MANAGEMENT INFORMATION SYSTEMS, BACHELOR OF SCIENCE

Information is the lens through which we see the world. Information systems professionals use technology to put information to use to bring value to people, organizations, and societies. The Bachelor of Science in Management Information Systems degree provides students with the skills and educational background to develop & manage an organization's information resources, technology, and infrastructure.

Students pursuing a degree in Management Information Systems will learn how the computer-based information systems can be applied to improve organizational operations and decision-making, enhance products and services, and create new opportunities for business success. The study of information systems and quantitative analysis prepares students for career opportunities in business data management; data analytics, management information systems, systems analysis and design, decision support, information security, digital transformation, and other related areas.

Fast Track

The department of Information Systems and Quantitative Analysis (ISQA) has developed a Fast Track program for highly qualified and motivated students providing the opportunity to complete a bachelor's degree and a master's degree in an accelerated time frame. With Fast Track, students may count up to 9 graduate credit hours towards the completion of their undergraduate program as well as the graduate degree program. Students will work with both undergraduate and graduate advisors to ensure graduate classes selected will count toward both programs, should a student wish to earn a graduate degree in a separate College of Information Science & Technology (CIST) area than their undergraduate degree.

Program Specifics:

- This program is available for undergraduate students pursuing any CIST undergraduate degree desiring to pursue an MS in either the same or a related CIST field.
- Students must have completed no less than 60 undergraduate hours.
- Students must have a minimum undergraduate GPA of 3.0.
- Students must complete the Fast Track Approval form and obtain all signatures and submit to the Office of Graduate Studies prior to first enrollment in a graduate course.
- Students will work with their undergraduate advisor to register for the graduate courses.
- A minimum cumulative GPA of 3.0 is required for graduate coursework to remain in good standing.
- Students remain undergraduates until they meet all the requirements for the undergraduate degree and are eligible for all rights and privileges granted undergraduate status including financial aid.
- Near the end of the undergraduate program, formal application to the graduate program is required. All applicants will need to meet any other admission requirements established for the MS in selected CIST program. The application fee will be waived if the applicant contacts the Office of Graduate Studies for a fee waiver code prior to submitting the MS application.
  - Admission to Fast Track does NOT guarantee admission to the graduate program.
  - The admit term must be after the completion term of the undergraduate degree.

Contact

For more information, contact the College of IS&T Academic Advising Office at 402.554.3819.

Website (https://www.unomaha.edu/college-of-information-science-and-technology/academics/advising.php)

Management Information Systems, Bachelor of Science in Management Information Systems Requirements

A minimum of 120 credit hours is required for a Bachelor of Science degree in Management Information Systems. Thirty of the last 36 hours must be University of Nebraska at Omaha (UNO) courses. Registering for courses without having taken the stated prerequisites could result in administrative withdrawal.

To obtain a Bachelor of Science in Management Information Systems, a student must fulfill the University, College and Departmental requirements. Some courses may satisfy requirements in more than one area, but credit is awarded only once, thereby reducing the total number of credit hours for the degree to 120. (This total does not include prerequisites; students are accountable for all prerequisite courses.)

Code	Title	Credits
General Education Requirements - 34 Hours Required		
Minimum of "C-"required		
Fundamental Skills		**15**
Writing – 6 hrs.		
ENGL 1150	ENGLISH COMPOSITION I	
ENGL 1160	COLLEGE RESEARCH AND INFORMATION LITERACY	
Oral Communication – 3 hrs.		
CMST 1110	PUBLIC SPEAKING FUNDS	
or CMST 2120	ARGUMENTATION AND DEBATE	
Quantitative Literacy – 3 hrs.		
MATH 1120	INTRODUCTION TO MATHEMATICAL AND COMPUTATIONAL THINKING	
or MATH 1130	QUANTITATIVE LITERACY	
or MATH 1140	QUANTITATIVE REASONING FOR HEALTHCARE PROFESSIONALS	
or MATH 1300	COLLEGE ALGEBRA WITH SUPPORT	
Data Literacy – 3 hrs.		
Select one from the following:		
STAT 1100	DATA LITERACY AND VISUALIZATION	
STAT 1530	ELEMENTARY STATISTICS	
Until Fall 2028, students can satisfy this requirement with an approved data literacy course, or any approved natural or social science general education course.		
Breadth of Knowledge		**13**
Social Science – 3 hrs.		
Humanities – 3 hrs.		
Natural & Physical Science (must complete a lab) – 4 hrs.		
Arts – 3 hrs.		
Individual and Social Responsibility		**6**

Cultural Knowledge – 3 hrs.		
Civic Knowledge and Engagement – 3 hrs.		
MAJOR REQUIREMENTS - 75 Hours Required		
**Course will satisfy UNO's General Education requirement		
^Course requires pre-requisite(s)		
All of the following:		**60**
CYBR 1100	INTRODUCTION TO INFORMATION SECURITY (**)	
CIST 1300	INTRODUCTION TO WEB DEVELOPMENT (^)	
CIST 1400	INTRODUCTION TO COMPUTER SCIENCE I (^)	
MATH 1930	CALCULUS FOR THE MANAGERIAL, LIFE, AND SOCIAL SCIENCES (^)	
or MATH 1370	APPLIED ALGEBRA AND OPTIMIZATION WITH DATA ANALYSIS	
CIST 2100	ORGANIZATIONS, APPLICATIONS AND TECHNOLOGY (** ^)	
ACCT 2010	PRINCIPLES OF ACCOUNTING I (^)	
ACCT 2020	PRINCIPLES OF ACCOUNTING II (^)	
ECON 2200	PRINCIPLES OF ECONOMICS (MICRO) (**^)	
ECON 2220	PRINCIPLES OF ECONOMICS (MACRO) (**^)	
CIST 2500	INTRODUCTION TO APPLIED STATISTICS FOR IS&T (^)	
CIST 3000	TECHNICAL WRITING & COMMUNICATION FOR IS&T (^)	
CIST 3110	INFORMATION TECHNOLOGY ETHICS (**^)	
ISQA 3310	MANAGING THE DATABASE ENVIRONMENT (^)	
ISQA 3400	INFORMATION TECHNOLOGY INFRASTRUCTURE (^)	
ISQA 3420	MANAGING IN A DIGITAL WORLD (^)	
ISQA 3900	WEB APPLICATION DEVELOPMENT (^)	
ISQA 3910	INTRODUCTION TO PROJECT MANAGEMENT (^)	
ISQA 4110	INFORMATION SYSTEMS ANALYSIS (^)	
ISQA 4120	SYSTEM DESIGN AND IMPLEMENTATION (^)	
ISQA 4900	FULL STACK DEVELOPMENT (^)	
Business Co-Requirement - Select 1 course from the following:		**3**
ACCT 3080	ACCOUNTING INFORMATION SYSTEMS (^)	
ECON 3200	ECONOMIC THEORY: MICRO (^)	
ECON 3220	ECONOMIC THEORY: MACRO (^)	
ENTR 3710	ENTREPRENEURIAL FOUNDATIONS (^)	
FNBK 3250	PRINCIPLES OF FINANCIAL MANAGEMENT (^)	
MKT 3310	PRINCIPLES OF MARKETING (^)	
MGMT 4030	HUMAN RESOURCE MANAGEMENT (^)	
MGMT 4090	MANAGING COLLABORATIVE ENGAGEMENT (^)	
Specialization Courses – Select 12 credits from the following*:		**12**
ACCT 4060	ADVANCED MANAGERIAL ACCOUNTING (^)	
ACCT 4080	PRINCIPLES OF AUDITING (^)	
ACCT 4090	INFORMATION SYSTEMS AUDITING (^)	
ACMP 4360	METAVERSE INNOVATIONS	
CYBR 2600	SYSTEM ADMINISTRATION (^)	
CYBR 3600	CYBERSECURITY POLICY AND AWARENESS (^)	
CYBR 4360	PRINCIPLES OF SECURE SYSTEM DESIGN (^)	
CYBR 4540	COMPUTER SECURITY MANAGEMENT (^)	
CSCI 2850	PROGRAMMING ON THE INTERNET (^)	
CSCI 3830	ADVANCED JAVA PROGRAMMING (^)	
ISQA 3520	GRAPHICAL USER INTERFACE DESIGN (^)	
ISQA 4000	SPECIAL TOPICS: INFORMATION SYSTEMS & QUANTITATIVE ANALYSIS (^)	
ISQA 4010	BUSINESS INTELLIGENCE (^)	
ISQA 4060	SPECIAL TOPICS: INFORMATION SYSTEMS & QUANTITATIVE ANALYSIS (^)	
ISQA 4070	SPECIAL TOPICS: INFORMATION SYSTEMS & QUANTITATIVE ANALYSIS (^)	
ISQA 4100	INFORMATION SYSTEMS ARCHITECTURE AND ORGANIZATION (^)	
ISQA 4130	INFORMATION TECHNOLOGY FOR DEVELOPMENT (^)	
ISQA 4150	ADVANCED STATISTICAL METHODS FOR IS&T (^)	
ISQA 4160	ENTERPRISE RESOURCE PLANNING SOFTWARE CONSULTING (^)	
ISQA 4170	DIGITAL SUPPLY CHAIN & LOGISTICS (^)	
ISQA 4180	ELECTRONIC COMMERCE (^)	
ISQA 4190	PROCESS REENGINEERING WITH INFORMATION TECHNOLOGY (^)	
ISQA 4200	INFORMATION AND DATA QUALITY MANAGEMENT (^)	
ISQA 4300	DATABASE ADMINISTRATION (^)	
ISQA 4380	DISTRIBUTED TECHNOLOGIES AND SYSTEMS (^)	
ISQA 4500	SPECIAL PROBLEMS IN INFOMATION SYSTEMS AND QUANTITATIVE ANALYSIS (^)	
ISQA 4510	INFORMATION SYSTEMS INTERNSHIP (^)	
ISQA 4730	DECISION SUPPORT SYSTEMS (^)	
ISQA 4880	SYSTEMS SIMULATION AND MODELING (^)	
ISQA 4890	DATA WAREHOUSING AND DATA MINING (^)	
*This area may also be used to complete concentration requirements		
ELECTIVES		
#Elective hours as required to reach a total of 120 hours		

Optional Concentrations

Coursework taken to complete an optional MIS concentration also satisfies the 12 hours of specialization coursework within the MIS degree.

- Data Science Concentration (http://catalog.unomaha.edu/undergraduate/college-information-science-technology/information-systems-quantitative-analysis/management-information-systems-bs/data-science-conc/)
- Internet Technologies Concentration for MIS Majors (http://catalog.unomaha.edu/undergraduate/college-information-science-technology/information-systems-quantitative-analysis/management-information-systems-bs/internet-tech-conc/)

- i-Business Application Development and Management (http://catalog.unomaha.edu/undergraduate/college-information-science-technology/information-systems-quantitative-analysis/management-information-systems-bs/ibusiness-app-develop-mgmt-conc/)
- Information Assurance Concentration for MIS Majors (http://catalog.unomaha.edu/undergraduate/college-information-science-technology/information-systems-quantitative-analysis/management-information-systems-bs/info-assurance-conc/)
- IT Audit and Control (http://catalog.unomaha.edu/undergraduate/college-information-science-technology/information-systems-quantitative-analysis/management-information-systems-bs/it-audit-control-conc/)

Management Information Systems, Bachelor of Science in Management Information Systems Four Year Plan

First Year		
Fall		**Credits**
ENGL 1150	ENGLISH COMPOSITION I	3
CMST 1110 or CMST 2120	PUBLIC SPEAKING FUNDS or ARGUMENTATION AND DEBATE	3
CIST 1300	INTRODUCTION TO WEB DEVELOPMENT	3
MATH 1930 or MATH 1370	CALCULUS FOR THE MANAGERIAL, LIFE, AND SOCIAL SCIENCES [1] or APPLIED ALGEBRA AND OPTIMIZATION WITH DATA ANALYSIS	3
CYBR 1100	INTRODUCTION TO INFORMATION SECURITY	3
	Credits	**15**
Spring		
ENGL 1160	COLLEGE RESEARCH AND INFORMATION LITERACY	3
CIST 1400	INTRODUCTION TO COMPUTER SCIENCE I	3
CIST 2500	INTRODUCTION TO APPLIED STATISTICS FOR IS&T	3
General Education Course or Elective		3
General Education Course or Elective		3
	Credits	**15**
Second Year		
Fall		
ACCT 2010	PRINCIPLES OF ACCOUNTING I	3
ECON 2200	PRINCIPLES OF ECONOMICS (MICRO)	3
CIST 2100	ORGANIZATIONS, APPLICATIONS AND TECHNOLOGY	3
General Education Course or Elective		3
General Education Course or Elective		3
	Credits	**15**
Spring		
ACCT 2020	PRINCIPLES OF ACCOUNTING II	3
CIST 3110	INFORMATION TECHNOLOGY ETHICS	3
ISQA 3310	MANAGING THE DATABASE ENVIRONMENT	3
ECON 2220	PRINCIPLES OF ECONOMICS (MACRO)	3
General Education Course or Elective		3
	Credits	**15**
Third Year		
Fall		
ISQA 3400	INFORMATION TECHNOLOGY INFRASTRUCTURE	3
ISQA 3900	WEB APPLICATION DEVELOPMENT	3
ISQA 3420	MANAGING IN A DIGITAL WORLD	3
CIST 3000	TECHNICAL WRITING & COMMUNICATION FOR IS&T	3
Specialization or Concentration Course		3
	Credits	**15**
Spring		
ISQA 3910	INTRODUCTION TO PROJECT MANAGEMENT	3
ISQA 4900	FULL STACK DEVELOPMENT	3
Business Co-requirement: See list of approved courses		3
General Education Course or Elective		3
General Education Course or Elective		3
	Credits	**15**
Fourth Year		
Fall		
ISQA 4110	INFORMATION SYSTEMS ANALYSIS	3
Specialization or Concentration Course		3
General Education Course or Elective		3
General Education Course or Elective		3
General Education Course or Elective		3
	Credits	**15**
Spring		
ISQA 4120	SYSTEM DESIGN AND IMPLEMENTATION	3
Specialization or Concentration Course		3
Specialization or Concentration Course		3
General Education Course or Elective		3
General Education Course or Elective		3
	Credits	**15**
	Total Credits	**120**

[1] MATH 1930 or MATH 1370 - Satisfy General Education Quantitative Literacy requirement

This roadmap is a suggested plan of study and does not replace meeting with an advisor. Please note that students may need to adjust the actual sequence of courses based on course availability. Please consult an advisor in your major program for further guidance.

This plan is not a contract and curriculum is subject to change.

Additional Information About this Plan:

University Degree Requirements: The minimum number of hours for a UNO undergraduate degree is 120 credit hours. Please review the requirements for your specific degree program to determine all requirements for the program. In order to graduate on time (four years for an undergraduate degree), you need to take 30 credit hours each year.

Placement Exams: For Math, English, and Foreign Languages, a placement exam may be required. More information on these exams can be found at https://www.unomaha.edu/enrollment-management/testing-center/placement-exams/information.php

Please note that transfer credit or placement exam scores may change a suggested plan of study.