I. Required non-business coursework includes the campus general education requirements. Students must complete a 42-hour block of courses from an approved list of general education courses. These courses are from eight areas:

**CORE:**
1. First Year Writing – 1 course (ENGL 1100, 1110 or HIST 1111 with a C- or better grade)
2. Math Proficiency – 1 course (MATH 1030 or a proctored ALEKS score of 51 or higher)
3. Communication Proficiency – 1 course (COMM 1030, 1040, 2230, 2240 or TH DAN 1210)
4. Information Literacy – 1 course (CMP SCI 1012, 1250, INFSYS 1800, 2800, MATH 1105)
5. American History or Government – 1 course (CRIMIN 1100, HIST 1001, 1002, 1003, 1004, POL SCI 1100)

**EXPLORE:**
6. Humanities and Fine Arts – 9 hours from at least two areas (see approved list in Advising Office)
7. Social Sciences – 9 hours from at least two areas (BUS AD 2900, ECON 1001, 1002)
8. Math and Life/Natural Sciences – 9 hours from at least two areas (MATH 1100, 1105 and a Life/Natural Science)

Additional requirements of the College of Business include:
- One Cultural Diversity course
- Two Global Awareness courses (see approved list)
- ENGL 3120 Business Writing
- Completion of Good Standing requirements

II. REQUIRED BUSINESS ADMINISTRATION COURSES:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTNG 2400</td>
<td>Fundamentals of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACCTNG 2410</td>
<td>Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>INFSYS 2800</td>
<td>Information Systems Concepts and Applications*</td>
<td>3</td>
</tr>
<tr>
<td>BUS AD 2900</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>LOG OM 3300</td>
<td>Business Statistics</td>
<td>3</td>
</tr>
<tr>
<td>LOG OM 3320</td>
<td>Introduction to Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>FINANCE 3500</td>
<td>Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 3600</td>
<td>Management and Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 3700</td>
<td>Basic Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 4219</td>
<td>Strategic Management (capstone course, taken during the last semester)**</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 4220</td>
<td>Business Assessment Test</td>
<td>0</td>
</tr>
</tbody>
</table>

*INFSYS 1800 can be waived by exam. See website: [http://mis.umsl.edu/B.S.%20in%20I.S./1800waiverrequest.html](http://mis.umsl.edu/B.S.%20in%20I.S./1800waiverrequest.html)

**Special Consent Form needed for MGMT 4219 Strategic Management.

III. INFORMATION SYSTEMS REQUIREMENTS:

A student must complete 7 courses (21 hours)

A) Programming/File Structure Requirement (6 hours)
- INFSYS 3806 Managerial Applications of Object-Oriented Programming I
- INFSYS 3816 Managerial Applications of Object-Oriented Programming II

B) Three Courses (9 hours)
- INFSYS 3810 Information Systems Analysis
- INFSYS 3845 Database Management Systems
- INFSYS 4850 Information Systems Design

C) A student must complete two courses (6 hours) from the following including at least one (INFSYS) course at the 3000/4000-level:
- INFSYS 3807 Legacy Systems
- INFSYS 3815 Object-Oriented Applications in Business
- INFSYS 3841 Enterprise Information Systems
- INFSYS 3842 Data Networks and Security
- INFSYS 3843 Decision Support Systems for Business Intelligence
- INFSYS 3844 Developing Business Applications in .NET
- INFSYS 3846 E-Commerce
- INFSYS 3847 Web Design
- INFSYS 3848 Introduction to Information Security
- INFSYS 3858 Advanced Security and Information Systems
- INFSYS 3868 Secure Software Development
- INFSYS 3878 Information Security Risk Management & Business Continuity
- INFSYS 3890 Internship in Information Systems
- INFSYS 3898 Seminar in Information Systems Management
- INFSYS 3899 Independent Study in Information Systems

*INFSYS 1800 (can be waived by an exam. See website: [http://mis.umsl.edu/B.S.%20in%20I.S./1800waiverrequest.html](http://mis.umsl.edu/B.S.%20in%20I.S./1800waiverrequest.html))

Students can add an undergraduate certificate or minor in cybersecurity to the BSIS by choosing appropriate electives: [https://cybersecurity.umsl.edu/programs/undergraduate.html](https://cybersecurity.umsl.edu/programs/undergraduate.html)
# Bachelor of Science in Information Systems Degree
## Four-Year Plan

Students must have 42 hours of General Education coursework. Courses listed in **bold print** count toward the 42 hours. A list of applicable General Education and State Requirement courses is posted on the College of Business Administration webpage and are available in the Academic Advising Office. Courses in *italics* count toward the Good Standing Policy.

### FIRST SEMESTER

- **MATH 1030 College Algebra**
- **ENGL 1100 First Year Writing**
- BUS AD 1000 Introduction to Business*
- **Managing Information Skills Goal** **
- Social/Behavioral Sciences Knowledge Goal
- INTDSC 1003 University Studies (1 hr)

### SECOND SEMESTER

- **MATH 1100 Basic Calculus**
- **ECON 1001 Principles of Microeconomics**
- Life/Natural Sciences Goal (lecture only) (INTDSC 1234 Science Basics for Non-science Careers is designed for Business majors)
- **Humanities/Fine Arts Goal**
- **INFYS 2800 Information Systems Concepts and Applications**

### THIRD SEMESTER

- **MATH 1105 Basic Probability and Statistics**
- **Communicating Skills Course**
- ACCTNG 2400 Fundamentals of Financial Accounting
- **ECON 1002 Principles of Macroeconomics**
- INFYS 3806 Managerial Applications of Object-Oriented Prog. I

### FOURTH SEMESTER

- ACCTNG 2410 Managerial Accounting
- BUS AD 2900 Legal Environment of Business
- LOG OM 3300 Business Statistics
- **Humanities/Fine Arts Goal**
- INFYS 3816 Managerial Applications of Object-Oriented Prog. II

### FIFTH SEMESTER

- LOG OM 3320 Introduction to Operations Management
- MGMT 3600 Management and Organizational Behavior
- ENGL 3120 Business Writing
- INFYS 3810 Information Systems Analysis
- **Humanities/Fine Arts Goal**

### SIXTH SEMESTER

- FINANCE 3500 Financial Management
- MKTG 3700 Basic Marketing
- INFYS 3845 Database Management Systems
- Cultural Diversity Course
- State Requirement Course

### SEVENTH SEMESTER

- INFYS 4850 Information Systems Design
- Information Systems Elective***
- Global Awareness Course (Non-Business)
- Social Science Course
- Non-Business Approved Elective

### EIGHTH SEMESTER

- MGMT 4219 Strategic Management / MGMT 4220 Business Test
- Information Systems Elective***
- Global Awareness Course
- Non-Business Approved Elective
- Non-Business Approved Elective

* BUS AD 1000 Introduction to Business and INTDSC 1003 University Studies are not required courses but students are **strongly** encouraged to take them during their Freshman year.

** INFYS 1800 Computers and Information Systems is a prerequisite for INFYS 2800 Information Systems Concepts and Applications. This prerequisite can be waived by exam. See website: [http://mis.umsl.edu/B.S.%20in%20Business/1800waiverrequest.html](http://mis.umsl.edu/B.S.%20in%20Business/1800waiverrequest.html)**

*** Choose from the following courses (at least one INFYS course at the 3000/4000 level):

- INFYS 3807 Legacy Systems
- INFYS 3815 Object-Oriented Applications in Business
- INFYS 3841 Enterprise Information Systems
- INFYS 3842 Data Networks and Security
- INFYS 3843 Decision Support Systems for Business Intelligence
- INFYS 3844 Developing Business Applications in .NET
- INFYS 3846 E-Commerce
- INFYS 3847 Web Design
- INFYS 3848 Introduction to Information Security
- INFYS 3858 Advanced Security and Information Systems
- INFYS 3868 Secure Software Development
- INFYS 3878 Information Security Risk Management and Business Continuity

+ INFYS 3890 Internship in Information Systems
+ INFYS 3892 Seminar in Information Systems Management
+ INFYS 3899 Independent Study in Information Systems
+ CMP SCI 2700 Computer Organization and Architecture
+ ACCTNG 3421 Accounting Information Systems
+ FINANCE 3503 Computer Applications in Finance
+ MKTG 3721 Introduction to Digital Marketing Strategies
+ MKTG 3722 Introduction to Social Media Marketing
+ CMP SCI 4222 iOS Apps
+ CMP SCI 4300 Introduction to Artificial Intelligence
+ CMP SCI 4700 Computer Forensics
+ CMP SCI 4760 Operating Systems

+ If offered and approved by the department faculty and the department chair.

The INFYS Area website: [http://www.umsl.edu/divisions/business/mis/index.html](http://www.umsl.edu/divisions/business/mis/index.html)

College of Business Administration Academic Advising website: [http://www.umsl.edu/divisions/business/undergrad_advising/](http://www.umsl.edu/divisions/business/undergrad_advising/)

Students seeking two concurrent degrees should have 135 hours with a major and an emphasis area. See an advisor for details.

Program Subject to Change Revised 06/17