CIS Graduate Courses

CIS 5318 Information Technology in the Digital Economy. (3-0) Provides an understanding of the issues involved in the strategic management of the information assets of organizations. Examines the issues and challenges that users face within the Information Technology (IT) management arena as part of a firm's business and IT strategy. Focus is on managerial rather than technical issues. Prerequisite: B A 5351.

CIS 5355 Database Management Systems. (3-0) Explores the concepts, principles, issues, and techniques for managing corporate data resources using database management systems. The course includes techniques for analysis, design, and development of database systems, creating and using logical data models, database query languages, and procedures for evaluating database management software. Students will use a relational database management system to develop a management information system.

CIS 5356 Business Telecommunications. (3-0) Explores the technology that is revolutionizing the manner in which business and government conduct their operations and the effects new developments in communication media have on computing systems. This course reflects the current state-of-the-art in data communication networking.

CIS 5358 IT Systems Project Management. (3-0) An in-depth study of the project management body of knowledge as applied to information Technology with an emphasis on the management of scope, costs, schedules, quality, and risks. Includes program management, system methodologies, material procurement, and human, cultural, and international issues and their impact on the organization.

CIS 5360 E-Commerce: Strategies, Technologies, and Applications. (3-0) This course is designed to familiarize students with current and emerging e-commerce technologies. Topics include Internet technology for business advantage, reinventing the future of business through e-commerce, business opportunities in e-commerce, and social, political, global, and ethical issues associated with ecommerce.

CIS 5364 Data Warehousing and Mining. (3-0) Familiarizes students with current and emerging data warehousing and mining technologies that are likely to play a strategic role in business organizations. Topics include data mining techniques, data warehouse development life cycle, data warehouse navigation, data quality, and performance issues. Prerequisites: QMST 5334, QMST 2333 or equivalent.

CIS 5368 Information Security. (3-0) This course covers the analysis, design, development, implementation, and maintenance of information security systems. Topics include legal, ethical, professional, personnel issues; risk management; technology; cryptography; and physical security.

CIS 5370 Enterprise Resource Planning. (3-0) The use of information technology for integrating an enterprise for operational control and strategic business intelligence is examined via ERP applications. Managerial issues surrounding the selection, design, and implementation of ERP systems are emphasized.

CIS 5390 Special Topics in Computer Information Systems. (3-0) Selected topics in computer information systems. Repeatable for credit with different topic and the approval of graduate advisor.

CIS 5390A Special Topics in Computer Information Systems – Business Process Modeling. (3-0) A study of tools and techniques for analyzing requirements of business process oriented systems. This course emphasizes a model driven approach and its usage for developing information controls. Unified Modeling Language (UML) is introduced to specify the user/system interaction, business logic, and data storage.

CIS 5390B Special Topics in Computer Information Systems – Business Intelligence Project. (3-0) Development of a system used for the implementation of analytics to diverse areas of interest, including: marketing, financial risk analysis, quality management in manufacturing health care management, and geographic information systems. Prerequisite: CIS 5355, CIS 5364.

QMST 5332 Quantitative Methods. (3-0) A study of management science/operations research emphasizing theory and applications of evaluative, predictive, and optimizing models as applied to the management of product and service-oriented operations.

QMST 5334 Advanced Statistical Methods for Business. (3-0) The course provides the quantitative foundation for business analysis and decision making. Topics include: regression analysis, mathematical programming, simulation and other analytical/modeling techniques with wide applicability in decision-making and problem solving in all functional areas of business. Prerequisite: B A 5353.

QMST 5335 Introduction to Forecasting and Simulation. (3-0) Introduction to the concepts and principles of forecasting and simulation techniques as applies to planning and decision making in organizations. Topical coverage includes time series forecasting, casual forecasting, discrete event simulation, and continues-event simulation techniques.