Management Information Systems (MIS), B.S.B.AD.

Degree Offered

- Bachelor of Science in Business Administration

Nature of the Program

Students in the MIS program gain the skills necessary to analyze an organization's information needs and develop technological solutions to effectively solve business problems. In today's fast-paced, global environment, technology is a vital and integral part of business. Every organization relies on technology, and MIS professionals are the experts that ensure organizations succeed with technology. MIS professionals have the knowledge to understand the organization's business goals and information needs and deliver the critical technologies to meet those needs. Every organization is becoming a technology-driven organization, making the career opportunities board for MIS professionals, but some include:

- Consulting
- Database Administration
- Information Systems Security
- Networking and Telecommunications
- Systems Analysis and Design
- Technology Management

This is an excellent major for students who enjoy technology and hands-on experience and want to apply their knowledge in a business environment.

FACULTY

DEPARTMENT CHAIRPERSON

- Brad Price - Ph.D. (University of Minnesota)
  Statistics and Machine Learning

PROFESSOR

- Gary Templeton - Ph.D. (Auburn University)
  Management of Information Technolgy and Innovation

ASSOCIATE PROFESSORS

- Stephane Collignon - Ph.D. (Virginia Tech)
  Business Information and Technology
- Bin Liu - Ph.D (Rutgers University)
  Artificial Intelligence and Machine Learning
- Salman Nazir - Ph.D. (McGill)
  Management Information Systems
- A. Graham Peace - Ph.D. (University of Pittsburgh)
  Management Information Systems
- Brad Price - Ph.D. (University of Minnesota)
  Statistics and Machine Learning
- Nanda Surendra - Ph.D. (University of Cincinnati)
  Management Information Systems

ASSISTANT PROFESSOR

- Mohammad (MJ) Ahmad - P.hD. (West Virginia University)
  Software Security and Machine Learning
- Jeongsub Choi - Ph.D. (Rutgers)
  Artificial Intelligence/Machine Learning
- Christopher Ramezan - Ph.D. (West Virginia University)
  Cybersecurity

SERVICE ASSISTANT PROFESSOR

- Joshua Meadows - M.S. (West Virginia University)
  Business Data Analytics

TEACHING ASSISTANT PROFESSOR

- Michael Starling - M.S.- Western Governors University
  Cybersecurity and Information Assurance

EMERITUS

- Thomas L. Blaskovics - Ed.D.
  (University of Wisconsin)
- Virginia Franke Kleist - Ph.D.
  (University of Pittsburgh)

Admissions for 2027-2028

For specific information regarding the admissions requirements for First Time Freshmen to the John Chambers College of Business and Economics, please visit Chambers admissions (http://catalog.wvu.edu/undergraduate/collegeofbusinessandeconomics/#admissionstext).

Students who are direct admitted to the major as first-time freshmen must possess an overall university GPA of at least 2.5 and have completed the course prerequisites listed in the table below with minimum grade of C-, unless otherwise noted, to be eligible to enroll in upper-division course work.

Students who are not direct admitted to the major (i.e. Business) will declare the major during the semester in which they satisfy the course prerequisites listed below with a minimum of C- unless otherwise noted. Applicants also must possess an overall GPA of at least 2.5 to be considered for admission to the major.

Code	Title	Hours
ACCT 201	Principles of Accounting 1	3
ECON 201 & ECON 202	Principles of Microeconomics and Principles of Macroeconomics	6
ECON 225	Elementary Business and Economics Statistics	3
or STAT 211	Elementary Statistical Inference	
Choose one of the following:		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	
Choose one of the following: a minimum of C- is needed in MATH 150 or D- in MATH 155		3-4
MATH 124 & MATH 150	Algebra with Applications and Applied Calculus	
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1 *	
MATH 150	Applied Calculus *	
MATH 155	Calculus 1 *	
Total Hours		**18-22**

* A minimum grade of C- in MATH 150 is required for admission to the program. A grade of D- in MATH 154 or a higher college calculus course satisfies the calculus requirement.

Major Code: 2152

Click here to view the Suggested Plan of Study (p. 5)

General Education Foundations

Please use this link to view a list of courses that meet each GEF requirement. (http://registrar.wvu.edu/gef/)

NOTE: Some major requirements will fulfill specific GEF requirements. Please see the curriculum requirements listed below for details on which GEFs you will need to select.

Code	Title	Hours
General Education Foundations		
F1 - Composition & Rhetoric		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
or ENGL 103	Accelerated Academic Writing	
F2A/F2B - Science & Technology		4-6
F3 - Math & Quantitative Reasoning		3-4
F4 - Society & Connections		3
F5 - Human Inquiry & the Past		3
F6 - The Arts & Creativity		3
F7 - Global Studies & Diversity		3
F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)		9
Total Hours		**31-37**

Please note that not all of the GEF courses are offered at all campuses. Students should consult with their advisor or academic department regarding the GEF course offerings available at their campus.

Degree Requirements

To qualify for the Bachelor of Science in Business Administration students must meet the following criteria:

- Complete a minimum of 120 credit hours.
- Possess an overall GPA of 2.0.
- Possess a GPA of 2.0 for all major courses (i.e. ACCT, MIST), calculated using all attempted GPA hours unless excluded by the D/F repeat policy.
- The John Chambers College of Business and Economics accepts all baccalaureate transferable course work completed at public and private colleges in West Virginia and other regionally accredited institutions. Since the College is AACSB accredited, upper-division courses (courses equivalent to 300/400 level at WVU) must be evaluated by the Dean or designee before they may count toward business core, major core and major restricted electives in the Bachelor of Science in Business Administration or Bachelor of Science in Economics program.

Code	Title	Hours
University Requirements		36
Program Requirements		21
Business Core Requirements		33
Management Information Systems Major Requirements		30
Total Hours		**120**

University Requirements

Code	Title	Hours
General Education Foundations (GEF) 1, 2, 3, 4, 5, 6, 7, and 8 (31-37 Credits)		
Outstanding GEF Requirements 2, 5, 6, 7, and 8		16
BCOR 191	First-Year Seminar	1
General Electives		19
Total Hours		**36**

Program Requirements

Code	Title	Hours
ACCT 201	Principles of Accounting 1 (Minimum grade of C-)	3
ECON 201	Principles of Microeconomics (Minimum grade of C-; may fulfill GEF 4)	3
ECON 202	Principles of Macroeconomics (Minimum grade of C-; may fulfill GEF 8)	3
Select one of the following (Minimum grade of C-; may fulfill GEF 1):		3-6
ENGL 101 & ENGL 102	Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research	
ENGL 103	Accelerated Academic Writing	
Select one of the following (Minimum grade of C-; may fulfill GEF 8):		3

ECON 225	Elementary Business and Economics Statistics	
STAT 211	Elementary Statistical Inference	
Select one of the following; minimum grade of C- in MATH 150 or D- in MATH 154 or higher; (may fulfill GEF 3):		3-8
MATH 124 & MATH 150	Algebra with Applications and Applied Calculus	
MATH 129 & MATH 155	Pre-Calculus Mathematics and Calculus 1	
MATH 150	Applied Calculus	
MATH 155	Calculus 1	
Total Hours		**21**

Business Core Requirements

Code	Title	Hours
ENTR 102	Fundamentals of Entrepreneurship	3
BCOR 199	Introduction to Business	3
BCOR 299	Business Communication (Fulfills Writing and Communication Skills Requirement)	3
BCOR 320	Legal Environment of Business	3
BCOR 330	Information Systems and Technology	3
BCOR 340	Principles of Finance	3
BCOR 350	Principles of Marketing	3
BCOR 360	Supply Chain Management	3
BCOR 370	Principles of Management	3
BCOR 380	Business Ethics	3
BCOR 460	Contemporary Business Strategy	3
Total Hours		**33**

Management Information Systems Major Requirements

Code	Title	Hours
Possess a minimum GPA of 2.0 for all major courses calculated using all attempted GPA hours unless excluded by the D/F repeat policy.		
MIST 320	Managing Information Technology (Minimum Grade of C-)	3
MIST 351	Database Management Systems (Minimum Grade of C-)	3
MIST 352	Business Application Programming (Minimum Grade of C-)	3
or CS 110	Introduction to Computer Science	
MIST 353	Advanced Information Technology	3
MIST 355	Data Communications	3
MIST 450	Systems Analysis	3
MIST 452	Systems Design and Development	3
MIST Electives		9
ACCT 321	Introduction to Accounting Systems	
BETH 357	The Ethics of AI and Digital Technology	
MIST 356	Network Security	
MIST 491	Professional Field Experience (maximum of three credits) *	
Upper-Division BUDA, CS, CYBR, MIST Courses		
Other Courses Approved by Department		
Total Hours		**30**

* A maximum of six-credits of Professional Field Experience may be applied to the degree but a maximum of three-credits may be applied to the major.

Suggested Plan of Study

First Year

Fall	Hours	Spring	Hours
BCOR 199	3	ACCT 201	3
BCOR 191	1	ECON 201 (GEF 4)	3
Select one of the following (GEF 3):	3	ENGL 101 (GEF 1)	3
MATH 124		Select one of the following (GEF 8):	3
MATH 129		MATH 150	
MATH 150		MATH 154	
MATH 153		MATH 155	
MATH 155		MATH 156	
ENTR 102	3	GEF (Choose from F2, F5, F6, F7 or F8)	3
GEF (Choose from F2, F5, F6, F7 or F8)	3		
General Electives	2		
	15		**15**

Second Year

Fall	Hours	Spring	Hours
ECON 202 (GEF 8)	3	BCOR 299	3
ECON 225 (GEF 8)	3	BCOR 330	3
ENGL 102 (GEF 1)	3	BCOR 350	3
GEF (Choose from F2, F5, F6, F7 or F8)	6	BCOR 370	3
		MIST 351	3
	15		**15**

Third Year

Fall	Hours	Spring	Hours
BCOR 340	3	BCOR 380	3
MIST 320	3	MIST 355	3
MIST 352	3	MIST 353	3
Minor or General Electives	3	GEF (Choose from F2, F5, F6, F7 or F8)	3
GEF (Choose from F2, F5, F6, F7 or F8)	3	Minor or General Electives	3
	15		**15**

Fourth Year

Fall	Hours	Spring	Hours
BCOR 320	3	BCOR 460	3
BCOR 360	3	MIST 452	3
MIST 450	3	MIS Elective	3
MIS Elective	6	Minor or General Electives	6
	15		**15**

Total credit hours: 120

Major Learning Outcomes

MANAGEMENT INFORMATION SYSTEMS

The objective of providing a foundational education in management information systems and innovation at the undergraduate level cannot be realized without appropriate curricula content, effective teaching, and ultimately, learning. Within the undergraduate management information systems major, we subscribe to the following learning goals for each of our undergraduate students:

- Competence in core technical areas associated with MIS, such as programming, data communications and databases
- Knowledge of the selection, implementation and use of management information systems in organizations
- Awareness of how to analyze business problems and to design, build and maintain appropriate technological systems to solve those problems