

# Management Information Systems Minor

(open to all non-business and business majors)

- Do you enjoy working with computers?
- Do you want to solve business problems?
- Do you want to develop solutions to business problems using computers?

The **Management Information Systems Minor** will help you prepare to create and manage the information systems essential to today's technological business world.

## Learn how to:

- Analyze business problems and develop solutions with computer technology.
- Design, build, and maintain computer, web, and mobile applications.
- Design, configure, and manage corporate computer networks.
- Manage large volumes of business data with databases.
- Improve the bottom line with information systems.

The **Management Information Systems Minor** can help prepare you for exciting career opportunities such as:

Applications Developer  
Network Administrator  
Software Specialist  
Systems Analyst

Database Analyst  
Network Analyst  
Software Support Specialist  
Tech Support Specialist

Database Manager  
Programmer Analyst  
Web Developer  
Web Master

And, with experience, it can help prepare you for executive roles such as:

Director of Information Systems    Chief Information Officer

Using computer technology to manage information systems is integral to almost all organizations. The **Management Information Systems Minor** offers courses focused on making computer technology a key competitive advantage for a business.

## Ready to Become a Management Information Systems Minor?

- Talk with your academic advisor to see how the minor will impact your academic plan.

## Have questions about the minor?

Please contact:

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# Management Information Systems Minor Requirements (open to all non-business and business majors)

## Management Information Systems Minor Core Courses

All students in the **Management Information Systems Minor** will complete six core courses (18 semester hours) designed to develop fundamental knowledge and skills in information systems:

**BUS 1950 Computer Concepts and Applications for Business.** A study of computer concepts, including the information processing cycle, file organization, telecommunications, and operating systems and systems software. Applications software, including spreadsheets, databases, word processing, presentation graphics, computer communications, and operating systems with graphical user interfaces.

**BUS 3500 Management Information Systems.** An introduction to MIS by management level. Special emphasis is given to database design and use. Other topics include: telecommunications, types of IS, approaches to systems development and security. **Prerequisites & Notes:** BUS 1950 with C or better, MAT 2120G (may be taken concurrently), or permission of the Chair, School of Business.

**MIS 2000 Business Analytics Programming.** This course covers many aspects of programming for data science and analytics, including syntax, data collection, data storage, and basic data visualization using Python language. Python libraries related to business analytics are introduced. Students are expected to work with software sharing platforms to develop and modify Python code for business analytics.

**MIS 3200 Networking Fundamentals.** Study of business telecommunications, teleprocessing, and computer networks. Installing, configuring and administering local area networks. **Prerequisites & Notes:** Sophomore standing, BUS 1950 with C or better, or permission of the Chair, School of Business.

**MIS 4760 Systems Analysis, Design, and Development.** Study of information systems analysis and design. This course emphasizes requirements determination, modeling techniques, development, implementation, and maintenance strategies. Includes project management techniques and the use of Computer Aided Systems Engineering (CASE) tools. **Prerequisites & Notes:** Junior, Senior or Graduate standing, MIS 2000 with C or better and BUS 3500 with C or better, or CSM 3870, or CSM 2170 with a C or better and CIT 2773 with a C or better, or permission of the Chair, School of Business.

**MIS 4770 Database and Data Management.** Study of database structures, design, and development. Includes the use of CASE tools and enterprise database management systems. Topics include: Data normalization, data definition language, data manipulation language, data integrity, database applications development, and data mining. Credit will not be granted for both MIS 4770 and CSM 3950. **Prerequisites & Notes:** BUS 3500 with C or better, or CIT 2773 (AET 4163), or CSM 3870, or permission of the Chair, School of Business.

## Management Information Systems Minor Elective Courses

To complete the **Management Information Systems Minor**, students will take one additional courses (3 semester hours) approved as electives for the minor from the list below:

CSM 2670	Object Oriented Programming
CSM 3870	Data Structures
MIS 3300	Business Programming in COBOL.
MIS 3330	Java Programming.
MIS 3505	Advanced Microcomputer Applications and Development.
MIS 3530	Business Web Site Design.
MIS 3970	Study Abroad. (maximum of 3 hours)
MIS 4275	Internship in Management Information Systems. (maximum of 3 hours)
MIS 4330	Advanced Java Programming.
MIS 4530	Web & Mobile Application Development.
MIS 4600	Special Topics in Management Information Systems. (maximum of 3 hours)
MIS 4700	Advanced Networking.
MIS 4740	Independent Study. (maximum of 3 hours)
MIS 4850	Systems Security.
MIS 4860	Ethical Hacking & Network Defense
OSC 3430	Enterprise Resource Planning Systems.
OSC 4820	Business Analytics and Data Mining.

