### ANIMAL SCIENCE, B.S.

**Begin Campus:** Any Penn State Campus  
**End Campus:** University Park  

### Degree Requirements

For the Bachelor of Science degree in Animal Science, a minimum of 124 credits is required:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Education</td>
<td>45</td>
</tr>
<tr>
<td>Electives</td>
<td>0-13</td>
</tr>
<tr>
<td>Requirements for the Major</td>
<td>90-100</td>
</tr>
</tbody>
</table>

18-24 of the 45 credits for General Education are included in the Requirements for the Major. This includes: 0-3 credits of GA courses; 9 credits of GN courses; 3-6 credits of GS courses; 6 credits of GQ courses.

### Requirements for the Major

To graduate, a student enrolled in the major must earn a grade of C or better in each course designated by the major as a C-required course, as specified by Senate Policy 82-44 (http://senate.psu.edu/policies-and-rules-for-undergraduate-students/82-00-and-83-00-degree-requirements/#82-44).

### Common Requirements for the Major (All Options)

Courses taken as common requirements can not be used to meet requirements within the option.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prescribed Courses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANSC 100</td>
<td>Introduction to Animal Industries</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 290</td>
<td>Careers in Animal Agriculture</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 110</td>
<td>Biology: Basic Concepts and Biodiversity</td>
<td>4</td>
</tr>
<tr>
<td>BMB 211</td>
<td>Elementary Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td><strong>Prescribed Courses: Require a grade of C or better</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANSC 201</td>
<td>Animal Science</td>
<td>4</td>
</tr>
<tr>
<td>ANSC 207</td>
<td>Animal Products Technology</td>
<td>2</td>
</tr>
<tr>
<td>ANSC 208</td>
<td>Animal Products Technology Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>ANSC 300</td>
<td>Integrated Animal Biology</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 301</td>
<td>Principles of Animal Nutrition</td>
<td>3</td>
</tr>
<tr>
<td><strong>Additional Courses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGBM 101</td>
<td>Economic Principles of Agribusiness Decision Making</td>
<td>3</td>
</tr>
<tr>
<td>or ECON 102</td>
<td>Introductory Microeconomic Analysis and Policy</td>
<td></td>
</tr>
<tr>
<td>ANSC 322</td>
<td>Animal Genetics and Selection</td>
<td>3</td>
</tr>
<tr>
<td>or BIOL 222</td>
<td>Genetics</td>
<td></td>
</tr>
<tr>
<td>CHEM 202</td>
<td>Fundamentals of Organic Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>or CHEM 210</td>
<td>Organic Chemistry I</td>
<td></td>
</tr>
</tbody>
</table>

Select 6-8 credits from the following: 6-8

Select 3 credits from the following:

- MATH 21  College Algebra I
- MATH 22  College Algebra II and Analytic Geometry
- MATH 26  Plane Trigonometry
- MATH 41  Trigonometry and Analytic Geometry
- MATH 110 Techniques of Calculus I
- MATH 140 Calculus With Analytic Geometry I
- Select 2-4 credits from the following:  
- CMPSC 101 Introduction to Programming
- CMPSC 203 Introduction to Spreadsheets and Databases
- MATH 22  College Algebra II and Analytic Geometry
- MATH 111 Techniques of Calculus II
- MATH 141 Calculus with Analytic Geometry II
- STAT 200 Elementary Statistics
- STAT 250 Introduction to Biostatistics

**Additional Courses: Require a grade of C or better**

Select 6-8 credits from the following:

- ANSC 305 Companion Animal Nutrition
- ANSC 306 Swine Production and Management
- ANSC 308 Sheep and Goat Production and Management
- ANSC 309 Beef Cattle Production and Management
- ANSC 310 Dairy Cattle Production and Management
- ANSC 311 Poultry Production and Management
- ANSC 315 Small Animal Health and Disease
- ANSC 324 Value Determination of Meat Animals
- ANSC 327 Horse Production and Management

### Supporting Courses and Related Areas

Select 3-5 credits in communication skills courses from department list  

### Requirements for the Option

Select an option 42-46

1 Certain courses may double count as general education courses; consult with your adviser.

### Requirements for the Option

#### Business and Management Option (43-45 credits)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTG 211</td>
<td>Financial and Managerial Accounting for Decision Making</td>
<td>4</td>
</tr>
<tr>
<td><strong>Additional Courses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MICRB 106</td>
<td>Elementary Microbiology</td>
<td>4-5</td>
</tr>
<tr>
<td>&amp; MICRB 107</td>
<td>Elementary Microbiology Laboratory</td>
<td></td>
</tr>
<tr>
<td>or MICRB 201</td>
<td>Introductory Microbiology</td>
<td></td>
</tr>
<tr>
<td>&amp; MICRB 202</td>
<td>Introductory Microbiology Laboratory</td>
<td></td>
</tr>
</tbody>
</table>

Select 3 credits from the following: 3

- CHEM 101  Introductory Chemistry
- CHEM 110  Chemical Principles I
- CHEM 130  Introduction to General, Organic, and Biochemistry

Select 3 credits from the following: 3

- AGBM 102 Economics of the Food System
- BA 303  Marketing
- MKTG 301 Principles of Marketing

Select 3 credits from the following: 3

- AGBM 200 Introduction to Agricultural Business Management
- or MGMT 10: Survey of Management
- BA 304  Management and Organization
- MGMT 301 Basic Management Concepts
General Education

Connecting career and curiosity, the General Education curriculum provides the opportunity for students to acquire transferable skills necessary to be successful in the future and to thrive while living in interconnected contexts. General Education aids students in developing intellectual curiosity, a strengthened ability to think, and a deeper sense of aesthetic appreciation. These are requirements for all baccalaureate students and are often partially incorporated into the requirements of a program. For additional information, see the General Education Requirements (https://bulletins.psu.edu/undergraduate/general-education/baccalaureate-degree-general-education-program/) section of the Bulletin and consult your academic adviser.

The General Education curriculum has three parts:

1. Foundations (grade of C or better is required.)
   • Quantification (GQ): 6 credits
   • Writing and Speaking (GWS): 9 credits

2. Knowledge Domains
   • Arts (GA): 6 credits
   • Health and Wellness (GHW): 3 credits
   • Humanities (GH): 6 credits
   • Social and Behavioral Sciences (GS): 6 credits
   • Natural Sciences (GN): 9 credits

3. Integrative Studies (may also complete a Knowledge Domain requirement)
   • Inter-Domain or Approved Linked Courses: 6 credits

University Degree Requirements

First Year Engagement

All students enrolled in a college or the Division of Undergraduate Studies at University Park, and the World Campus are required to take 1 to 3 credits of the First-Year Seminar, as specified by their college First-Year Engagement Plan.

Other Penn State colleges and campuses may require the First-Year Seminar; colleges and campuses that do not require a First-Year Seminar provide students with a first-year engagement experience.

First-year baccalaureate students entering Penn State should consult their academic adviser for these requirements.

Cultures Requirement

6 credits are required and may satisfy other requirements

• United States Cultures: 3 credits
• International Cultures: 3 credits

Writing Across the Curriculum

3 credits required from the college of graduation and likely prescribed as part of major requirements.

Total Minimum Credits

A minimum of 120 degree credits must be earned for a baccalaureate degree. The requirements for some programs may exceed 120 credits. Students should consult with their college or department adviser for information on specific credit requirements.

Quality of Work

Candidates must complete the degree requirements for their major and earn at least a 2.00 grade-point average for all courses completed within their degree program.

Limitations on Source and Time for Credit Acquisition

The college dean or campus chancellor and program faculty may require up to 24 credits of course work in the major to be taken at the location or in the college or program where the degree is earned. Credit used toward degree programs may need to be earned from a particular source or within time constraints (see Senate Policy 83-80 (http://senate.psu.edu/...)) section of...
policies-and-rules-for-undergraduate-students/82-00-and-83-00-degree-requirements/#83-80)). For more information, check the Suggested Academic Plan for your intended program.