## ANIMAL SCIENCE: ANIMAL BIOTECHNOLOGY, BSAG

Requirements for Students Matriculating in or before Academic Year 2019-2020. 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></td>
<td>General Education Requirements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>English Composition</td>
<td></td>
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<tr>
<td>See Academic Regulation 3.5 (<a href="http://catalog.okstate.edu/university-academic-regulations/#english-composition">http://catalog.okstate.edu/university-academic-regulations/#english-composition</a>)</td>
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<tr>
<td>ENGL 1113</td>
<td>Composition I</td>
<td>3</td>
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<tr>
<td>or ENGL 1313</td>
<td>Critical Analysis and Writing I</td>
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<tr>
<td>Select one of the following:</td>
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<tr>
<td>ENGL 1213</td>
<td>Composition II</td>
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<tr>
<td>ENGL 1413</td>
<td>Critical Analysis and Writing II</td>
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</tr>
<tr>
<td>ENGL 3323</td>
<td>Technical Writing</td>
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<tr>
<td></td>
<td>American History &amp; Government</td>
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<tr>
<td>Select one of the following:</td>
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<tr>
<td>HIST 1103</td>
<td>Survey of American History</td>
<td>3</td>
</tr>
<tr>
<td>HIST 1483</td>
<td>American History to 1865 (H)</td>
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</tr>
<tr>
<td>HIST 1493</td>
<td>American History Since 1865 (DH)</td>
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<tr>
<td>POLS 1113</td>
<td>American Government</td>
<td>3</td>
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<tr>
<td></td>
<td>Analytical &amp; Quantitative Thought (A)</td>
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<tr>
<td>MATH 1513</td>
<td>College Algebra (A)</td>
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<tr>
<td>Select one of the following:</td>
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<tr>
<td>MATH 1613</td>
<td>Trigonometry (A)</td>
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<tr>
<td>STAT 2013</td>
<td>Elementary Statistics (A)</td>
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<tr>
<td>STAT 2023</td>
<td>Elementary Statistics for Business and Economics (A)</td>
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</tr>
<tr>
<td></td>
<td>Humanities (H)</td>
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</tr>
<tr>
<td>Courses designated (H)</td>
<td>6</td>
<td></td>
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<tr>
<td>Natural Sciences (N)</td>
<td></td>
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<tr>
<td>Must include one Laboratory Science (L) course</td>
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<tr>
<td>BIOL 1114</td>
<td>Introductory Biology (LN)</td>
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<tr>
<td>Any course designated (N)</td>
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<tr>
<td>Social &amp; Behavioral Sciences (S)</td>
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<tr>
<td>AGEC 1113</td>
<td>Introduction to Agricultural Economics (S)</td>
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<tr>
<td>or ECON 2103</td>
<td>Introduction to Microeconomics (S)</td>
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<tr>
<td>Additional General Education</td>
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<tr>
<td>Courses designated (A), (H), (N), or (S)</td>
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<tr>
<td>Hours Subtotal</td>
<td>40</td>
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<tr>
<td></td>
<td>Diversity (D) &amp; International Dimension (I)</td>
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<tr>
<td>May be completed in any part of the degree plan</td>
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<tr>
<td>Select at least one Diversity (D) course</td>
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<tr>
<td>Select at least one International Dimension (I) course</td>
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<tr>
<td>College/Departmental Requirements</td>
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<td></td>
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<tr>
<td>Agricultural Sciences and Natural Resources</td>
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### Related Courses
Select 5 hours of the following:  

- CHEM 3053 and Organic Chemistry I
- CHEM 3153 and Organic Chemistry II
- CHEM 3112 and Organic Chemistry Laboratory
- BIOC 3653 Survey of Biochemistry
- Minimum of 3 upper division hours required
- ANSI, BIOC, BIOL, CHEM, ENTO, FDSC, MICR, PHYS, STAT
- No more than 3 hours from ANSI 4900

### Hours Subtotal
58 hours

### Electives
Select 0 hours or hours to complete required total for degree

### Total Hours
120 hours

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**Option 1**

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ANSI 3433</td>
<td>Animal Breeding</td>
<td>6</td>
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<tr>
<td>ANSI 3623</td>
<td>Livestock Behavior Handling</td>
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<tr>
<td>ANSI 3653</td>
<td>Applied Animal Nutrition</td>
<td></td>
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</tbody>
</table>

Select 3 hours of the following:

- ANSI 4023 Poultry Science
- ANSI 4423 Horse Science
- ANSI 4543 Dairy Cattle Science
- ANSI 4553 Sheep Science
- ANSI 4613 Beef Cow-Calf Management
- ANSI 4633 Stocker and Feedlot Cattle Management
- ANSI 4643 Swine Science
- ANSI 4703 Equine Enterprise Management
- ANSI 4713 Beef Seedstock Management and Sales

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**Option 2**

<table>
<thead>
<tr>
<th>Code</th>
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<th>Hours</th>
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<tbody>
<tr>
<td>ANSI 4803</td>
<td>Animal Growth and Performance</td>
<td>9</td>
</tr>
<tr>
<td>MICR 3253</td>
<td>Immunology</td>
<td></td>
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<tr>
<td>MICR 4123</td>
<td>Virology</td>
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<tr>
<td>MICR 4233</td>
<td>Advanced Cell and Molecular Biology</td>
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<tr>
<td>BIOL 4134</td>
<td>Embryology</td>
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<tr>
<td>BIOL 4283</td>
<td>Endocrinology</td>
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**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 2025.