSINESS STRATEGY 3 Credit Hours
Integrative approach to the study of policy formulation and implementation. Formalized planning systems reviewed; case analysis of actual business situations helps students further develop analytical and communication skills.
Prerequisite: Master of Business Administration or Master of Science in Accounting majors; and graduate standing; and special approval.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 64263 EMPLOYEE SELECTION AND APPRAISAL 3 Credit Hours
This course will focus primarily on issues associated with the person/job matching process in modern organizations related to the selection and appraisal of employees.
Prerequisite: MIS 64271; and graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 64270 ORGANIZATIONAL ANALYSIS AND DESIGN 3 Credit Hours
Course provides students an in-depth examination of all of the factors influencing human behavior at work.
Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 64271 HUMAN RESOURCE MANAGEMENT 2 Credit Hours
This course explores the management of a firm's human resources from practical and theoretical perspectives of managing people at work. How high performance work practices (HPWPs) help businesses to motivate their employees for strategic competitive advantage is emphasized.
Prerequisite: Graduate standing.
Schedule Type: Lecture
Contact Hours: 2 lecture
Grade Mode: Standard Letter

MIS 64275 STRATEGIC GLOBAL MANAGEMENT 3 Credit Hours
Strategic global management explores micro-level concepts and strategic managerial alternatives within the context of current global business operations in the political, economic and cultural environment facing today's manager.
Prerequisite: Completion of 24 credit hours of graduate courses from the college of business administration; and graduate standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter
MIS 68051 BUSINESS PROFESSIONAL DEVELOPMENT I 1 Credit Hour
Development of professional business skills for the full-time MBA student to use in both the graduate program and career development.
Prerequisite: Admission to MBA program; and special approval.
Schedule Type: Lecture
Contact Hours: 1 lecture
Grade Mode: Standard Letter

MIS 68052 BUSINESS PROFESSIONAL DEVELOPMENT II 1 Credit Hour
Continuation of development of professional business skills for the full-time MBA student primarily focused on building and strengthening the skills needed by a manager for the workplace.
Prerequisite: Graduate standing; and special approval.
Schedule Type: Lecture
Contact Hours: 1 lecture
Grade Mode: Satisfactory/Unsatisfactory

MIS 74005 STATISTICS FOR MANAGEMENT I 3 Credit Hours
This course uses computer capabilities to use and understand a variety of statistical techniques and applies these techniques to business problems.
Prerequisite: Admission to MBA program; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 74013 NONPARAMETRIC AND ROBUST STATISTICS 3 Credit Hours
(Slashed with MIS 64013) A presentation of statistically sound techniques for those who need to be able to use nonparametric or robust methods to deal with non-normal distributions or outliers (common problems) in their data.
Prerequisite: MIS 64005 or 74005; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 74017 MULTIVARIATE STATISTICS 3 Credit Hours
This course is devoted to a study of multivariate statistical methods. Topics include multivariate analysis of variance, canonical correlation, principal component analysis, discriminant analysis, cluster analysis and factor analysis.
Prerequisite: MIS 64023 or 74023; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 74018 QUANTITATIVE MANAGEMENT MODELING 3 Credit Hours
A variety of optimization and heuristic modeling techniques are explored. Decision-making environments, model selection, and interpretation are emphasized. Various linear and nonlinear mathematical programming techniques are the primary topic but are supplemented with other optimization and heuristic techniques.
Prerequisite: Doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 74019 RESEARCH SEMINAR IN SUPPLY CHAIN MANAGEMENT 3 Credit Hours
Research seminar designed primarily for students who seek an in-depth understanding of the current research literature in supply chain management and who are interested in doing research in supply chain management. Students study the academic literature with emphasis on the development and use of analytical tools and models to solve supply chain management problems. Specifically, the course will address quantitative modeling to support operational, tactical and strategic decision-making in supply chain management.
Prerequisite: Doctoral standing.
Schedule Type: Seminar
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 74020 ADVANCED STATISTICAL MODELS 3 Credit Hours
This is a special focus course for which the topics will vary. It will generally include sampling techniques, experimental designs, similar statistical methods, internal and external validity, and reliability issues.
Prerequisite: MIS 64023 or 74023; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 74023 LINEAR STATISTICAL MODELS AND APPLICATIONS 3 Credit Hours
Models and applications of simple and multiple regression, correlation and analysis of variance.
Prerequisite: MIS 64005 or 74005; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 74037 ADVANCED DATA MINING AND PREDICTIVE ANALYTICS 3 Credit Hours
(Slashed with MIS 64037) Course extends the coverage of data mining techniques for those who need to be able to use nonparametric or robust methods to deal with non-normal distributions or outliers (common problems) in their data. Focus is on the strategic issues around how a firm should manage its data.
Prerequisite: MIS 64023 or 74023; and doctoral standing.
Schedule Type: Seminar
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 74041 OPERATIONS MANAGEMENT 3 Credit Hours
Develops a framework for analysis of operating problems. Uses computer quantitative and behavioral models to develop operating plans consistent with organizations' competitive (or service) strategy.
Prerequisite: MIS 64005 or 74005; and doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 74042 GLOBALIZATION AND TECHNOLOGY STRATEGY 3 Credit Hours
Focus is on the strategic issues around how a firm should manage its technology in a global market. Strategic issues include understanding the technological and competitive landscape, innovations, competitive advantages in the high-tech marketplace, outsourcing and information ethics. The core emphasis in on integrated decision-making in the age of globalization.
Prerequisite: Doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter
MIS 74047  MANUFACTURING TECHNOLOGY AND STRATEGY  3 Credit Hours
This course provides the student with an introduction to modern techniques in manufacturing and the necessary strategic concepts to implement them. A similar discussion of service industries is also included.
Prerequisite: Doctoral standing; and special approval of instructor.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 74061  ADVANCED MACHINE LEARNING  3 Credit Hours
(Slashed with MIS 64061) Introduction to deep learning and time series data analysis. Students consider applications of deep learning to computer vision, text analysis and sequences and time series data.
Prerequisite: Doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 74080  EMERGING HARDWARE AND SOFTWARE TECHNOLOGIES  3 Credit Hours
Investigation of selected emerging hardware and software technologies such as parallel processing systems, computer languages and operation systems, artificial intelligence, neural networks and chaos theory.
Prerequisite: Doctoral standing; and special approval of instructor.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 74081  DATA COMMUNICATIONS AND NETWORKING IN BUSINESS  3 Credit Hours
An introduction to telecommunications and computer networks. Topics include telecommunications technologies and services, communication standards and protocols, local area networks and network management.
Prerequisite: Doctoral standing; and special approval of instructor.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 74082  DATABASE MANAGEMENT AND DATABASE ANALYTICS  3 Credit Hours
The design, implementation and management of database management systems within organizations are studied from an applied perspective. Additional emphases include data warehousing, structured query language for analytics, and introductions to NoSQL databases and big data analytics.
Prerequisite: Doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 74160  LEADERSHIP AND ORGANIZATIONAL CHANGE  3 Credit Hours
(Slashed with MIS 64160) Develop understanding of the theories and techniques needed for the successful management of significant organizational change with emphasis on discussion, exercises and case studies.
Prerequisite: Doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 74475  STRATEGIC GLOBAL MANAGEMENT  3 Credit Hours
Strategic global management explores micro-level concepts and strategic managerial alternatives within the context of current global business operations in the political, economic and cultural environment facing today’s manager.
Prerequisite: Doctoral standing; and special approval.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 74507  PHILOSOPHY OF SCIENCE AND BUSINESS MODELS  3 Credit Hours
Introductory seminar for understanding the forms and the process of business research. Its major objective is to help seminar participants understand the various philosophies that drive business research in an academic community, and introductory methods of social science research. Additionally, the seminar seeks to develop participant motivation to become a contributor to the organizational sciences community by examining: 1. The research process, methodologies and strategies. 2. Research Paradigms, Modes and Contexts of Inquiry. 3. The nature of organizational sciences research. 4. The major streams of business research. 5. Understanding ontological choice of constructs and defining epistemic relationships between constructs. 6. Building hypotheses and socio-technical models. 7. Research design, data requirements and collection techniques, ethics and philosophies.
Prerequisite: Doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter
MIS 84011  SYSTEMS SIMULATION  3 Credit Hours
Techniques and applications of computer simulation of existing or proposed real-world systems. Use of simulation language, simulation studies, analysis of interpretation and of results.
Prerequisite: Doctoral standing; and special approval.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 84012  SCHEDULING AND PLANNING  3 Credit Hours
Course is a doctoral seminar on scheduling and planning models that are used in operations and production management. The goal is to expose students to a portfolio of scheduling and planning models to stimulate research ideas in scheduling and planning models that will lead to the development of a research program for your doctoral research.
Prerequisite: Doctoral standing in the college of business administration.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 84015  STOCHASTIC MODELS  3 Credit Hours
Mathematical modeling of systems involving one or more random variables, and stochastic processes: basic probability theory; Poisson process, Markov chain and Markov process with applications to production, inventory, reliability and queueing systems.
Prerequisite: Doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 84023  LINEAR STATISTICAL MODELS  3 Credit Hours
Linear statistical models for regression and analysis of variance.
Prerequisite: Doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 84045  SOCIAL ISSUES IN INFORMATION SYSTEMS  3 Credit Hours
Social issues in information systems arise at the interface between information systems and individuals, groups and society. The course will begin with a broad exposure to current social issues, moving to an examination of specific issues in detail with issues chosen by student interest and instructor consent.
Prerequisite: Doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 84047  VALUE AND SUPPLY CHAIN MANAGEMENT  3 Credit Hours
This course is a doctoral seminar for students who seek an in-depth understanding of the current research literature in supply chain management. The seminar is designed into three modules. The first module covers the conceptual foundation for understanding value and supply chains from an interdisciplinary perspective. The second module focuses on the basis of supply chain modeling using optimization and simulation. The third module serves to integrate the previous modules with the objective of the student producing a research paper for journal submission.
Prerequisite: Doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 84080  INNOVATION, ADOPTION, DIFFUSION  3 Credit Hours
Provides students with theoretical foundations of adoption and diffusion of technological innovations in organizations and society. Topics include: determinants of organizational innovation by acquisition; individual- and organizational-level technology adoption; diffusion of technologies through social systems; and the infusion and assimilation of technologies in organizations.
Prerequisite: Doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 84081  INFORMATION SYSTEMS STRATEGY AND INNOVATION  3 Credit Hours
This course explores the basis of strategy, deployment and competition in high-technology industries. It introduces conceptual frameworks based on cutting-edge research in economics and strategy. The frameworks may seem abstract at first, but we will focus on mastering them and how to develop strategies for managing firms in such industries. Students will learn how to develop and apply such frameworks in their research.
Prerequisite: Doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 84082  DATABASE MANAGEMENT SYSTEMS  3 Credit Hours
In-depth investigation of intelligent database management systems in support of business decision-making. An understanding of relational databases is assumed. Object-orientation and other advanced database concepts will be explored.
Prerequisite: Doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 84108  ACQUIRING HUMAN RESOURCES  3 Credit Hours
Course provides foundation for understanding issues related to the acquisition of human resources in an organization. Students will learn issues related to employment law, job analysis, job design, planning, recruitment, selection.
Prerequisite: Doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 84112  RESEARCH METHODOLOGY  3 Credit Hours
The objectives of this course are: to formulate a research problem and develop testable research hypotheses; develop research skills by learning the different research methods and techniques; explain information contained in research statistical outputs such as SAS and SPSS enable students to conduct meaningful and high quality research in their specific field of interest.
Prerequisite: Doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter
MIS 84191  SEMINAR IN HUMAN RESOURCE MANAGEMENT    3 Credit Hours
(Repeatable for credit.) Variable content of relevance to Human Research Management research. Exact topics will be announced when scheduled.
Prerequisite: Doctoral standing.
Schedule Type: Seminar
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 84261  STRATEGIC DECISION-MAKING AND HUMAN RESOURCE MANAGEMENT    3 Credit Hours
Provides a first graduate-level introduction to the fundamental concepts of HRM/OB and strategic decision-making.
Prerequisite: Doctoral standing; and special approval.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 84262  THEORY OF THE FIRM    3 Credit Hours
Course focuses on developing a deep understanding of modern strategic theory in relation to other allied fields. Students will review fundamental concepts of strategic thinking and theory development and then move to contemporary theoretical issues including transaction-cost economics, the resource-based view, the emerging theories of real options and of dynamic capabilities, strategic optimization and constraint theory, and dealing with uncertainty through scenario-driven planning.
Prerequisite: Doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 84263  OPTIMIZING HUMAN RESOURCES    3 Credit Hours
Students learn areas of human resources management that include training and development, performance management, compensation and retention or turnover.
Prerequisite: Doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 84277  ORGANIZATIONAL BEHAVIOR AND THEORY    3 Credit Hours
An examination of theory and research on individual and group behavior in organizations. Special attention is given to theories of motivation, job satisfaction, goal setting, task design, feedback systems, group dynamics, power and teams.
Prerequisite: Doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 84275  THEORETICAL AND EMPIRICAL GLOBAL STRATEGY    3 Credit Hours
Focuses on review and integration of the several streams of literature dealing with strategy for, and management of, the product-diversified and/or internationally-diversified firm. Also, in order to complement the emphasis of other doctoral offerings on strategy formulation topics, this seminar places a special emphasis on strategy process, organizational structure, and administrative mechanisms. In particular, it explores the foundations as well as current research on corporate governance, broadly define. This includes (I) the set of mechanisms available to align the interest of top managers to those of shareowners, as well as (II) the mechanisms available to motivate and control middle managers so that their decisions and behaviors are aligned with intended corporate and/or international strategy and goals.
Prerequisite: Doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 84285  TECHNOLOGY AND INNOVATION STRATEGY    3 Credit Hours
Covers topics pertaining to innovation management at micro-level (entrepreneurship, corporate entrepreneurship), meso-level (networks), and macro-level (cross-country and within-country comparisons).
Prerequisite: Doctoral standing.
Schedule Type: Lecture
Contact Hours: 3 lecture
Grade Mode: Standard Letter

MIS 84277  SEMINAR IN MANAGEMENT SYSTEMS    3 Credit Hours
(Repeatable for credit) Intensive investigation of selected topics in organization and strategic management. Student will be expected to undertake research on a topic determined in joint consultation with the instructor.
Prerequisite: Doctoral standing; and special approval of instructor.
Schedule Type: Seminar
Contact Hours: 3 seminar
Grade Mode: Standard Letter