MANAGEMENT INFORMATION SYSTEMS: DATA SCIENCE, BSBA

Requirements for Students Matriculating in or before Academic Year 2018-2019. Learn more about University Academic Regulation 3.1 (http://catalog.okstate.edu/university-academic-regulations/#matriculation).

Minimum Overall Grade Point Average: 2.00
Total Hours: 120

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1113</td>
<td>Composition I</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 1313</td>
<td>Critical Analysis and Writing I</td>
<td></td>
</tr>
<tr>
<td>ENGL 1213</td>
<td>Composition II</td>
<td>3</td>
</tr>
<tr>
<td>or ENGL 1413</td>
<td>Critical Analysis and Writing II</td>
<td></td>
</tr>
<tr>
<td>HIST 1103</td>
<td>Survey of American History</td>
<td>3</td>
</tr>
<tr>
<td>POLS 1113</td>
<td>American Government</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1483</td>
<td>Mathematical Functions and Their Uses (A)</td>
<td>3</td>
</tr>
<tr>
<td>or MATH 1513</td>
<td>College Algebra (A)</td>
<td></td>
</tr>
<tr>
<td>ENGL 1313</td>
<td>Critical Analysis and Writing I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1413</td>
<td>Critical Analysis and Writing II</td>
<td>3</td>
</tr>
</tbody>
</table>

American History & Government

Courses designated (H)       6

Natural Sciences (N)

Must include one Laboratory Science (L) course

Courses designated (N) with one (L)     7

Social & Behavioral Sciences (S)

Course designated (S)       3

Additional General Education

MATH 2103 | Business Calculus (A)  | 3     |
MGTMT 3013 | Fundamentals of Management (S)  | 3     |
MKTG 3213 | Marketing (S)       | 3     |

Hours Subtotal 40

Diversity (D) & International Dimension (I)

May be completed in any part of the degree plan

At least one Diversity (D) course

At least one International Dimension (I) course

College/Departmental Requirements

Business Freshman Seminar

BADM 1111 | Business First Year Seminar | 1     |

Career Planning for Business Success

BADM 1111 | Career Planning for Business Success | 1     |

Professional Development for Business Development

BADM 3111 | Professional Development for Business Success | 1     |

Hours Subtotal 3

Major Requirements

A minimum GPA of 2.20 is required in these 66 hours

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>ACCT 2003</td>
<td>Survey of Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BADM 3113</td>
<td>Interpersonal Skills</td>
<td>3</td>
</tr>
<tr>
<td>ECON 2003</td>
<td>Microeconomic Principles for Business</td>
<td>3</td>
</tr>
<tr>
<td>EEE 2023</td>
<td>Introduction to Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>FIN 3113</td>
<td>Finance</td>
<td>3</td>
</tr>
<tr>
<td>LSB 3213</td>
<td>Legal and Regulatory Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 4513</td>
<td>Strategic Management</td>
<td>3</td>
</tr>
<tr>
<td>MSIS 2103</td>
<td>Business Data Science Technologies</td>
<td>3</td>
</tr>
<tr>
<td>MSIS 3223</td>
<td>Operation Analytics</td>
<td>3</td>
</tr>
</tbody>
</table>

Management Information Systems Major Requirements

A GPA of 2.00 is required in these 39 hours of Management Information Systems Major Requirements

18 of these 39 hours must be in residence at OSU

MSIS 2203 | Computer Programming for Business          | 3     |
MSIS 4123 | Information Assurance Management           | 3     |
MSIS 3333 | Database Systems Design, Management and Administration | 3     |
MSIS 3363 | Web Application Development               | 3     |
MSIS 4003 | Systems Analysis and Design               | 3     |
MSIS 4033 | Information Systems Project Management and Communication | 3     |

Select 12 hours of the following: 12

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>MSIS 3233</td>
<td>Management Science - Prescriptive Analytics</td>
<td></td>
</tr>
<tr>
<td>MSIS 3243</td>
<td>Managerial Decision Theory</td>
<td></td>
</tr>
<tr>
<td>MSIS 4263</td>
<td>Decision Support and Business Intelligence Applications</td>
<td></td>
</tr>
<tr>
<td>MSIS 4623</td>
<td>Data Science Programming</td>
<td></td>
</tr>
<tr>
<td>MSIS 4673</td>
<td>Data Visualization</td>
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</table>

Select 9 hours of the following: 9

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT 3103</td>
<td>Intermediate Accounting I</td>
<td></td>
</tr>
<tr>
<td>ACCT 3113</td>
<td>Intermediate Accounting II</td>
<td></td>
</tr>
<tr>
<td>ACCT 3203</td>
<td>Cost Accounting</td>
<td></td>
</tr>
<tr>
<td>ACCT 3603</td>
<td>Accounting Information Systems</td>
<td></td>
</tr>
<tr>
<td>ACCT 4653</td>
<td>Contemporary Integrated Accounting and Business Systems</td>
<td></td>
</tr>
<tr>
<td>CS 2133</td>
<td>Computer Science II</td>
<td></td>
</tr>
<tr>
<td>CS 2351</td>
<td>Unix Programming</td>
<td></td>
</tr>
<tr>
<td>CS 2433</td>
<td>C/C++ Programming</td>
<td></td>
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Any upper-division CS courses except CS 4113 and CS 4883

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<thead>
<tr>
<th>Code</th>
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</thead>
<tbody>
<tr>
<td>ECON 4213</td>
<td>Econometric Methods</td>
<td></td>
</tr>
<tr>
<td>ECON 4223</td>
<td>Business and Economic Forecasting</td>
<td></td>
</tr>
<tr>
<td>FIN 4223</td>
<td>Investments</td>
<td></td>
</tr>
<tr>
<td>FIN 4333</td>
<td>Financial Management</td>
<td></td>
</tr>
<tr>
<td>IEM 4103</td>
<td>Quality Control</td>
<td></td>
</tr>
<tr>
<td>IEM 4203</td>
<td>Facilities and Material Handling System Design</td>
<td></td>
</tr>
<tr>
<td>IEM 4713</td>
<td>Systems Simulation Modeling</td>
<td></td>
</tr>
</tbody>
</table>

Hours Subtotal 3

Code | Title                                      | Hours |
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>MATH 3013</td>
<td>Linear Algebra</td>
<td></td>
</tr>
</tbody>
</table>
MATH 4553  Linear and Nonlinear Programming
MKTG 3323  Consumer and Market Behavior
MKTG 3513  Sales Management
MKTG 4223  Supply Chain Management
MKTG 4333  Marketing Research
MKTG 4773  Services Marketing
MSIS  any upper division courses
STAT 3013  Intermediate Statistical Analysis
STAT 4033  Engineering Statistics
STAT 4043  Applied Regression Analysis
STAT 4053  Statistical Methods I for the Social Sciences (A)
STAT 4203  Mathematical Statistics I
STAT 4213  Mathematical Statistics II

**Hours Subtotal**  66

**Electives**
Select 11 hours
May be selected from any upper- or lower-division area except activity courses in LEIS and PE and lower-division AERO and MLSC. Twelve credit hours earned in advanced AERO and MLSC, exclusive of credit earned for summer camp, may be included in the 120 hours.

**Hours Subtotal**  11

**Total Hours**  120

1 Courses also meet College and Departmental Requirements and cannot be waived with an Associate's degree.
2 MGMT 3013 Fundamentals of Management (S) and MKTG 3213 Marketing (S) are common body requirements, but are counted in general education requirements.

**Other Requirements**
1. A minimum of 50 percent of the business hours required for a degree must be in residence at OSU.
2. Forty-five hours of upper division courses required.

**Additional State/OSU Requirements**
- **At least:** 60 hours at a four-year institution; 30 hours completed at OSU; 15 of the final 30 and 50% of the upper-division hours in the major field completed at OSU.
- **Limit of:** one-half of major course requirements as transfer work; one-fourth of hours earned by correspondence; 8 transfer correspondence hours.
- Students will be held responsible for degree requirements in effect at the time of matriculation and any changes that are made, so long as these changes do not result in semester credit hours being added or do not delay graduation.
- Degrees that follow this plan must be completed by the end of Summer 2024.