## Management Information Systems

### Bachelor of Business Administration

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

Management information systems (MIS) is a natural fit if you’re looking to put your interest in technology to use professionally.

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.

Career opportunities include Big Data Analytics Specialist, Business Intelligence Analyst, Business Systems Analyst, Data Analyst, Interface Designer, IT Consultant, Software Engineer, Systems Analyst, and Web Developer. This program is offered as a night program.

### Area A: Essential Skills

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1101</td>
<td>English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1102</td>
<td>English Composition II</td>
<td>3</td>
</tr>
<tr>
<td>Choose one MATH: *</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MATH 1101</td>
<td>Intro to Mathematical Modeling</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 1111</td>
<td>College Algebra</td>
<td></td>
</tr>
<tr>
<td>or MATH 1113</td>
<td>Precalculus Mathematics</td>
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</tbody>
</table>

### Area B: Institutional Options

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>COMM 1110</td>
<td>Fundamentals of Speech *</td>
<td>3</td>
</tr>
</tbody>
</table>

One of the following electives:

- COMM 1120  Argumentation and Advocacy
- 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 1100  Political and Social Rhetoric
- 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):

- 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:

- 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:

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTR 1010</td>
<td>Astronomy of the Solar System</td>
<td></td>
</tr>
<tr>
<td>&amp; 1010L</td>
<td>and Astronomy of Solar Sys. Lab</td>
<td></td>
</tr>
<tr>
<td>ASTR 1020</td>
<td>Stellar and Galactic Astronomy</td>
<td></td>
</tr>
<tr>
<td>&amp; 1020L</td>
<td>and Stellar &amp; Galac. Astronomy Lab</td>
<td></td>
</tr>
<tr>
<td>BIOL 1105K</td>
<td>Environmental Studies</td>
<td></td>
</tr>
<tr>
<td>BIOL 1107K</td>
<td>Principles of Biology I</td>
<td></td>
</tr>
<tr>
<td>BIOL 1108K</td>
<td>Principles of Biology II</td>
<td></td>
</tr>
<tr>
<td>BIOL 1203K</td>
<td>Principles of Botany</td>
<td></td>
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<tr>
<td>BIOL 1224K</td>
<td>Entomology</td>
<td></td>
</tr>
<tr>
<td>CHEM 1151K</td>
<td>Survey of Chemistry</td>
<td></td>
</tr>
<tr>
<td>CHEM 1211K</td>
<td>Principles of Chemistry I</td>
<td></td>
</tr>
<tr>
<td>CHEM 1212K</td>
<td>Principles of Chemistry II</td>
<td></td>
</tr>
<tr>
<td>GEOL 1121K</td>
<td>Principles of Geology</td>
<td></td>
</tr>
<tr>
<td>GEOL 1122K</td>
<td>Historical Geology</td>
<td></td>
</tr>
<tr>
<td>GEOL 1131K</td>
<td>Geology &amp; the Environment</td>
<td></td>
</tr>
<tr>
<td>PHYS 1111K</td>
<td>Introductory Physics I</td>
<td></td>
</tr>
<tr>
<td>PHYS 1112K</td>
<td>Introductory Physics II</td>
<td></td>
</tr>
<tr>
<td>PHYS 2211K</td>
<td>Principles of Physics I</td>
<td></td>
</tr>
<tr>
<td>PHYS 2212K</td>
<td>Principles of Physics II</td>
<td></td>
</tr>
</tbody>
</table>

One of the following electives:

- MATH 2181  Applied Calculus
- MATH 2253  Calculus and Analytic Geom I
- MATH 2254  Calculus and Analytic Geom II

### Area E: Social Sciences

<table>
<thead>
<tr>
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<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>HIST 2111</td>
<td>United States History to 1877</td>
<td>3</td>
</tr>
<tr>
<td>or HIST 2112</td>
<td>United States Hist since 1877</td>
<td></td>
</tr>
<tr>
<td>POLS 1101</td>
<td>American Government</td>
<td>3</td>
</tr>
<tr>
<td>ECON 2105</td>
<td>Principles of Macroeconomics *</td>
<td>3</td>
</tr>
</tbody>
</table>

One of the following electives:

- 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
- POLS 2101  Intro to Political Science
- POLS 2201  State and Local Government
- PHIL 2020  Logic and Critical Thinking
PHED Activity Elective  1
Total Hours  122-123

* Grade of C or higher required.
+ Course must be taken at Dalton State College during graduation term. If student is graduating in summer semester the course should 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 utilize basic programming concepts to develop a small application. (F (Day & Evening), S (Day & Evening), M (Online))
Prerequisites: Upper Division Eligibility and BUSA 2201 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 (Evening))
Prerequisites: Upper Division Eligibility and 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 (Evening))
Prerequisites: Upper Division Eligibility and BUSA 2201 with a ‘C’ or better.

**MGIS 3354. Telecommunications Management. 3-0-3 Units.**
Provides an understanding of telecommunications and data communications technologies, voice communications and data networks, protocols, standards and management. Topics include transmission media, data communications, and voice and data technology. (F (Evening))
Prerequisites: Upper Division Eligibility and MGIS 3351 or concurrent.

**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 (Evening))
Prerequisites: Upper Division Eligibility; Corequisite: MGIS 3351.

**MGIS 3390. Management of IS Security. 3-0-3 Units.**
Provides a managerial overview of IS security and basic IS security principles while examining operational, technical, and administrative aspects of the topic. This course enables students to improve their IS security management skills and software proficiencies through a thorough investigation of the major concepts and techniques used in enterprise architecture and IS security. It also covers much of the common Body of Knowledge of the CISSP Exam. (F (Evening))
Prerequisites: Upper Division Eligibility and 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. (S (Evening))
Prerequisites: Upper Division Eligibility and MGIS 3356; Corequisite: MGIS 3353.

MGIS 4360. Databases: Big Data & Analytics. 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 (Evening))
Prerequisites: Upper Division Eligibility and 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 (Evening))
Prerequisites: Upper Division Eligibility, BUSA 3055, LSCM 3251, MARK 3010, 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. (F, S, M)
Prerequisites: Upper Division Eligibility, and 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 (Evening))
Prerequisites: Upper Division Eligibility, MGIS 3352 and MGIS 3356 (formerly MGIS 4356), both 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. (F, S, M)
Prerequisites: Upper Division Eligibility and 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. (F, S, M)
Prerequisites: Upper Division Eligibility, 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.