# MS Agriculture, Specialization in Animal Science

## Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 581</td>
<td>Graduate Seminar</td>
<td>1</td>
</tr>
<tr>
<td>AG 599</td>
<td>Thesis</td>
<td>6</td>
</tr>
<tr>
<td>ASCI 581</td>
<td>Graduate Seminar in Animal Science</td>
<td>3</td>
</tr>
<tr>
<td>STAT 511</td>
<td>Statistical Methods</td>
<td>4</td>
</tr>
<tr>
<td>STAT 513</td>
<td>Applied Experimental Design and Regression Models</td>
<td>4</td>
</tr>
</tbody>
</table>

Select from the following: 16

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AG 500</td>
<td>Individual Study</td>
</tr>
<tr>
<td>ASCI 403</td>
<td>Applied Biotechnology in Animal Science</td>
</tr>
<tr>
<td>ASCI 405</td>
<td>Domestic Livestock Endocrinology</td>
</tr>
<tr>
<td>ASCI 406</td>
<td>Applied Animal Embryology and Assisted Reproduction</td>
</tr>
<tr>
<td>ASCI 415</td>
<td>HACCP for Meat and Poultry Operations</td>
</tr>
<tr>
<td>ASCI 420</td>
<td>Animal Metabolism and Nutrition</td>
</tr>
<tr>
<td>ASCI 438</td>
<td>Systemic Animal Physiology</td>
</tr>
<tr>
<td>ASCI 440</td>
<td>Immunology and Diseases of Animals</td>
</tr>
<tr>
<td>or ASCI 540</td>
<td>Advanced Immunology and Diseases of Animals</td>
</tr>
<tr>
<td>ASCI 450</td>
<td>Computer Applications in Animal Science: Spreadsheet Analysis</td>
</tr>
<tr>
<td>ASCI 500</td>
<td>Individual Study in Animal Science</td>
</tr>
<tr>
<td>ASCI 503</td>
<td>Advanced Molecular Techniques in Animal Science</td>
</tr>
<tr>
<td>ASCI 593</td>
<td>Regenerative Medicine Internship</td>
</tr>
<tr>
<td>ASCI 594</td>
<td>Applications in Regenerative Medicine</td>
</tr>
<tr>
<td>AGED 438</td>
<td>Instructional Processes in Agricultural Education</td>
</tr>
<tr>
<td>BIO 501</td>
<td>Molecular &amp; Cellular Biology</td>
</tr>
<tr>
<td>BIO 524</td>
<td>Developmental Biology Seminar</td>
</tr>
<tr>
<td>CHEM 528</td>
<td>Nutritional Biochemistry</td>
</tr>
<tr>
<td>NR 532</td>
<td>Applications in Biometrics and Econometrics</td>
</tr>
</tbody>
</table>

## Approved Electives

Any 400 and 500 level courses approved by the student’s graduate committee 11

## Total units

45

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1 At least half of all units required by the committee as reflected on the formal study plan must be at the 500 level.