DAIRY AND FOOD ANIMAL MANAGEMENT, BS

REQUIREMENTS

UNIVERSITY GENERAL EDUCATION REQUIREMENTS

All undergraduate students at the University of Wisconsin–Madison are required to fulfill a minimum set of common university general education requirements to ensure that every graduate acquires the essential core of an undergraduate education. This core establishes a foundation for living a productive life, being a citizen of the world, appreciating aesthetic values, and engaging in lifelong learning in a continually changing world. Various schools and colleges will have requirements in addition to the requirements listed below. Consult your advisor for assistance, as needed. For additional information, see the university Undergraduate General Education Requirements (http://guide.wisc.edu/undergraduate/#requirementsforundergraduatestudytext) section of the Guide.

General Education

- Breadth—Humanities/Literature/Arts: 6 credits
- Breadth—Natural Science: 4 to 6 credits, consisting of one 4- or 5-credit course with a laboratory component; or two courses providing a total of 6 credits
- Breadth—Social Studies: 3 credits
- Communication Part A Part B *
- Ethnic Studies *
- Quantitative Reasoning Part A Part B *

* The mortarboard symbol appears before the title of any course that fulfills one of the Communication Part A or Part B, Ethnic Studies, or Quantitative Reasoning Part A or Part B requirements.

COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

In addition to the University General Education Requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Courses may not double count within university requirements (General Education and Breadth) or within college requirements (First-Year Seminar, International Studies, Science, and Capstone), but courses counted toward university requirements may also be used to satisfy a college and/or a major requirement; similarly, courses counted toward college requirements may also be used to satisfy a university and/or a major requirement.

COLLEGE REQUIREMENTS FOR ALL CALS BS DEGREE PROGRAMS

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quality of Work: Students must maintain a minimum cumulative grade point average of 2.000 to remain in good standing and be eligible for graduation.</td>
<td></td>
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<tr>
<td></td>
<td>Residency: Students must complete 30 degree credits in residence at UW–Madison after earning 86 credits toward their undergraduate degree.</td>
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<tr>
<td></td>
<td>First year seminar (<a href="http://guide.wisc.edu/undergraduate/agricultural-life-sciences/#CALSFirstYearSeminarCourses">http://guide.wisc.edu/undergraduate/agricultural-life-sciences/#CALSFirstYearSeminarCourses</a>)</td>
<td>1</td>
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<tr>
<td></td>
<td>International studies (<a href="http://guide.wisc.edu/undergraduate/agricultural-life-sciences/#CALSInternationalStudiesCourses">http://guide.wisc.edu/undergraduate/agricultural-life-sciences/#CALSInternationalStudiesCourses</a>)</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 103</td>
<td>General Chemistry I</td>
<td>4-5</td>
</tr>
<tr>
<td>or CHEM 108</td>
<td>Chemistry in Our World</td>
<td></td>
</tr>
<tr>
<td>or CHEM 109</td>
<td>Advanced General Chemistry</td>
<td></td>
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<tr>
<td></td>
<td>Physical science fundamentals</td>
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<tr>
<td></td>
<td>Biological science</td>
<td>5</td>
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<tr>
<td></td>
<td>Additional science (biological, physical, or natural)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Science breadth (biological, physical, natural, or social)</td>
<td>3</td>
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<td></td>
<td>CALS Capstone Learning Experience: included in the requirements for each CALS major (see “major requirements”) (<a href="http://guide.wisc.edu/undergraduate/agricultural-life-sciences/#CALSCapstoneRequirement">http://guide.wisc.edu/undergraduate/agricultural-life-sciences/#CALSCapstoneRequirement</a>)</td>
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SUMMARY OF MAJOR REQUIREMENTS

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Major Requirements</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Foundation</td>
<td>19-25</td>
</tr>
<tr>
<td></td>
<td>Major Core</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Major Depth and Breadth</td>
<td>36</td>
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<tr>
<td></td>
<td>Internship</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Major Capstone</td>
<td>2-3</td>
</tr>
<tr>
<td></td>
<td>Total Credits</td>
<td>66-73</td>
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</table>

DAIRY & FOOD ANIMAL MANAGEMENT MAJOR REQUIREMENTS

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Mathematics</td>
<td></td>
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<td></td>
<td>Complete one of the following (or may be satisfied by placement exam):</td>
<td>3-5</td>
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<tr>
<td></td>
<td>MATH 112 Algebra</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 114 Algebra and Trigonometry</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Statistics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>STAT 301 Introduction to Statistical Methods</td>
<td>3</td>
</tr>
<tr>
<td>or STAT 371</td>
<td>Introductory Applied Statistics for the Life Sciences</td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td></td>
<td>5-9</td>
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</tbody>
</table>
Complete one of the following:

**CHEM 103 & CHEM 104**
General Chemistry I and General Chemistry II

**CHEM 109**
Advanced General Chemistry

**Biology**

Complete one of the following:

**BIOLOGY/BOTANY/ZOOLOGY 151**
Introductory Biology

**BIOLOGY/ZOOLOGY 101 & BIOLOGY/ZOOLOGY 102**
Animal Biology and Animal Biology Laboratory

**Biochemistry**

Complete one of the following:

**BIOCHEM 301**
Survey of Biochemistry

or **BIOCHEM 501**
Introduction to Biochemistry

**Major Core**

**AN SCI/DY SCI 101**
Introduction to Animal Sciences

**AN SCI/DY SCI 102**
Introduction to Animal Sciences Laboratory

**A A E 101**
Introduction to Agricultural and Applied Economics

or **ECON 101**
Principles of Microeconomics

**Major Depth and Breadth**

**Animal Science**

Complete 12 credits from the following:

**AN SCI 245**
Animal Welfare

**AN SCI/DY SCI/NUTR SCI 311**
Comparative Animal Nutrition

**AN SCI/DY SCI 320**
Animal Health and Disease

**AN SCI 336**
Animal Growth and Development

**AN SCI/DY SCI 361**
Veterinary Genetics

**AN SCI/DY SCI 363**
Principles of Animal Breeding

**AN SCI 366**
Concepts in Genomics

**AN SCI/DY SCI 373**
Animal Physiology

**AN SCI/DY SCI 414**
Ruminant Nutrition & Metabolism

**AN SCI 415**
Application of Monogastric Nutrition Principles

**AN SCI/DY SCI 434**
Reproductive Physiology

**DY SCI 378**
Lactation Physiology

**Food and Animal Agriculture**

Complete 12 credits from the following:

**AN SCI/DY SCI 305**
Introduction to Meat Science and Technology

**AN SCI/DY SCI 321**
Food Laws and Regulations

**AN SCI/BSE 344**
Digital Technologies for Animal Monitoring

**AN SCI/DY SCI 370**
Livestock Production and Health in Agricultural Development

**AN SCI 420**
Microbiomes of Animal Systems

**AN SCI 431**
Beef Cattle Production

**AN SCI 432**
Swine Production

**DY SCI/AGRONOMY 471**
Food Production Systems and Sustainability

**AN SCI/FOOD SCI 515**
Commercial Meat Processing

**DY SCI 233**
Dairy Herd Management I

**DY SCI 234**
Dairy Herd Management II

**DY SCI 534**
Reproductive Management of Dairy Cattle

**AGRONOMY 302**
Forage Management and Utilization

**FOOD SCI 301**
Introduction to the Science and Technology of Food

**SOIL SCI/ENVIR ST/GEOG 230**
Soil: Ecosystem and Resource or **SOIL SCI 301**
General Soil Science

**Business, Economics, and Management**

Complete the following two courses:

**A A E 320**
Agricultural Systems Management

**A A E 419**
Agricultural Finance

Complete 6 credits from the following:

**A A E 322**
Commodity Markets

**A A E 335**
Introduction to Data Analysis using Spreadsheets

**A A E/ECON 421**
Economic Decision Analysis

**A A E 422**
Food Systems and Supply Chains

**ACCT I S 300**
Accounting Principles

**GEN BUS 301**
Business Law

**MARKETING 300**
Marketing Management

**M H R 300**
Managing Organizations

**M H R 305**
Human Resource Management

**Internship**

Complete the following course:

**AN SCI 399**
Coordinative Internship/Cooperative Education

**Capstone**

Complete one of the following:

**AN SCI 435**
Animal Sciences Proseminar

**DY SCI 535**
Dairy Farm Management Practicum

**Total Credits**

66-73

**UNIVERSITY DEGREE REQUIREMENTS**

Total Degree
To receive a bachelor's degree from UW–Madison, students must earn a minimum of 120 degree credits. The requirements for some programs may exceed 120 degree credits. Students should consult with their college or department advisor for information on specific credit requirements.
<table>
<thead>
<tr>
<th>Residency</th>
<th>Degree candidates are required to earn a minimum of 30 credits in residence at UW–Madison. “In residence” means on the UW–Madison campus with an undergraduate degree classification. “In residence” credit also includes UW–Madison courses offered in distance or online formats and credits earned in UW–Madison Study Abroad/Study Away programs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of Work</td>
<td>Undergraduate students must maintain the minimum grade point average specified by the school, college, or academic program to remain in good academic standing. Students whose academic performance drops below these minimum thresholds will be placed on academic probation.</td>
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</tbody>
</table>