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, Systems Analyst, and Web Developer. This program is offered as a night program.

Area A: Essential Skills

ENGL 1101  English Composition I  3
ENGL 1102  English Composition II  3
Choose one MATH:  *
  MATH 1101  Intro to Mathematical Modeling  3
  or MATH 1111  College Algebra
  or MATH 1113  Precalculus Mathematics

Area B: Institutional Options

COMM 1110  Fundamentals of Speech  *  3
One of the following electives:  1
  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
  HLT 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):  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  Astronomy of the Solar System
  or 1010L  and Astronomy of Solar Sys. Lab
  ASTR 1020  Stellar and Galactic Astronomy
  or 1020L  and Stellar & Galac. Astronomy Lab
  BIOL 1105K  Environmental Studies
  BIOL 1107K  Principles of Biology I
  BIOL 1108K  Principles of Biology II
  BIOL 1203K  Principles of Botany
  BIOL 1224K  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
  MATH 2181  Applied Calculus
  MATH 2253  Calculus and Analytic Geom I
  MATH 2254  Calculus and Analytic Geom II

Area E: Social Sciences

One of the following electives:  3
  HIST 2111  United States History to 1877
  or HIST 2112  United States Hist since 1877
  POLS 1101  American Government
  ECON 2105  Principles of Macroeconomics  *

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
  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

Upper Division MGIS Elective*
Select one 3000-4000 level MGIS course not already required or taken toward degree program.

MGIS 3390 Management of IS Security
MGIS 4358 Web-based MIS
MGIS 4360 Databases: Big Data & Analytics
MGIS 4700 Independent Study MGIS
MGIS 4800 Special Topics in MIS
MGIS 4900 Mgmt Info System Internships

Upper Division Business Electives*
Select two 3000-4000 level Business course not already required or taken toward degree program.

MATH 4502 is allowed for all business students as an upper division elective.

Senior Requirement* +
MGNT 4701 Strategic Management 3

Physical Education

Area F: Major Related
(2.25 GPA required.)

ACCT 2101 Principles of Accounting I 3
ACCT 2102 Principles of Accounting II 3
BUSI 2106 The Environment of Business 3
BUSI 2201 Fundamentals of Computer Appli 3
BUSI 2850 Business Statistics 3
ENCN 2106 Principles of Microeconomics 3

Business Core*

BUSI 3055 Quantitative Analysis Bus Prob 3
BUSI 3060 Business Law 3
BUSI 3070 Business Ethics 3
BUSI 3301 Business Communications 3
BUSI 3351 International Business 3
BUSI 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
MGIS 3352 Principles of Management 3

Management Information Systems Core*

MGIS 3352 Management Application Prog I 3
MGIS 3353 Management Applications Programming II 3
MGIS 3354 Telecommunications Management 3
MGIS 3356 Database Management Systems 3
MGIS 4701 Systems Analysis & Design 3
MGIS 4830 Project Management 3

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 3352, both with a ‘C’ or better.

MGIS 3355. 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 and MGIS 3351 or concurrent.

MGIS 3356. Database Management Systems. 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.