MANAGEMENT INFORMATION SYSTEMS

Based on 2021-22 Undergraduate Catalog

MANAGEMENT INFORMATION SYSTEMS AS AN UNDERGRADUATE MAJOR

Management Information Systems (MIS) applies information technology to business problems with an emphasis on finding solutions. MIS focuses on using information and communication technologies to support management at all levels and in all business areas (accounting, finance, marketing, human resources and operations management) with the information they need for planning, control and decision making. MIS also considers how managers and knowledge workers actually use information and how system specialists and end users interact during the analysis, design, implementation and on-going use of information systems. MIS experts aim to bridge the gap between information technology and people's needs. MIS emphasizes application software development and the business context in which an information system exists, instead of the technical side of hardware and software.

MAJOR REQUIREMENTS FOR A BACHELOR OF SCIENCE IN MIS

To fulfill the requirements for the major in MIS, students must be admitted to major standing, complete the core program and complete a minimum of 27 credits, as specified below, with a C or better in each course.

REQUIRED IN THE PRE-CORE

SBC 1990 ACHIEVE I
SBC 2990 ACHIEVE II
MIS 1000 Business Problem Solving with IT

REQUIRED IN THE CORE

MIS 3000 Management Information Systems

REQUIRED MAJOR COURSES

MIS 3050 Information Technology Foundations
MIS 3140 Business Database Systems
MIS 4050 Business Systems Analysis and Design
MIS 4060 Managing Information Projects
MIS 3990 ACHIEVE III MIS

NO SPECIALIZATION – CHOOSE THREE ELECTIVES

MIS 4130 Networks
MIS 4140 Information Security Lab
MIS 4170 Practical Cyber Security Fundamentals
MIS 4180 IS Risk Analysis and Security Controls Development
MIS 4200 Electronic Commerce
MIS 4220 Business Object Development
MIS 4240 Business Application Architecture
MIS 4260 Business Application Technology
MIS 4410 Operations Analytics
MIS 4460 Business Analytics
MIS 4470 Practical Computing for Data Analytics
MIS 4500 Web Analytics
MIS 4560 Introduction to Data Science
MIS 4700 IS Security
MIS 4750 Mobile Security and Secure Application Development
MIS 4900 Advanced Topics in MIS
MIS 5460* Business Analytics
MIS 5630* Networks
MIS 5640* Network Management

5000 level courses are open to undergraduates upon approval by faculty coordinator for the Master of Science in Information Technology Management (MSITM) program.

BUSINESS ANALYTICS SPECIALIZATION

REQUIRED COURSES

MIS 4460 Business Analytics
and
MIS 4560 Introduction to Data Science, or
MIS 4470 Practical Computing for Data Analytics

CHOOSE ONE ELECTIVE

MIS 4410 Operations Analytics
MIS 4500 Web Analytics
QMM 4400 Management Science
QMM 4520 Forecasting
MIS 4900 Advanced Topics in MIS (prior approval needed)

INFORMATION SECURITY MANAGEMENT SPECIALIZATION

REQUIRED COURSES

MIS 4170 Practical Cyber Security Fundamentals

MIS 4180 IS Risk Analysis and Controls Development

CHOOSE ONE ELECTIVE

MIS 4130 Networks

MIS 4140 Information Security Lab

MIS 4700 IS Security

MIS 4750 Mobile Security and Secure Application Development

MIS 4900 Advanced Topics in MIS (prior approval needed)

MASTER OF SCIENCE IN INFORMATION TECHNOLOGY MANAGEMENT 4+1

The MSITM 4+1 is a combined bachelor/master degree program that provides high-achieving students an opportunity to complete a bachelor's and master's degree with an additional year of courses. Students who know they wish to pursue a graduate degree in MIS can save time and tuition costs through this exclusive program.

SKILLS AND ABILITIES

- Analysis for modeling complex business situations
- Business process modeling and redesign
- Communication (verbal and written)
- Interpersonal and team building
- Logical thinking and programming
- Project management and leadership
- Technology (Microsoft Visual Studio, VB, VBA, HTML, C#, ASP.Net, SQL)

RECOMMENDED MIS COURSE SCHEDULE

CAREER OPPORTUNITIES

Career opportunities for MIS graduates are outstanding. MIS positions reflect the continuing evolution in information technology with new job titles frequently appearing. For more information on careers please visit the Bureau of Labor Statistics at **bls.gov/OCO** or O*Net at **onetonline.org**.

DEPARTMENT OF
DECISION AND
INFORMATION SCIENCES

Elliott Hall, Room 440

Career Choices

- Business Intelligence Analyst
- Database Analyst/Developer/ Modeler
- E-Commerce Specialist
- Helpdesk/Technical Support Specialist
- IT/IS Business Analyst
- Network Engineer/Administrator
- Programmer Analyst
- Software Quality Assurance Specialist
- System Analyst
- Web Developer

Organizations that commonly employ MIS majors

- Blue Cross Blue Shield of Michigan
- Computer and Engineering Services
- Compuware
- Crain Communications
- Ford Motor Company
- IBM
- Inteva Products
- TEKsystems

JOB OPENINGS

Access thousands of job and internship postings at Handshake **(oakland.edu/careerservices/handshake)**. Handshake also provides the latest news from OU Career Services, exclusively for OU students and alumni.

MIS ORGANIZATIONS AT OU

AIS (Association for Information Systems), TALK (Technology and Leadership Keys), TEDxOaklandUniversity

For more information, visit: **oakland.edu/business/orgs**.

CAREER OUTLOOK

Starting Salary | $44,470 – $69,340

Mid-Career Salary | $85,380 – $142,530

National Growth | 11 – 24% by 2026

Data from the National Bureau of Labor and Statistics

FOR FURTHER INFORMATION

To help choose your area of interest, plan your future career goals and monitor your progress, you can visit the Oakland Business School Undergraduate Advising and Career Services Offices.

School of Business Administration Undergraduate Advising

Elliott Hall, Room 232 | 275 Varner Drive

(248) 370-3285 | **oakland.edu/business/advising**

School of Business Administration Career Services

Elliott Hall, Room 232 | 275 Varner Drive

(248) 370-3215 | **oakland.edu/business**

Career Services

Main Office

North Foundation Hall, Room 154 | 318 Meadow Brook Road

(248) 370-3250 | **oakland.edu/careerservices**

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