Management Information Systems (MIS)

Degree Offered

- Bachelor of Science in Business Administration

MIS Program Objectives

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 necessary and integral part of business. MIS professionals have the knowledge to understand both the business goals and information needs of the organization, and to deliver the application of technology to meet those needs. Career opportunities 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 want to apply their knowledge in a business environment.

FACULTY

DEPARTMENT CHAIRPERSON

- Virginia Franke Kleist - Ph.D. (University of Pittsburgh)
  Management information systems.

PROFESSOR

- Virginia Franke Kleist - Ph.D.
  University of Pittsburgh

ASSOCIATE PROFESSORS

- A. Graham Peace - Ph.D. (University of Pittsburgh)
  Management information systems.
- Nanda Surendra - Ph.D. (University of Cincinnati)
  Management information systems.

ASSISTANT PROFESSOR

- Stephane Collignon - Ph.D. (Virginia Tech)
  Business Information and Technology
- Salman Nazir - Ph.D. (McGill University)
  Management information systems

EMERITUS

- Thomas L. Blaskovics

Admission Requirements

Students who are direct admitted to the major as first-time freshmen must possess an overall 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 at the beginning of the semester in which they satisfy the course prerequisites listed below. Applicants also must possess an overall GPA of at least 2.5 to be considered for admission to the major.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 201 &amp; ACCT 202</td>
<td>Principles of Accounting and Principles of Accounting</td>
<td>6</td>
</tr>
<tr>
<td>CS 101</td>
<td>Intro to Computer Applications</td>
<td>4</td>
</tr>
<tr>
<td>ECON 201 &amp; ECON 202</td>
<td>Principles of Microeconomics and Principles of Macroeconomics</td>
<td>6</td>
</tr>
<tr>
<td>ECON 225</td>
<td>Elementary Business and Economics Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>
Management Information Systems (MIS)  
or STAT 211 Elementary Statistical Inference
ENGL 101 Introduction to Composition and Rhetoric
& ENGL 102 and Composition, Rhetoric, and Research
or ENGL 103 Accelerated Academic Writing
Choose one of the Following:  
MATH 126A College Algebra 5-Day
MATH 126B College Algebra 4-Day
MATH 129 Pre-Calculus Mathematics
MATH 153 Calculus 1a with Precalculus
Choose one of the Following:  
MATH 150 Applied Calculus *
MATH 154 Calculus 1b with Precalculus *
MATH 155 Calculus 1 *
MATH 156 Calculus 2 *
Total Hours 28-33
  * A minimum grade of B- in MATH 150 is required for admission to the program. A grade of C- in MATH 154 or a higher college calculus course satisfies the calculus requirement.

Students who are direct admitted to the major and meet the requirements listed above are guaranteed permission to enroll in upper-division course work. The College will accommodate as many majors as resources are available. Students who are denied admission to the major may apply for admission in a future application period or accept admission to an alternative major in the College.

Click here to view the Suggested Plan of Study (p. 4)

Program Requirements

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.

General Education Foundations

F1 - Composition & Rhetoric
ENGL 101 Introduction to Composition and Rhetoric
& ENGL 102 and Composition, Rhetoric, and Research
or ENGL 103 Accelerated Academic Writing

F2A/F2B - Science & Technology

F3 - Math & Quantitative Skills

F4 - Society & Connections

F5 - Human Inquiry & the Past

F6 - The Arts & Creativity

F7 - Global Studies & Diversity

F8 - Focus (may be satisfied by completion of a minor, double major, or dual degree)

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 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.

### Curriculum Requirements

**Minimum Overall GPA of 2.0 is required**

**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.**

### ACCT 201
- Principles of Accounting (Minimum grade of C-)
- 3 units

### ACCT 202
- Principles of Accounting (Minimum grade of C-)
- 3 units

### CS 101
- Intro to Computer Applications (Minimum grade of C-; may fulfill GEF 2A)
- 4 units

### ECON 201
- Principles of Microeconomics (Minimum grade of C-; may fulfill GEF 4 or 8)
- 3 units

### ECON 202
- Principles of Macroeconomics (Minimum grade of C-; may fulfill GEF 4 or 8)
- 3 units

Select one of the following (Minimum grade of C-; may fulfill GEF 3):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 225</td>
<td>Elementary Business and Economics Statistics</td>
<td>3</td>
</tr>
<tr>
<td>STAT 211</td>
<td>Elementary Statistical Inference</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following (Minimum Grade of C-; may fulfill GEF 1):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 101 &amp; ENGL 102</td>
<td>Introduction to Composition and Rhetoric and Composition, Rhetoric, and Research</td>
<td>6</td>
</tr>
<tr>
<td>ENGL 103</td>
<td>Accelerated Academic Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

### GEF 2A, Science & Technology
- 3 units

### GEF 5, Human Inquiry & the Past
- 3 units

### GEF 6, The Arts & Creativity
- 3 units

### GEF 7, Global Studies & Diversity
- 3 units

Select one of the following; minimum grade of B- in MATH 150 or C- in MATH 154 or higher

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 126A &amp; MATH 150</td>
<td>College Algebra 5-Day and Applied Calculus</td>
<td>3</td>
</tr>
<tr>
<td>MATH 126B &amp; MATH 150</td>
<td>College Algebra 4-Day and Applied Calculus</td>
<td>3</td>
</tr>
<tr>
<td>MATH 129 &amp; MATH 155</td>
<td>Pre-Calculus Mathematics and Calculus 1</td>
<td>3</td>
</tr>
<tr>
<td>MATH 150</td>
<td>Applied Calculus</td>
<td>3</td>
</tr>
<tr>
<td>MATH 153 &amp; MATH 154</td>
<td>Calculus 1a with Precalculus and Calculus 1b with Precalculus</td>
<td>3</td>
</tr>
<tr>
<td>MATH 155</td>
<td>Calculus 1</td>
<td>3</td>
</tr>
</tbody>
</table>

### PSYC 101
- Introduction to Psychology (May fulfill GEF 4 or 8)
- 3 units

### SOCA 101
- Introduction to Sociology (May fulfill GEF 4 or 8)
- 3 units

### BCOR 199
- Introduction to Business (Fulfills First Year Seminar requirement)
- 3 units

### BCOR 299
- Business Communication (Fulfills Writing and Communication Skills Requirement)
- 3 units

### BCOR 320
- Legal Environment of Business
- 3 units

### BCOR 330
- Information Systems and Technology
- 3 units

### BCOR 340
- Business Finance
- 3 units

### BCOR 350
- Principles of Marketing
- 3 units

### BCOR 360
- Supply Chain Management
- 3 units

### BCOR 370
- Managing Individuals and Teams
- 3 units

### BCOR 380
- Business Ethics
- 3 units

### BCOR 460
- Contemporary Business Strategy
- 3 units

### ACCT 331
- Managerial Accounting
- 3 units

### MIST 320
- Managing Information Technology
- 3 units

### MIST 351
- Database Management Systems
- 3 units

### MIST 352
- Business Application Programming
- 3 units

### MIST 353
- Advanced Information Technology
- 3 units
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIST 355</td>
<td>Data Communications</td>
<td>3</td>
</tr>
<tr>
<td>MIST 450</td>
<td>Systems Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MIST 452</td>
<td>Systems Design and Development</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MIST Electives (ACCT 321, ACCT 322, &amp; GIS 350 Allowable MIST Electives Courses)</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Unrestricted Electives</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Total Hours</td>
<td>120</td>
</tr>
</tbody>
</table>

The College restricts students to six credit hours of Professional Field Experience toward completion of a degree. No more than three credit hours may apply toward the major.

**Suggested Plan of Study**

### First Year

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCOR 199</td>
<td>3</td>
<td>ACCT 201</td>
<td>3</td>
</tr>
<tr>
<td>CS 101 (GEF 2A)</td>
<td>4</td>
<td>ECON 201 (GEF 4)</td>
<td>3</td>
</tr>
<tr>
<td>Select one of the following:</td>
<td>3</td>
<td>ENGL 101 (GEF 1)</td>
<td>3</td>
</tr>
<tr>
<td>MATH 126A</td>
<td></td>
<td>Select one of the following:</td>
<td>3</td>
</tr>
<tr>
<td>MATH 126B</td>
<td></td>
<td>MATH 150</td>
<td></td>
</tr>
<tr>
<td>MATH 129</td>
<td></td>
<td>MATH 154</td>
<td></td>
</tr>
<tr>
<td>MATH 153</td>
<td></td>
<td>MATH 155</td>
<td></td>
</tr>
<tr>
<td>SOCA 101 (GEF 8)</td>
<td>3</td>
<td>MATH 156</td>
<td></td>
</tr>
<tr>
<td>GEF (Choose from 2A, 5, 6, or 7)</td>
<td>3</td>
<td>GEF (Choose from 2A, 5, 6, or 7)</td>
<td>3</td>
</tr>
</tbody>
</table>

16

**Second Year**

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 202</td>
<td>3</td>
<td>BCOR 299</td>
<td>3</td>
</tr>
<tr>
<td>ECON 202 (GEF 8)</td>
<td>3</td>
<td>BCOR 330</td>
<td>3</td>
</tr>
<tr>
<td>ECON 225 (GEF 3)</td>
<td>3</td>
<td>BCOR 350</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 102 (GEF 1)</td>
<td>3</td>
<td>BCOR 370</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 101 (GEF 8)</td>
<td>3</td>
<td>MIST 352</td>
<td>3</td>
</tr>
</tbody>
</table>

15

**Third Year**

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCOR 340</td>
<td>3</td>
<td>ACCT 331</td>
<td>3</td>
</tr>
<tr>
<td>MIST 320</td>
<td>3</td>
<td>BCOR 380</td>
<td>3</td>
</tr>
<tr>
<td>MIST 351</td>
<td>3</td>
<td>MIST 355</td>
<td>3</td>
</tr>
<tr>
<td>GEF (Choose from 2A, 5, 6, or 7)</td>
<td>3</td>
<td>GEF (Choose from 2A, 5, 6, or 7)</td>
<td>3</td>
</tr>
<tr>
<td>Unrestricted Electives</td>
<td>3</td>
<td>Unrestricted Electives</td>
<td>3</td>
</tr>
</tbody>
</table>

15

**Fourth Year**

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCOR 320</td>
<td>3</td>
<td>BCOR 460</td>
<td>3</td>
</tr>
<tr>
<td>BCOR 360</td>
<td>3</td>
<td>MIST 452</td>
<td>3</td>
</tr>
<tr>
<td>MIST 353</td>
<td>3</td>
<td>MIS Elective</td>
<td>3</td>
</tr>
<tr>
<td>MIST 450</td>
<td>3</td>
<td>MIS Elective</td>
<td>5</td>
</tr>
<tr>
<td>MIS Elective</td>
<td>3</td>
<td>Unrestricted Electives</td>
<td></td>
</tr>
</tbody>
</table>

15

Total credit hours: 120
Major Learning Goals

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
- An ability to apply business skills to technical problems while using an information ethics lens to achieving solutions