MMIS Course Description

MIS 520: Management Information Systems (3-0-3)

This course provides students with a holistic view of the managerial and technical implications of information systems within the global business context, including the development, use, and implication of enterprise systems, business intelligence, e-commerce, etc. The course also addresses all key issues in managing information systems in advanced industrial states with sensitive attention to cross-cultural differences, including user and organizational resistance to information systems, strategies, and methods for developing and managing information systems.

MIS 521: Digital Transformation (3-0-3)

This course is designed to provide students with a comprehensive understanding of digital transformation; identify why platforms beat products, and how to make their business a platform. It also focuses on giving students the opportunity to work with real-life platform-related business ideas and case studies. The course, therefore, empowers students to define and recognize disruption in its various forms with the most common disruption strategies. It allows students to identify challenges associated with platforms, differentiate between successful and unsuccessful platforms, and discover why some incumbents are unable to adapt to disruption.

MIS 522: Database Management and Design (3-0-3)

The database is the backbone of the Information System, and organizes the data in a way that people find meaningful and structured; therefore, this course introduces students to database management systems and practices various steps of database-driven application development, such as modeling, design, querying, and implementation. This course also covers topics such, but not limited to, data resource management concepts, database support for various levels of management, relational database model, database life cycle, conceptual data modeling, database logical and physical design, database integrity, database languages, and technologies, and data and database administration.

MGT 523: Organizational Theory and Culture (3-0-3)

This course will provide students with an overview of major management concepts and organization theory with an emphasis on understanding human behavior in organizational contexts and solving managerial problems. In this course, students will develop conceptual, diagnostic, and personal skills to help them deal with human interaction in complex organizations. The course will compare and contrast a number of behavioral theories that deal with a range of topics, including motivation, individual and team development, leadership, decision-making, personal perception, ethics, conflict, power/politics, workforce culture, diversity, creativity, and the organizational psyche.

MIS 524: Business Analytics (3-0-3)

Successful management information system leaders and strategists are increasingly turning towards business analytics to help develop evidence-based information systems that improve organizational performance and deliver competitive advantage. In this course, students will learn a number of data collection techniques, and analysis methods, and explore ways in which data can be better visualized and presented in a clear and compelling manner. As well, students will be able to analyze and interpret an organization's performance measures and articulate sound and effective information system strategies and solutions that optimize organizational goals.

MIS 525: Systems Analysis and Design (3-0-3)

This course reflects the information explosion of recent years, the new technological advances in information systems, and the exponential growth in electronic business processes. Students learn how to develop systems requests, and undertake feasibility assessments and works plans for system development projects. Students learn to represent graphically, the features of information systems with data flow diagrams, and class diagram diagrams, and to apply Unified Modeling Language diagrams to system analysis. Overall, this course examines how IT supports business requirements in changing environments, given emerging IT capabilities and legal and ethical considerations.

MIS 526: Enterprise Systems for Management (3-0-3)

This course provides students with a comprehensive understanding of enterprise systems and shows how organizations can use enterprise systems to run their operations more efficiently and effectively. In this course, the students will develop an appreciation of the managerial aspects related to the selection and implementation of enterprise systems. The students will learn also, the approaches taken in enterprise systems implementation, and change management techniques to utilize when an organization is undergoing enterprise systems implementation. The course covers also the core skills for enterprise architects, addressing the structuring and delivery of IT services in organizations. *Prerequisite: MIS 520*

MIS 527: Data Communications and Networks (3-0-3)

This course is designed to help students develop a comprehensive understanding of network architecture, design, the layering concept, and how data transfers between devices. Details of layering, differences between the OSI and TCP/IP model, routing algorithms, performance, resource allocation, management, security, and other contemporary issues related to networks are discussed. Standard communication protocols are introduced and analyzed such as HTTP(S), DNS, TCP/ UDP, TCP/IP, RSVP, and SNMP. Protocols and algorithms are introduced and their performance is analyzed. *Prerequisite: MIS 520*

MIS 528: Financial Information Systems (3-0-3)

This course shows students how modern financial markets function as a network of systems and information flows. It emphasizes how information technology is used to support decision-making, facilitate payments and settlement mechanisms, enable financial markets, such as exchanges, and support inter-institution communication. It also highlights how traders, analysts, and risk managers use systems to cope with the vast amounts of data on the economy, markets, and customers that flow into their systems each day. It covers automated trading systems, customer-oriented analytic systems, and other decision-support tools. *Prerequisite: MIS 520*

MIS 529: Information Systems Security (3-0-3)

The course provides a broad review of information security (InfoSec), background on many related InfoSec elements, and enough detail to facilitate an understanding of the InfoSec topic as a whole. It covers the terminology of the field and strategies for managing an information security program. The course also emphasizes topics of InfoSec, such as, but not limited to, security planning, risk management, technical security (e.g., access controls, firewall, VPN, IDS, IPS), and cryptography. *Prerequisite: MIS 527*

MIS 530: Graduate Research Project (3-0-3)

In this project, MIS students, under the supervision of their faculty advisors, are expected to design, implement, and present a research project. This is a semester-long project in which a research issue is defined, research methodology is established, appropriate data analysis is undertaken, and defensible conclusions/findings are drawn. The requirements for this research

project are flexible enough to encourage students to attempt a wide range of MIS topics and approaches that are intended to deepen students' understanding of MIS applications in business and various business environments. *Prerequisite: 21 Credits*