ENTOMOLOGY: INSECT BIOLOGY AND ECOLOGY, BSAG

Requirements for Students Matriculating in or before Academic Year 2020-2021. 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>
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</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>Select one of the following:</td>
<td></td>
<td>3</td>
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<tr>
<td>ENGL 1213</td>
<td>Composition II</td>
<td></td>
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<tr>
<td>ENGL 1413</td>
<td>Critical Analysis and Writing II</td>
<td></td>
</tr>
<tr>
<td>ENGL 3323</td>
<td>Technical Writing</td>
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American History & Government
Select one of the following: 3
- HIST 1103 | Survey of American History                  |
- HIST 1483 | American History to 1865 (H)                |
- HIST 1493 | American History Since 1865 (DH)           |
- POLS 1113 | American Government                         |

Analytical & Quantitative Thought (A)
Select one of the following: 3
- MATH 1483 | Mathematical Functions and Their Uses (A)   |
- MATH 1513 | College Algebra (A) ¹                       |
- MATH 1613 | Trigonometry (A) ¹                          |
- MATH 2103 | Business Calculus (A) ¹                     |

Humanities (H)
Courses designated (H) 6

Natural Sciences (N)
Must include one Laboratory Science (L) course
- BIOL 1114 | Introductory Biology (LN) ¹                |
- CHEM 1314 | Chemistry I (LN) ¹                         |
- or CHEM 1215 | Chemical Principles I (LN)                |

Social & Behavioral Sciences (S)
Course designated (S) 3

Additional General Education
Courses designated (A), (H), (N), or (S) 8

Hours Subtotal 40

Diversity (D) & International Dimension (I)
May be completed in any part of the degree plan
Select at least one Diversity (D) course
Select at least one International Dimension (I) course

College/Departmental Requirements
Agricultural Sciences and Natural Resources

Ferguson College of Agriculture course cannot be used here and as an (N)
AG 1011 | First Year Seminar                         |
AGEC 1113 | Introduction to Agricultural Economics (S) |
ENTO 2993 | Introduction to Entomology (LN)           |
STAT 2013 | Elementary Statistics (A)                 |
Select one of the following: 3
- ANSI 1124 | Introduction to the Animal Sciences       |
- BIOC 2344 | Chemistry and Applications of Biomolecules |
- ENVR 1113 | Elements of Environmental Science         |
- FDSC 1133 | Fundamentals of Food Science              |
- HORT 1013 | Principles of Horticultural Science (LN)  |
- LA 1013 | Introduction to Landscape Architecture and Landscape Management |
- NREM 1014 | Introduction to Natural History (LN)      |
- NREM 1113 | Elements of Forestry                      |
- NREM 2013 | Ecology of Natural Resources              |
- PLNT 1213 | Introduction to Plant and Soil Systems    |
- SOIL 2124 | Fundamentals of Soil Science (N)          |

Written and Oral Communications
Select one of the following: 3
- AGCM 3103 | Written Communications in Agricultural Sciences and Natural Resources |
- BCOM 3113 | Written Communication                     |
- BCOM 3443 | Business Communication for International Students |
- ENGL 3323 | Technical Writing ²                       |
Select one of the following: 3
- AGCM 3203 | Oral Communications in Agricultural Sciences & Natural Resources (S) |
- SPCH 2713 | Introduction to Speech Communication (S)  |
- SPCH 3733 | Elements of Persuasion                    |

Hours Subtotal 19

Major Requirements
With approval from the advisor and the department head, a maximum of 30 hours of science courses from an accredited doctoral health program may be substituted for major requirements other than the ENTO core courses of eight hours.

Core Courses
Select 8 hours of the following: 8
- ENTO 3044 | Insect Morphology and Physiology          |
- ENTO 4464 | Insect Biology and Classification         |

Additional Entomology
- ENTO 4800 | Entomology Practicum                      |

Any entomology or plant pathology course not taken as a core course 12

Related Courses
Genetics:
Select one of the following: 3
- BIOL 3023 | General Genetics                          |
- PLNT 3554 | Plant Genetics and Biotechnology          |
- ANSI 3423 | Animal Genetics                           |

Ecology.
Select one of the following:  
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>BIOL 3034</td>
<td>General Ecology</td>
</tr>
<tr>
<td>NREM 4033</td>
<td>Ecology Of Invasive Species</td>
</tr>
</tbody>
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Chemistry:  
<table>
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<th>Course Title</th>
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<tbody>
<tr>
<td>CHEM 1225</td>
<td>Chemical Principles II (LN)</td>
</tr>
<tr>
<td>or CHEM 1515</td>
<td>Chemistry II (LN)</td>
</tr>
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<table>
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<tr>
<td>BIOL 3104</td>
<td>Invertebrate Zoology</td>
</tr>
<tr>
<td>BIOL 4104</td>
<td>General Parasitology</td>
</tr>
<tr>
<td>BIOL 4133</td>
<td>Evolution</td>
</tr>
<tr>
<td>MATH 2103</td>
<td>Business Calculus (A)</td>
</tr>
<tr>
<td>MATH 2144</td>
<td>Calculus I (A)</td>
</tr>
<tr>
<td>MATH 2153</td>
<td>Calculus II (A)</td>
</tr>
<tr>
<td>CHEM 3153</td>
<td>Organic Chemistry II</td>
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<tr>
<td>&amp; CHEM 3112</td>
<td>and Organic Chemistry Laboratory</td>
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<tr>
<td>PHYS 1114</td>
<td>College Physics I (LN)</td>
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<tr>
<td>PHYS 1214</td>
<td>College Physics II (LN)</td>
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<tr>
<td>STAT 2331</td>
<td>SAS Programming</td>
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<tr>
<td>STAT 4013</td>
<td>Statistical Methods I (A)</td>
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<tr>
<td>STAT 4023</td>
<td>Statistical Methods II</td>
</tr>
<tr>
<td>STAT 4043</td>
<td>Applied Regression Analysis</td>
</tr>
<tr>
<td>BIOL 4133</td>
<td>Evolution</td>
</tr>
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Foreign Language: Up to 10 credit hours of upper division foreign language may be substituted

Electives  
Select 0 hours or hours to complete required total for degree  
Total Hours  

Other Requirements  
- A minimum of 40 semester credit hours and 100 grade points must be earned in courses numbered 3000 or above.
- A 2.00 GPA or higher in upper-division hours.

Additional State/OSU Requirements  
- At least: 60 hours at a four-year institution; 30 hours completed at OSU; 15 of the final 30 or 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 2026.