MANAGEMENT INFORMATION SYSTEMS (MIS)

MIS 173 - Introduction to Business Analytics (3.0 hours)
Develop spreadsheet applications for analyzing and solving problems. Learn how to gather, store, organize, secure and disseminate data with spreadsheets and databases. Learn how to convert data into information that is beneficial to supporting business decisions.

MIS 272 - Business Analytics Tools and Techniques (3.0 hours)
Students will learn commonly used data analysis tools and techniques. They will learn how to use and apply software that allows business professionals to gather, store, access, and analyze data to aid in decision making. The course will teach students how to discover and communicate information from data through the use of basic, intermediate, and advanced functions and tools in commonly used spreadsheet and database software. Each student will learn about the visual representation of data, optimization techniques, queries, pivot tables, reporting tools, data storage, and more.
Prerequisite: MIS 173 or consent of department chair

MIS 279 - Personal Security and Privacy (3.0 hours)
Core Curriculum: GP,GS
Gives students an understanding of how the dynamic global environment and contemporary technology impacts personal security, privacy, and liberty. Studies threat modeling, proper account practices, data collection methods, and vulnerabilities in digital and physical environments. Application of security measures and privacy enhancing technologies to address various use cases.

MIS 289 - Topics in Management Information Systems (1.0-3.0 hours)
Topics of special interest in management information systems, which may vary each time the course is offered. Topic and prerequisite stated in current Schedule of Classes. May be repeated under different topics for a maximum of six hours credit.

MIS 373 - Applied Networking (3.0 hours)
Gives students an understanding of basic network design concepts and an opportunity to apply them in a business context. Studies the functionality, performance and management of multiple network designs. Application of the theories, design and technologies utilized in modern business data communications networks.
Prerequisite: 42 hours

MIS 374 - Database Management and Administration (3.0 hours)
Introduces the fundamental concepts of database analysis, design, and implementation with emphasis on the relational model. Topics include SQL, data modeling, data normalization, tables, queries, data mining, security, database administration, and backup/recovery.
Prerequisite: MIS 272 and 42 hours

MIS 375 - Business Systems Analysis and Design (3.0 hours)
Core Curriculum: WI
Information systems in business applications. Emphasis on relationship of information systems planning to overall business goals, policies, plans, management style, and industry condition; analysis, design, and implementation of information systems. Overview of future trends in data management.
Prerequisite: MIS 272 and junior standing.

MIS 379 - Information Systems Security (3.0 hours)
An introduction to the various technical and administrative aspects of information security and assurance. Provides the foundation for understanding the key issues associated with protecting information assets, determining the levels of protection and response to security incidents, and designing a consistent, reasonable information security system, with appropriate intrusion detection and reporting features.
Prerequisite: Junior standing.

MIS 389 - Advanced Topics in Management Information System (1.0-3.0 hours)
Advanced topics of special interest in management information systems, which may vary each time the course is offered. Topic and prerequisite stated in current schedule of classes. May be repeated under different topics for a maximum of six hours credit.

MIS 471 - Applied Machine Learning for Business (3.0 hours)
Explores data analysis and statistical methods as well as best practices for continuous iterative investigation of past business performance to gain insights and drive business planning. Exposes the students to several aspects of Business Analytics. Investigates data analytics fundamentals, data cleansing and transformation, and supervised/unsupervised data mining techniques for tasks like targeted mailing campaigns, customer segmentation, customer churn, fraud detection and market basket analysis.
Prerequisite: Q M 262 or MTH 111 or MTH 325

MIS 473 - Data Visualization for Business Analytics (3.0 hours)
Visual illustration of how to better understand data, present clear evidence of findings to an intended audience, and tell appealing stories through data graphics. The topics covered include but are not limited to: design principles, multivariate displays, geospatial displays, dashboards, interactive and animated displays. Some knowledge of basic programming (in any language) will be helpful, but not required. We will use several tools to refine our data and create, edit, alter, and display their visualizations.
Prerequisite: MIS 272

MIS 479 - Topics in Management Information Systems (3.0 hours)
Topics of special interest which may vary each time course is offered. Topic and prerequisite stated in current Schedule of Classes. May be repeated under different topics for a maximum of six hours credit.
Prerequisite: stated in current schedule of classes

MIS 483 - Advanced Ethical Hacking (3.0 hours)
Core Curriculum: EL
Provides students with hands-on experience with all phases of a security assessment for a live client. Students are responsible for planning the assessment, executing assigned tasks, and reporting results. Repeatable to a maximum of 6 hours.
Prerequisite: MIS 373 or CIS 430, and MIS 379 or CIS 435, or permission of Instructor

MIS 490 - Capstone Project for Business Analytics (3.0 hours)
Core Curriculum: EL
Applies the concepts and skills learned by Business Analytics undergraduate students. Students are required to work on a team with a business client on an analytics project.
Prerequisite: MIS 471 and MIS 473

MIS 499 - Independent Studies in Management Information Systems (1.0-3.0 hours)
Studies undertaken by academically qualified students under the guidance of a faculty member, with the approval of the chair of the Department of Entrepreneurship, Technology, and Law. May be repeated under different topics for a maximum of six hours credit.
Prerequisite: Stated in current schedule of classes

MIS 571 - Applied Machine Learning for Business (3.0 hours)
Explores data analysis and statistical methods as well as best practices for continuous iterative investigation of past business performance to gain insights and drive business planning. Exposes the students to several aspects of business analytics. Investigates data analytics fundamentals, data cleansing and transformation, and supervised/unsupervised data mining techniques for tasks like targeted mailing campaigns, customer segmentation, customer churn, fraud detection and market basket analysis.
Prerequisite: A statistics course and consent of the department chair. May not register for MIS 571 if credit earned for MIS 471

MIS 572 - Information Systems Management (2.0 hours)
Knowledge and application of information-related resources from a management perspective: identifying information needs, strategic uses of information systems, emerging information technologies, legal issues in information technology, managing information resources effectively.
Prerequisite: Foster College of Business Graduate Student or Consent of Associate Dean.

MIS 573 - Data Visualization for Business Analytics (3.0 hours)
Visual illustration of how to better understand data, present clear evidence of findings to an intended audience, and tell appealing stories through data graphics. The topics covered include but are not limited to: design principles, multivariate displays, geospatial displays, dashboards, interactive and animated displays. Some knowledge of basic programming (in any language) will be helpful, but not required. We will use several tools to refine our data and create, edit, alter, and display their visualizations. Cross-listed with MIS 473. The graduate level course will have additional requirements beyond those of the undergraduate course.
Prerequisite: May not register for MIS 573 if credit earned for MIS 473.

MIS 590 - Capstone Project for Business Analytics (3.0 hours)
Applies the concepts and skills learned by data science and analytics graduate students. Students are required to work on a team with a business client on an analytics project.
Prerequisite: Consent of the Department Chair

MIS 658 - Topics in Management Information Systems (1.0-6.0 hours)
Topics of special interest, which may vary each time the course is offered. May be repeated under different topics for a maximum of six (6) hours credit. Topic stated in current Schedule of Classes.
Prerequisite: Stated in current Schedule of Classes

MIS 660 - Readings in Management Information Systems (1.0-6.0 hours)
Individual readings in Management Information Systems for qualified students, under the guidance of a member of the faculty. Repeatable to a maximum of 6 credit hours.
Prerequisite: Advancement to candidacy; consent of instructor and director of graduate programs