Management Information Systems (MISY)

Courses

MISY 1305 Business Computer Applications: 3 semester hours.
The course explores living and communicating in a digital world. It includes selection and use of different types of computers, desktop and mobile, and their supported applications; an examination of the advantages and pitfalls of cloud computing and social networking; and projects designed to promote collaborative communication using multimedia and web technology with attention to formal and informal code of conduct.

MISY 2301 Fundamentals of MIS with ERP: 3 semester hours.
Overview of information systems including software and hardware issues, database management, enterprise systems, and organizational and managerial issues of fundamental business processes and functional areas, such as sales, production, accounting etc., and how they interact with an enterprise system; emphasis on hands-on learning using ERP.
Prerequisites: MISY 1305 or MISY 1013.

MISY 2315 Object-Oriented Programming Applications in Business: 3 semester hours.
This course covers the fundamental concepts of object-oriented programming as they apply to real-world business problems. Emphasis is given on the development of object-oriented program logic and design in solving programming problems in business.
Prerequisites: MISY 2301 or MISY 2013.

MISY 3311 Introduction to Crisis Informatics: 3 semester hours.
Use of information and communication technologies (ICT) in crisis management; examines how information is managed, organized, coordinated, and used for crisis management; analyzes information needs and seeking behaviors during a crisis; explores how ICT can support organizations/communications in a crisis.
Prerequisites: MISY 2301 or MISY 2013.

MISY 3332 Networking: 3 semester hours.
Specific topics include the introduction to core network concepts, network standards, physical layer propogation, Ethernet PC network, telephony and various LAN (Local Area Network) technologies, WAN (Wide Area Networks), internet working, wireless networking, network security, and network management.
Prerequisites: MISY 2301 or MISY 2013.

MISY 3339 Information Systems Internship I: 3 semester hours.
Supervised full-time training in industry, government or other agencies for junior-level information systems majors. Individual conferences, company performance evaluations and written reports required. The duration of the program will be one regular semester or two consecutive summer terms.
Prerequisites: MISY 2301 or MISY 2013.

MISY 3341 Business Database Applications: 3 semester hours.
The course provides a solid foundation in database concepts and design as they apply in business. It covers principles of conceptual as well as relational designs and includes translation of business requirements into entity relationship diagrams, normalization of tables and advanced SQL to address specific business problems.
Prerequisites: MISY 2301 or MISY 2013.

MISY 3342 System Analysis & Design: 3 semester hours.
Methods, techniques, and tools involved in information systems analysis and design and project management in enterprises with exposure to traditional methodologies like systems development life cycle, and alternative methodologies like object-oriented and agile methodologies; hands-on experience of analysis and design on problem-solving and modeling software tools.
Prerequisites: MISY 2301 or MISY 2013.

MISY 3343 JAVA Applications in Business: 3 semester hours.
The course covers the fundamental concepts of object-oriented programming (OOP) using Java language and emphasizes basic programming skills using hands-on practices. Intensive exploration of Java programming environment.
Prerequisites: MISY 2315 or MISY 2153.

MISY 3399 Independent Study in MIS: 3 semester hours.
Supervised reading, research, and/or field work on selected topics in management information system (MIS).
Prerequisites: MISY 2301 or MISY 2013.

MISY 4332 Enterprise Cybersecurity: 3 semester hours.
The course will provide students with essential knowledge in data security and the technology involved in securing data. It will also provide a forum to bring in current issues in the MIS area such as information security; big data, mobile/wireless technology, cloud computing and project management. Students will gain insight into the importance of cybersecurity and the integral role of cybersecurity professionals in data security. Cross-Listed Course: CRIJ 4333
Prerequisites: MISY 3332 or MISY 3323.

MISY 4335 Information Technology Project Management: 3 semester hours.
Concepts, tools and techniques involved in Information Technology (IT) project management are presented. Focus will be on the five phases of project management: Initiating, Planning, Executing, Controlling, and Closing, and the nine project management knowledge areas: Integration Scope, Time, Cost, Quality, Human Resources, Quality, Risk.
Prerequisites: MGMT 3310 or MGMT 3103 and (MISY 2301 or MISY 2013).

MISY 4345 Special Topics in MIS: 3 semester hours.
The course provides a forum to bring in current issues in the MIS area such as information security, data mining, mobile/wireless technology and IT project management. Topics may vary from semester to semester and course can be repeated.
Prerequisites: MGMT 3310 or MGMT 3103 and (MISY 3332 or MISY 3323).

MISY 4354 Predictive Analytics: 3 semester hours.
The course involves important aspects of decision-making process in business such as business intelligence and data analytics. It would explore relationship discoveries in data as well as prediction of future outcomes using probabilities and trends. Students will be exposed to relevant topics such as business intelligence, data warehousing, big data, data mining, regression analysis, forecasting, and simulation.
Prerequisites: (MISY 3341 or MISY 3413) and (MGMT 3301 or MGMT 3013).

MISY 4399 Independent Study: 3 semester hours.
Reading, research, and/or field work on selected topics.

MISY 5310 Management Information Systems: 3 semester hours.
Foundational understanding of IS functions in relation to other business functions; current and emerging technologies; managerial and organizational understanding of IS functions within a networked or virtual organization; introduction to computer application software used by contemporary managers.

MISY 5331 Crisis Informatics: 3 semester hours.
The course explores the use of information and communication technologies (ICT) in crisis management. In particular, it examines how information (including social media data) is managed, organized, coordinated, and used for crisis management. This course also analyzes information needs and seeking behaviors during a crisis, and explores how ICT can support organizations/communities in a crisis.
Prerequisites: MISY 5310 or MISY 5103.

MISY 5332 Data Com and Network: 3 semester hours.
Integration of business management with data communications and networking core concepts such as fundamentals of data communication, various networking architectures and design, communication circuits and communication protocols.
Prerequisites: MISY 5310 or MISY 5103.

MISY 5341 App Database Management: 3 semester hours.
Concepts, tools, and technologies associated with the design, implementation and management of large databases for organizational effectiveness. Emphasis on the application aspect of databases.
Prerequisites: MISY 5310 or MISY 5103.

MISY 5342 Info Syst Analysis: 3 semester hours.
Focus on project planning, analysis, design, and implementation techniques, with an emphasis on the development of computer systems.
Prerequisites: MISY 5310 or MISY 5103.

MISY 5347 Bus Intelligence and Analytics: 3 semester hours.
Covers relevant topics such as intelligence, data analytics, big data, business process, OLAP, data warehousing, data marts, data mining, and data access tools.
Prerequisites: MISY 5310 or MISY 5103.

MISY 5353 Special Topics in MISY: 3 semester hours.
The course provides a forum to bring in current issues in the MIS area such as project management, information security, data mining, etc. Topics may vary from semester to semester.
Prerequisites: MISY 5310 or MISY 5103.