

MANAGEMENT INFORMATION SYSTEMS (MIS)

MIS 215 | Data Visualization and Analytics | 3 cr

Explores data visualization and analytics using data sets from applications ranging from social sciences and business to natural sciences and healthcare. Introduces multiple tools for data visualization and analytics.

Prerequisites: Sophomore standing.

Offered: Spring.

MIS 220 | Information Technology Foundations | 3 cr

Covers foundations in computer software, hardware, business applications, projects, and careers. Introduces project management and web page development including markup languages and style sheets.

Prerequisites: MATH 104 or MATH 111.

Offered: Occasionally.

MIS 221 | Business Programming I | 3 cr

Provides conceptual and practice-oriented approaches to defining a business problem, designing and testing solution logic, implementing and coding the logic through sound structured programming techniques. Uses the Python programming language to develop programs that are robust and easy to maintain.

Prerequisites: MATH 104 or MATH 111.

Offered: Spring.

Meets: Natural Science:MIS

MIS 290 | Special Topics in Management Information Systems | 3 cr

Selected topics in management information systems. Subject matter varies.

Prerequisites: Dependent on subject matter.

Offered: Occasionally.

MIS 320 | Management Information Systems | 3 cr

Examines the computer as a problem-solving tool, as part of data processing systems, MIS and decision support systems; information systems planning and development; explores database management, networking and web technologies; project management.

Prerequisites: ACCT 201; completion of a minimum of 54 credits; business major/minor.

Offered: Fall, Spring.

MIS 322 | Business Programming II | 3 cr

Introduces object-oriented programming; covers the basics of creating classes, encapsulation, constructors, error handling, polymorphism, and inheritance; writing programs using classes and relational databases.

This course may be offered online.

Prerequisites: MIS 221.

Offered: Fall.

MIS 327 | Cloud Computing in Business | 3 cr

Introduces fundamental principles of computer networks, hardware, facilities, and related equipment/processes used to support IT services. Covers multiple cloud computing technology platforms for business applications.

Prerequisites: MATH 104 or MATH 111; completion of a minimum of 60 credits; business major/minor.

Offered: Fall.

MIS 328 | Database Management Systems | 3 cr

Investigates data modeling techniques including object-oriented modeling, database systems concepts, and use of structured query language for information processing, client/server architecture, distributed databases. Includes hands-on exercises with different database platforms.

Prerequisites: MIS 221; completion of a minimum of 60 credits, business major/minor.

Offered: Fall.

MIS 422 | Internet Programming | 3 cr

Explores web-based application development using Active Server Pages and web services, database connectivity, graphical user interfaces, event-driven software, and the development of server-side programs. Not open to students with credit in CIS 626. Multi-career cross-listing: CIS 626.

Prerequisites: MIS 320, 322.

Offered: Occasionally.

MIS 424 | Advanced Business Data Communications | 3 cr

Explores fundamentals of transmission protocols and network services; setting up and configuring network protocols, routing, security, and networking services such as name resolution and dynamic addressing. Multi-career cross-listing: CIS 624.

Prerequisites: MIS 327; business major/minor.

Offered: Occasionally.

MIS 425 | Systems Analysis and Design | 3 cr

Examines agile methodologies, system development using the life cycle, rapid application development, prototyping, software acquisition, structured and object-oriented techniques and project management.

Requires use of current software packages for analysis and design.

Community-based learning designation. Multi-career cross-listing: CIS 625.

Prerequisites: MIS 328; PMGT 341 or concurrent registration; business major/minor.

Offered: Spring.

Meets: Community Based Learning

MIS 428 | IS Planning and Project Management | 3 cr

Examines information systems (IS), IS projects and information technology (IT) from the perspective of IT management and upper management. Exposes students to common IS used in organizations.

Prerequisites: MIS 425 or concurrent registration; completion of minimum 54 credits; business major/minor.

Offered: Occasionally.

MIS 431 | Advanced Data Analytics | 3 cr

Covers advanced data analytics programming techniques such as knn, neural networks, decision trees, and random forests using programming techniques in R and Python.

Prerequisites: MIS 215, MIS 221, QM 310.

Offered: Spring.

MIS 490 | Special Topics in Management Information Systems | 1-3 cr

Selected topics in management information systems. Subject varies; see current course schedule.

Prerequisites: Dependent on subject matter.

Offered: Occasionally.

MIS 494 | Internship | 1-3 cr

Designed to provide actual or quasi on-the-job learning experiences in which a student works with a single sponsoring organization in either the public or private sector under the supervision of a faculty member. Credit/no-credit grading basis.

Prerequisites: As provided in guidelines and policies available in Business Department; consent of instructor; department chair approval.

Offered: Fall, Spring, Summer.

MIS 499 | Independent Study | 1-3 cr

Designed to provide qualified students with an opportunity to conduct research projects in an appropriate area of management information systems under the supervision of a faculty member. Six hours credit maximum.

Prerequisites: As provided in guidelines and policies available in Business Department; consent of instructor; department chair approval.

Offered: Fall, Spring, Summer.