COLLEGE OF MANAGEMENT
MANAGEMENT INFORMATION SYSTEMS CONCENTRATION
ONE OF THE CONCENTRATIONS AVAILABLE IN THE MANAGEMENT MAJOR

Overview
Information technology is transforming all aspects of business. Students who concentrate in MIS acquire the knowledge and skills needed to take a leading role in this innovative field. Among other topics, the curriculum covers the planning, design and implementation of computer-based information, communication, and network systems.

Career Paths
Courses in the MIS program are designed to offer students options in the following career paths:
1) Business Intelligence and Data Analytics
2) Business and System Analysis
3) Security and Computer Forensics

The Business Intelligence (BI) and Data Analytics path prepares students for careers that are in very high demand. Some of the positions people in this career path have taken include data analysts working with BI software on Big Data, using analytical software to solve problems for management decisions, designing data warehouses, and becoming database administrators. As organizations increasingly understand the value of BI and analytics and turn to data-driven decision-making there is a shortfall of talent, and people who have chosen this career path are highly sought after.

Systems analysts serve as the bridge between managers and IT departments, and have the ability to understand what managers need from an information system and how to design the information system that will meet those needs. The Business and System Analysis path prepares students to take positions in which they work with a combination of managers, users, software vendors, and system architects to recommend plans for designing, building, and integrating information systems solutions. People who work in this career path often gain experience with several different facets of information systems and choose to move in to project management.

The Security and Computer Forensics path gets students ready for the jobs such as information security analysts, information risk analysts, computer forensics analysts, and computer forensics investigator. They are expected to prevent cyber-attacks, and collect and investigate criminal digital evidence. The need for these specialists is high, and that need is growing each year, helping to make this a great career opportunity for those who have an interest in technology and the law. The computer forensics salary, the interesting nature of the career, and the number of jobs the field offers are all reasons to start pursuing this career.

Those who are employed in the field may work with law enforcement or with private firms. The main duties are to retrieve information from computers and other types of electronic devices that store data. Today, specialists could work on laptops, digital cameras, tablets, smart phones, flash drives, and more. Computer forensics examiners use specialized tools to help them with this job, and they need to be able to stay on top of all of the new tools and technologies that are out there. Part of the computer forensics job description could be to testify in court and to relate the evidence found during investigations. Often, those who are in the field will work with members of law enforcement, attorneys, and other forensic specialists to see how the evidence fits together in the case.

The job outlook for those who decide to follow this career path is quite bright. Because the world increasingly uses computers, it means that the world may need to have more specialists with the knowledge and know-how to handle the crimes that follow. (Source: http://www.forensicscolleges.com/)

Concentration Requirements
Six Courses Required (18 credits)
Take all three of these required courses:
- MSIS 310 Client/Server Programming
- MSIS 411 Database Management (pre-req=MSIS 310)
- MSIS 461 Systems Analysis and Design

Take any three of the elective courses listed below. Courses are organized by career path, however these are just suggestions – any three electives will satisfy this requirement.

Business Intelligence and Data Analytics Career Path
- IT 370: Business Intelligence Applications
- IT 456: Information Storage and Management
- IT 471: Data Warehousing for Business Intelligence
- IT 472: Data Mining for Management Applications
- MSIS 415: Object-Oriented Programming
- MSIS 422: Decision Support Systems and Groupware
- MSIS 425: Project Management
- MSIS 427: Knowledge Management

Business and System Analysis Career Path
- IT 360: Enterprise Software
- IT 370: Business Intelligence Applications
- IT 460: Integration Methodologies & Tools
- IT 471: Data Warehousing for Business Intelligence
- MSIS 415: Object-Oriented Programming
- MSIS 425: Project Management
- MSIS 426: e-Business and e-Commerce Infrastructure
- MSIS 430: International Information Management
- MSIS 454: Supply Chain Management

Security and Computer Forensics Career Path
- MSIS 414: Computer Networks for Management
- MSIS 415: Object-Oriented Programming
- MSIS 428: Information System Security
- IT 420: Network and Model Forensics
- IT 421: Digital Forensics Malware Analysis

Additional Options not related to a specific Career Path
- MSIS 478*: Special Topics in MSIS
- MSIS 480*: Internship
- MGT 497*: Honors Seminar (run as MGT 478)

*Only one of MSIS 478, MGT 480, and MSIS 497 can count towards the concentration.

Advising Notes
The prerequisites for these courses are strictly enforced, so MIS concentrators should plan their schedules carefully and early. Concentration courses are not guaranteed to be offered every semester. Students should meet with their advisor to plan out a specific path for graduation.

For more information contact:
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