MANAGEMENT INFORMATION SYSTEMS (MIS)

MIS 140 | INTRODUCTION TO BUSINESS TECHNOLOGY AND DECISION MAKING | 4 quarter hours
(Undergraduate)
Focused on information systems within organizations, this course addresses how information technology (IT) supports business operations and management. Topics include strategic uses of IT, databases, data warehouses, decision support, artificial intelligence, e-commerce, systems development, IT infrastructure, security, emerging trends, and the inherent social, ethical and legal considerations. Excel spreadsheet design and data analysis for decision making are key components of this course.

MIS 250 | CAREER MANAGEMENT FOR MIS | 2 quarter hours
(Undergraduate)
This course is designed to explore and manage the professional expectations and career potential of an MIS major. It will prepare students for a career in the MIS field. Students will connect with MIS professionals, identify possible career paths and create resumes, cover letters, and LinkedIn profiles. Students will identify their strengths, understand how to market their skills and conduct themselves in interviews. Discussions will focus on Career Center resources, internship opportunities, and best practices in utilizing career development resources for long term professional growth. (2 quarter hours)

MIS 300 | DATA MINING AND ANALYTICS | 4 quarter hours
(Undergraduate)
This course is an introduction to inferential statistics in analytics using data mining techniques. The course is applied and hands on, with applications in several domains. Techniques covered include factor analysis, cluster analysis, linear and multiple regression and decision trees. Emphases are placed on understanding data mining and analytics concepts, applying them using SPSS Modeler, preparing data for analysis, interpreting results, and using the results to make management recommendations.
BUS 102 and MAT 137 are prerequisites for this course.

MIS 360 | SYSTEMS ANALYSIS AND DESIGN | 4 quarter hours
(Undergraduate)
This course prepares students to pursue careers in systems analysis and design. It emphasizes various systems analysis and design techniques using computer aided software engineering (CASE), unified modeling language (UML), data flow diagram (DFD) and entity-relationship (E-R) diagram. Students learn about business process modeling, project management skills, and current techniques used by systems analysts. The course covers all phases of system development life cycle. Students work on projects to solve a real-world problem.
BUS 102 is a prerequisite for this class.

MIS 362 | INFORMATION SYSTEMS PROJECT MANAGEMENT | 4 quarter hours
(Undergraduate)
The course prepares students to become project managers. It covers IS project management concepts, techniques, tools, project issues, roles and responsibilities of project leaders. Topics include, but not limited to, resource allocation, scheduling, budgeting, monitoring, controlling, use of Gantt charts, precedence analysis, PERT, and CPM. Students use Microsoft Project.
(MIS major or MIS minor) and (MIS 360 or MIS 350) are prerequisites for this class.

MIS 370 | DATABASE MANAGEMENT SYSTEMS DESIGN AND DEVELOPMENT | 4 quarter hours
(Undergraduate)
This course is designed to prepare students to pursue careers in database management. It covers topics such as entity relationship modeling, normalization, SQL, database design principles, data warehousing, transaction management, and database administration. Students will complete assignments and a group term project using Microsoft SQL Server.

MIS 398 | SPECIAL TOPICS | 4 quarter hours
(Undergraduate)
Special Topics.

MIS 399 | INDEPENDENT STUDY | 4 quarter hours
(Undergraduate)
Independent Study is available to students of demonstrated capability for intensive independent work in management information systems. (variable credit)

MIS 555 | MANAGEMENT OF INFORMATION TECHNOLOGY | 4 quarter hours
(Graduate)
This course focuses on the management and use of information technology (IT). As the use of IT in society grows, particularly in business, our graduates are likely to become responsible for managing some technology resources and to participate in IT planning and development projects as founders, sponsors, team members, managers of development or end-user developers. Students should become effective users and evaluators of information, IT, and information services. The course explores a number of IT-related topics such as the strategic role of IT, IT planning and architecture, building the telecommunication highway system, management issues in systems development, the expanding universe of computing, group support systems, intelligent systems, electronic document management, and managing the human side of systems.

MIS 673 | DATA MANAGEMENT | 4 quarter hours
(Graduate)
Data has been recognized as a vital corporate resource and database systems used have evolved into a central component of business information systems. Topics include: semantic data modeling using entity-relationship models (ERDs); data structuring with normalization and functional dependencies; relational database design employing multiple perspectives (end-users, business and product owners, front-end and middle-tier developers, data engineers, database administrators, and data analysts); hands-on implementation of student's data model into actual data environment, including manipulation and analysis using SQL (Structured Query Language); and discussion on evolving technologies including NoSQL, Big Data, Data Warehousing, and On-line Analytical Processing.

MIS 683 | INFORMATION TECHNOLOGY STRATEGY AND ARCHITECTURE | 4 quarter hours
(Graduate)
This course focuses on key aspects of formulating a business-driven information technology (IT) strategic plan and an enabling technology architecture to optimize enterprise value-chain functions, and improve shareholder value. Students will explore opportunities on how to leverage IT, of their own firm, for competitive advantage and growth. The course will include lectures, case study, project presentation, and discussion of current developments in IT industry. Class discussion will be centered around the importance of the alignment of business and technology, and the critical role IT has on optimizing mission-critical business processes. Key course topics include: Business Strategy Alignment, Strategic Analysis, IT Strategic Planning Framework, IT Strategy Tools & Methods, Baseline Assessment (applications, data, infrastructure, TCO, organization), IT Effectiveness Review, Applications Portfolio Strategy, Data Management Strategy, Technology Infrastructure Strategy (hosted, cloud/SaaS, and on-premise), Spend/TCO, Investment Plan, and Organization Strategy.

MIS 798 | SPECIAL TOPICS | 4 quarter hours
(Graduate)
Content and format of this course are variable. It involves an in-depth study of current issues in information systems and technology. Subject matter constantly changes and will be indicated in class schedule.

MIS 799 | INDEPENDENT STUDY | 4 quarter hours
(Graduate)
Available for graduate students of demonstrated capability for intensive independent work in information systems.