

# MANAGEMENT INFORMATION SYSTEMS

## Bachelor of Business Administration

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. The management information systems major is a natural fit if you're looking to use your interest in technology in a professional career. According to the Bureau of Labor Statistics, the need for data analysts, database and web developers, software developers, and network professionals continues to increase by 15% per year as daily business becomes more dependent on technology.

The MIS degree combines technical skills in probability, statistics, and programming with professional skills in critical thinking, complex problem-solving, and system analysis. 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.

## Program Course Requirements

Click here to view Core IMPACTS General Education Curriculum requirements (<http://catalog.daltonstate.edu/programs/coreimpacts/>).

### Program Advice (can share with CORE curriculum):

Grades of C or better required.

|              |                                |   |
|--------------|--------------------------------|---|
| COMM 1110    | Fundamentals of Speech         | 3 |
| ECON 2105    | Principles of Macroeconomics   | 3 |
| MATH 1101    | Intro to Mathematical Modeling | 3 |
| or MATH 1111 | College Algebra                |   |
| or MATH 1113 | Precalculus Mathematics        |   |

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### Core IMPACTS General Education Curriculum requirements 42

NOTE: Core IMPACTS courses can also satisfy requirements in your Program of Study. Please review the requirements for your major to prevent taking extra courses. The USG Core IMPACTS curriculum is designed to ensure that students acquire essential knowledge in foundational academic areas and develop career-ready competencies. There are seven Core IMPACTS areas. Students at all USG institutions must meet the Core IMPACTS requirements in all specified areas.

### Field of Study: 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 |
| <b>Business Core*</b> |                                |   |
| 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 | Enterprise Management Systems          | 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 121**

\* Grade of C or better 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. Enterprise Management Systems. 3-0-3 Units.**

Covers the major components of enterprise management systems that support core business and supply chain management functions such as accounting, planning, sourcing, production, material flow, inventory management, warehouse management, sales and transportation. Students will have hands-on experience with a commercial-grade enterprise 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 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 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.