MANAGEMENT INFORMATION SYSTEMS

Bachelor of Business Administration

The management information systems major is a natural fit if you're looking to use your interest in technology in a professional career. The need for data analysts, database and web developers, software developers, and network professionals continues to increase as daily business becomes more dependent on technology.

The Bachelor of Business Administration in Management Information Systems (MIS) degree prepares graduates for careers in computer programming, systems analysis, design, database administration, and end-user computing support. Careers in MIS are found throughout global business, industry, and government.

Career opportunities include Big Data Analytics Specialist, Data Architect, Data Engineer, Information Security Analyst, Business Intelligence Analyst, Business Systems Analyst, Data Analyst, Interface Designer, IT Consultant, Software Engineer, Systems Analyst, and Web Developer. The MIS degree combines technical skills of probability, statistics, and programming with the soft skills of critical thinking, complex problem-solving, and system analysis.

Area A: Essential Skills		
ENGL 1101	English Composition I	3
ENGL 1102	English Composition II	3
Choose one MATH: *		3
MATH 1101	Intro to Mathematical Modeling	
or MATH 1111	College Algebra	
or MATH 1113	Precalculus Mathematics	
Area B: Institutional Options		
Beginning Fall 2022, incoming (entering) students with 29 hours or fewer college credits will take only a Perspectives course for their one-hour Area B credit.		
COMM 1110	Fundamentals of Speech *	3
One of the following electives:		1
ENGL 1105	Intro to Greek Mythology	
ENGL 1110	Creative Writing	
GEOL 1000	Natural Hazards	
HIST 1050	Appalachian Hist-Special Topic	
HIST 1051	Sports Hist & Amer Character	
HLTH 1030	Health and Wellness Concepts	
HUMN 1000	Mystery Fiction in Pop Culture	
HUMN 1300	Christian Fiction/Pop Culture	
SOCI 1000	Race and Ethnicity in America	
PRSP Elective (See advisor)		
Area C: Humanities/Fine Arts		
Choose one to two ENGL course(s):		3-6
ENGL 2000	Topics in Literature & Culture	
ENGL 2111	World Literature I	
ENGL 2112	World Literature II	
ENGL 2120	British Literature I	
ENGL 2121	British Literature II	
ENGL 2130	American Literature I	
ENGL 2131	American Literature II	
ENGL 2201	Intro to Film as Literature	
If only one ENGL course chosen, add one of the following:		0-3
ARTS 1100	Art Appreciation	
HUMN 1201	Expressions of Culture I	
HUMN 1202	Expressions of Culture II	
MUSC 1100	Music Appreciation	
MUSC 1110	World Music	
MUSC 1120	American Music	
THEA 1100	Theatre Appreciation	
Area D: Science/Mathematics/Technology		
Eight Credit Hours of Lab Science Electives:		8
ASTR 1010 & 1010L	Astronomy of the Solar System and Astronomy of Solar Sys. Lab	
ASTR 1020 & 1020L	Stellar and Galactic Astronomy and Stellar & Galac. Astronomy Lab	
BIOL 1105K	Environmental Studies	
BIOL 1107K	Principles of Biology I	
BIOL 1108K	Principles of Biology II	
BIOL 1203K	Botany	
BIOL 1224K	Principles of Entomology	
CHEM 1151K	Survey of Chemistry	
CHEM 1211K	Principles of Chemistry I	
CHEM 1212K	Principles of Chemistry II	
GEOL 1121K	Principles of Geology	
GEOL 1122K	Historical Geology	
GEOL 1131K	Geology & the Environment	
PHYS 1111K	Introductory Physics I	
PHYS 1112K	Introductory Physics II	
PHYS 2211K	Principles of Physics I	
PHYS 2212K	Principles of Physics II	
One of the following electives:		3-4
ASTR 1010	Astronomy of the Solar System	
ASTR 1020	Stellar and Galactic Astronomy	
BIOL 1105K	Environmental Studies	
BIOL 1107K	Principles of Biology I	
BIOL 1108K	Principles of Biology II	
BIOL 1203K	Botany	
BIOL 1224K	Principles of Entomology	
CHEM 1151K	Survey of Chemistry	
CHEM 1211K	Principles of Chemistry I	
CHEM 1212K	Principles of Chemistry II	
CMPS 1301	Principles of Programming I	
CMPS 1302	Principles of Programming II	
DATA 1501	Introduction to Data Science	
GEOL 1110	Environmental Hazards	
GEOL 1121K	Principles of Geology	
GEOL 1122K	Historical Geology	
GEOL 1131K	Geology & the Environment	
MATH 1113	Precalculus Mathematics	
MATH 1401	Elementary Statistics	
MATH 2181	Applied Calculus	

MATH 2253	Calculus and Analytic Geom I	
MATH 2254	Calculus and Analytic Geom II	
PHYS 1111K	Introductory Physics I	
PHYS 1112K	Introductory Physics II	
PHYS 2211K	Principles of Physics I	
PHYS 2212K	Principles of Physics II	
Area E: Social Sciences		
HIST 2111	United States History to 1877	3
or HIST 2112	United States Hist since 1877	
POLS 1101	American Government	3
ECON 2105	Principles of Macroeconomics *	3
One of the following electives:		3
ANTH 1103	Intro to Cultural Anthropology	
GEOG 1100	Introduction to Geography	
GEOG 1101	Intro to Human Geography	
GEOG 1111	Intro to Physical Geography	
HIST 1111	World Civilization to 1500 CE	
HIST 1112	World Civilization since 1500	
HIST 2111	United States History to 1877	
HIST 2112	United States Hist since 1877	
PHIL 1103	Intro to World Religions	
PHIL 2010	Intro to Philosophical Issues	
PHIL 2020	Logic and Critical Thinking	
POLS 2101	Intro to Political Science	
POLS 2201	State and Local Government	
POLS 2301	Comparative Politics	
POLS 2401	International Relations	
PSYC 1101	Introduction to Psychology	
PSYC 2101	Psychology of Adjustment	
PSYC 2103	Human Development	
SOCI 1101	Introduction to Sociology	
SOCI 1160	Social Problems	
Area F: Major Related *		
ACCT 2101	Principles of Accounting I	3
ACCT 2102	Principles of Accounting II	3
BUSA 2106	The Environment of Business	3
BUSA 2201	Fundamentals of Computer Appli	3
BUSA 2850	Business Statistics	3
ECON 2106	Principles of Microeconomics	3
Business Core*		
BUSA 3060	Business Law	3
BUSA 3301	Business Communications	3
BUSA 3351	International Business	3
BUSA 3531	Data Cleaning & Visualization	3
BUSA 3701	Prof Development Seminar	1
FINC 3056	Principles of Finance	3
LSCM 3251	Principles of Supply Chain Mng	3
MARK 3010	Principles of Marketing	3
MGIS 3351	Principles Mgmt Info Systems	3
MNGT 3051	Principles of Management	3
Management Information Systems Core*		
MNGT 4380	Project Management	3
MGIS 3352	Management Application Prog I	3
MGIS 3353	Management Applications Programming II	3
MGIS 3356	Database Management Systems	3
MGIS 4360	Databases: Big Data & Analyt	3
MGIS 4580	Supply Chain Management System	3
MGIS 4701	Systems Analysis & Design	3
Upper Division MGIS Elective*		
Choose three of the following electives:		9
Regularly Offered Courses		
BUSA 3532	Bus Analytics/Data Mining	
FTA 4001	Foundations of Fintech	
FTA 4002	Financial Technologies	
FTA 4003	Commercial Banking in FinTech	
FTA 4005	Intro Financial Data Analytics	
FTA 4100	Inform. Security for FinTech	
ITEC 1390	Intro to Cybersecurity	
ITEC 1400	IoT: Connecting Things	
ITEC 3390	Management of IS Security	
ITEC 3400	IoT: Security	
ITEC 3500	Cybersecurity Operations	
ITEC 3510	Ethical Hacking	
ITEC 4700	Python Programming	
Unscheduled Management Information Systems Electives		
MGIS 4358	Web-based MIS (may occasionally be offered)	
MGIS 4700	Independent Study MGIS (courses available with faculty sponsor)	
MGIS 4800	Special Topics in MIS (may occasionally be offered)	
MGIS 4900	Mgmt Info System Internships (requires preapproval from Internship Coordinator)	
Senior Requirement* +		
MNGT 4701	Strategic Management	3
Total Hours		**120-121**

* Grade of C or higher required.

\+ Senior Requirement must be completed at Dalton State College during graduation term. If a student is graduating in the summer semester the course must be taken in the spring term.

Courses

MGIS 3351. Principles Mgmt Info Systems. 3-0-3 Units.
Covers essential business aspects of information systems such as networks, databases, the Internet, management reporting, software development, computer hardware, and information ethics. The course also examines the use of information systems for managerial decision-making and for gaining strategic advantage. Students will experience hands-on system activities associated with course concepts.(F, S) Prerequisites: BUSA 2201, COMM 1110, ENGL 1102, all with a "C" or better.

MGIS 3352. Management Application Prog I. 3-0-3 Units.
Develops a knowledge of language and file structures for computer-based business applications using a major business procedural-oriented programming language. Students will write computer programs on individual and/or team projects.(F)
Prerequisites: BUSA 2201 with a "C" or better.

MGIS 3353. Management Applications Programming II. 3-0-3 Units.
Emphasizes top-down design, structured techniques, testing and modularity. Emphasis placed on development of correct efficient programs that are easy to maintain. Includes problem analysis, problem design, documentation, testing and debugging. Introduces application development using an object-oriented language.(S)
Prerequisites: BUSA 2201 and MGIS 3352, both with a "C" or better.

MGIS 3356. Database Management Systems. 3-0-3 Units.
Focuses on the use of database systems in business to support information systems and decision-making. Topics include database concepts, data modeling, database design and development, administration of database systems, and database technologies. Students will have hands-on experience developing a database application.(F)
Corequisites: MGIS 3351 with a "C" or better.

MGIS 4358. Web-based MIS. 3-0-3 Units.
Examines the process of developing business information systems with a significant web component. Topics include organizational considerations involved in developing and maintaining a web-enhanced MIS, and system considerations such as usability and other human-computer-interaction (HCI) issues, general and database web-design principles, and programming of web-enhanced systems. Students will develop a web site for a real or hypothetical organization. (As needed) ;
Prerequisites: MGIS 3356 with a "C" or better.
Corequisites: MGIS 3353.

MGIS 4360. Databases: Big Data & Analyt. 3-0-3 Units.
Provides an overview of database management systems for big data and analytics. Topics include an overview of analytics and related data requirements, data modeling, data management and an introduction to prominent types of database systems designed to support big data and analytics. Students will have hands-on experience with various database technologies.(S)
Prerequisites: MGIS 3356 with a "C" or better.

MGIS 4580. Supply Chain Management System. 3-0-3 Units.
Covers the major components of supply chain management systems that support major supply chain activities such as planning, sourcing, production, material flow, inventory management, and delivery. Students will have hands-on experience with a commercial-grade supply chain management system.(F)
Prerequisites: LSCM 3251 and MGIS 3351, all with a "C" or better.

MGIS 4700. Independent Study MGIS. 0-0-3 Units.
Supervised, in-depth individual research and study of one or more current topics in MIS in conjunction with an associated major project. Students will be required to prepare a formal report and presentation of the topic research and project. Only available with coordination with MIS faculty.
Prerequisites: MGIS 3351 with a "C" or better.

MGIS 4701. Systems Analysis & Design. 3-0-3 Units.
Examines the process of developing business information systems. Topics include requirements analysis and specification, systems modeling, and systems design techniques. Structured and object-oriented tools and techniques are introduced. A major component of the course is the analysis, design and development of a business system as a term project.(S)
Prerequisites: MGIS 3352 and MGIS 3356 (formerly MGIS 4356), and all with a "C" or better.

MGIS 4800. Special Topics in MIS. 3-0-3 Units.
This special topics course for provides an overview of database management systems for big data and analytics. Topics include an overview of analytics and related data requirements, data modeling, data management and an introduction to prominent types of database systems designed to support big data and analytics. Students with have hands-on experience with various database technologies.
Prerequisites: MGIS 3351 with a "C" or better.

MGIS 4900. Mgmt Info System Internships. 0-0-3 Units.
Provides students with on-site work experience in Management Information Systems through a coordinated academic internship with a pre-approved employer. A portfolio chronicling the work experience, a project relating relevant academic literature to the Information Systems internship experience, and a final presentation encompassing the entire internship experience are required to receive academic credit. By permission of the Internship Coordinator.(F,S)
Prerequisites: MGIS 3351 (Grade of "B" or Better), plus an additional 3 credit hours of upper division MGIS, and 3 credit hours of any upper division business course, all with a "C" or better.