**Lower Division**

**MIS 2000 Software Productivity Tools (1)**
This course examines software productivity tools. These tools will include word processing, spreadsheets, database, presentation software and the Internet. Microsoft Windows will be taught in order to manage microcomputer resources. In addition, students will be shown how to use and benefit from the information superhighway. A comprehensive test, designed by the BPA faculty, will be given at the end of the course.

**Upper Division**

**MIS 3000 Management Information Systems: Concepts and Applications (3)**
This course will provide an overview of the computer-based information systems, their components, and the process of development and implementation. The role of information systems will be taught from an interdisciplinary perspective. A heavy emphasis will be given to information management, database design, collection and manipulation of data, sharing data among the functional areas and relational database concepts. New developments in MIS and how they affect the functional areas of business that improve the competitiveness of a business organization will be explored and developed. Issues such as decision support systems, geographic information systems and group support systems will be explored. Prerequisite: Completion of business administration lower core or graduate conditionally classified and MIS 2000 or equivalent.

**MIS 3200 Introduction to Geographic Information Systems (3)**
An introduction to the basic principles of Geographic Information Systems (GIS) with applications to a variety of problems using established data sources. The course includes fundamental principles of cartographic design and communication. Students are expected to become proficient users of ArcView GIS Software package. Lab sessions cover step-by-step GIS practice in the real world, including working with public domain data, importing data into GIS, creating a GIS database, performing spatial analysis with tools, building GIS models, and presenting results. Business and public sector applications. Prerequisite: MIS 2000, ECON 3030, or equivalent. Cross-listed with ECON 3200.

**MIS 3300 System Analysis and Design (3)**
The analysis and design of computer-based information systems. The systems development life cycle will be emphasized. Tools such as data flow diagrams, layout charts, decision tables and computer-aided software engineering will be utilized. Students will analyze a real-life business problem and design a computer based solution. Prerequisite: MIS 3000 or equivalent.

**MIS 3400 Fundamentals of Database Systems (3)**
This course introduces the fundamental concepts and applications of relational database systems, as well as basic knowledge of Geo-database systems. Students will gain an understanding of the relational model and SQL, as well as the entity-relationship diagram for database modeling. The concepts and tools of database design will be stressed. Students will be required to use various tools (i.e., CASE) for instruction and assignments. Prerequisite: MIS 2000, ECON 2100, or equivalent.

**MIS 4100 Information Security and Privacy (3)**
This course introduces the fundamental concepts and theories of information security and privacy. It explores the organizational, legal, and global issues as they relate to privacy and security. The course investigates various security issues and measures for computers and network systems. Malware, spyware, viruses, and worms will be reviewed and biometric and non-biometric security measures will be explained. Also, the privacy on the Internet will be thoroughly examined and major privacy laws will be discussed. HIPPA and HITEC in health care industry will be reviewed. The course outlines a comprehensive security and privacy policy that organizations could use in order to minimize security and privacy risks.

**MIS 4400 Principles of Big Data and Analytics (3)**
The key objectives of this course are two-fold: (1) to provide you with a theoretical and practical understanding of core business analytic concepts and techniques; and (2) to provide you with hands-on experience in applying these techniques to practical real-word business problems using commercial business analytic software tools. As an applied course, the emphasis will be less on the inner working of each method and more on when and how to use each technique and how to interpret the results. Prerequisite: MIS 3000 or 300.

**MIS 4770 Special Topics in Management Information Systems (3)**
This course provides an opportunity to present an in-depth study of selected management information systems subjects not covered in regular courses. When offered, prerequisites and course requirements will be announced for each course.

**MIS 4850 Individual Study (1-3)**
Individual study is offered to give the student experience in planning and outlining a course of study on the student’s own initiative under departmental supervision. Independent study should deal with a special interest not covered in a regular course or with the exploration in greater depth of a subject presented in a regular course. Instructor consent is required. No more than 3 semester units may be used to satisfy degree requirements. (May not be substituted for any required graduate seminar).
MIS 4860 Internship in MIS (1-3)
This course is designed to provide an integrated academic experience in a work setting. Units may not be used to satisfy the requirements of the Business Administration major. Students may earn a maximum of 5 units through internships. Offered on a credit, no-credit basis only. Prerequisite: MIS 3000 or permission of the instructor.

Graduate Courses

MIS 6100 Information Systems for Leaders (3)
Information and information systems (IS) are vital organizational resources and constitute an integral part of managerial decision making. It is important to understand how managers can effectively utilize IS to achieve organizational goals. The objective of this course is to train students to identify, understand, and resolve managerial issues surrounding the use and management of IS in organizations. The course adopts the perspective that, in a world where the half-life of a particular hardware or software technology is often measured in months, developing intuitions about the core concepts to assess and deploy Information Systems is more valuable to future managers than learning the intricate details of a specific technology. The focus of the course is to develop - through cases, lectures, discussions, examples, application development assignments, and a system analysis and design project-insights into when and how MIS can be used to create and enhance an organizations competitive advantage.

MIS 6300 Applied Decision Support and Expert Systems (3)
This course will provide an overview of decision support (DSS) and expert systems (ES) with specific focus on their conceptual models; the inter-relationship between DSS and ES, and their architectures. Specifically, this course will focus on the use of decision support technologies for future executives. A variety of scenarios related to the future of decision support and expert systems technologies will be examined. New technologies from the growing field of applied artificial intelligence (AI) will also be explored. Finally, students will design and implement small-scale decision support and executive information systems using commercial software.

MIS 6700 Selected Topics in MIS (3)
Special topic courses provide each department with the opportunity to present an in-depth study of a selected subject not covered in regular courses. When offered, prerequisites and course requirements will be announced for each course.

MIS 6850 Individual Graduate Study MIS (1-3)
Individual study is offered to give the student experience in planning and outlining a course of study on the student’s own initiative under departmental supervision. Independent study should deal with a special interest not covered in a regular course or with the exploration in greater depth of a subject presented in a regular course. Instructor consent is required. No more than 3 semester units may be used to satisfy degree requirements. (May not be substituted for any required graduate seminar).