# **MANAGEMENT INFORMATION SYSTEMS (MGIS)**

## MGIS 1301. Introduction to Information Systems. 3 Hours.

Students are provided with the knowledge and skills necessary to succeed in today's computing society. Students make use of hardware and software to efficiently and effectively solve problems and make better decisions.

## MGIS 1305. Business Computer Applications. 3 Hours. [TCCN: BCIS 1305]

This course is designed to develop student proficiency with business software. These skills include producing properly formatted business documents and reports, creating computerized spreadsheets for problem-solving and decision-making, and as a tool for preparing effective presentations. Course Equivalents: BUAD 1305.

# MGIS 3310. Principles of Management Information Systems (MIS). 3 Hours.

Students are introduced to the management and use of information systems in organizations. Material presented is selected to increase the student's literacy in this rapidly changing field, including commonly used acronyms and emerging technologies. Organizational applications of information systems are discussed for the functional areas of the firm.

Prerequisite: MGIS 1305 or CSTE 1330 and 42 hours.

## MGIS 3315. Programming for Business. 3 Hours.

Students are introduced to the implementation of common business applications using current visual application development platforms. Basic structured and object-oriented computer programming techniques are covered in the context of the creation of business-oriented systems. Course Equivalents: MGIS 2320

Prerequisite: CSTE 1330 or BUAD 1305 or MGIS 1301 and MATH 1324 or 1314 or MATH 1420.

## MGIS 3320. E-Commerce Implementation. 3 Hours.

Students are introduced to the implementation of common business applications for e-commerce using Internet related technologies. Hypertext Markup Language (HTML), Cascading Style Sheets (CSS), scripting language(s), and other current technologies are covered in the context of e-commerce. Course Equivalents: MGIS 4320

Prerequisite: MGIS 3310 and 42 credit hours.

# MGIS 3330. Business Database Management. 3 Hours.

Students are introduced to databases. Design and implementation principles, including entity-relationship modeling and normalization are studied and applied in order to create an organizational database. Students become better computer users, who are more knowledgeable about the uses of databases in solving business problems, and learning a new way to think about business and its information needs.

Prerequisite: MGIS 3310.

# MGIS 4080. Independent Study. 1-3 Hours.

The student may pursue studies for which a special course is not organized. The credit in this course varies according to the work performed. Variable Credit (1 to 3). Course Equivalents: MGIS 4380.

# MGIS 4085. Special Topic. 1-3 Hours.

Students study emerging information technologies. Class participants learn about the technical fundamentals and business applications associated with information technologies. Variable Credit (1 to 3). Course Equivalents: MGIS 4385

Prerequisite: MGIS 3310.

## MGIS 4315. Decision Analysis & Analytics. 3 Hours.

Students apply topics related to business analytics. A major focus is placed on the importance of collecting and analyzing data by creating models for making better decisions and improving business practices and strategies. Topics covered include descriptive analytics, predictive analytics, and prescriptive analytics. Students learn to apply business analytic tools, and to communicate the results. Emphasis is placed on applications, concepts and interpretation of results.

Prerequisite: BANA 2372 or MATH 1342.

## MGIS 4330. Business Database Management II. 3 Hours.

Students are provided knowledge and skills for database design, development, and implementation in a multi-user business environment, using a database management system (DBMS). Structured Query Language (SQL), a database procedural language, and other current technologies are covered in the context of DBMS.

Prerequisite: MGIS 3330.

## MGIS 4340. Systems Analysis & Design. 3 Hours.

Students acquire knowledge and skills for analyzing an organization's information needs and designing, evaluating, and implementing computer-based information systems using a structured approach. Special attention is given to understanding the needs of an organization and translating those needs into a solution recommendation following project management best practices and a structured methodology. Course Equivalents: MGIS 3360 Prerequisite: MGIS 3310.

#### MGIS 4350. Business Network Management. 3 Hours.

Students learn the current and emerging telecommunications services and networking technologies with emphasis on their strengths, limitations, and business applications. In addition, students investigate aspects of installing and managing networks within business organizations. Covered topics may include commonly used network media, operating systems, LAN and WAN technologies, inter-networking approaches, and media.

Prerequisite: MGIS 3310.

## MGIS 4360. Design and Implementation of Enterprise Resource Planning. 3 Hours.

Students study the types of issues that managers need to consider in implementing cross-functional integrated systems. Students learn the general nature of enterprise computing, re-engineering principles, and the technical foundations of client/server systems and enterprise information architectures. Topics may include the tools and methodology, modules, processes, industry initiatives, and different types of enterprise information systems, primarily SAP ERP.

Prerequisite: MGIS 3310.

## MGIS 4365. Business Process Integration Using ERP System Configuration. 3 Hours.

Students gain an understanding and appreciation of the role that Enterprise Resource Planning (ERP) systems play in today's business environment. Students use an ERP system to gain an understanding of Business Process Implementation and how an entity's different functions are integrated and focused on accomplishing a common goal. Practical aspects of configuring an ERP system will also be explored.

Prerequisite: MGIS 3310 or ACCT 3324.

# MGIS 4389. Internship. 3 Hours.

Students are provided with an opportunity to apply academic skills in a practical work environment. (See Internship Coordinator prior to enrolling.) All internships must be approved in advance in order to receive credit.

Prerequisite: Department approval and minimum overall and COBA GPA of 2.5.