# AGRICULTURAL AND APPLIED ECONOMICS, B.S.

## 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 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 B.S. 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. Residency: Students must complete 30 degree credits in residence at UW–Madison after earning 86 credits toward their undergraduate degree.</td>
<td></td>
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</tbody>
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### MAJOR REQUIREMENTS

#### Mathematics and Statistics

This major requires calculus. Prerequisites may need to be taken before enrollment in calculus.

Select one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 211</td>
<td>Calculus</td>
<td>5</td>
</tr>
<tr>
<td>MATH 217</td>
<td>Calculus with Algebra and Trigonometry II</td>
<td></td>
</tr>
<tr>
<td>MATH 221</td>
<td>Calculus and Analytic Geometry I</td>
<td></td>
</tr>
</tbody>
</table>

Select one of the following:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ECON 310</td>
<td>Statistics: Measurement in Economics</td>
<td></td>
</tr>
<tr>
<td>STAT 301</td>
<td>Introduction to Statistical Methods</td>
<td></td>
</tr>
<tr>
<td>STAT 324</td>
<td>Introductory Applied Statistics for Engineers</td>
<td></td>
</tr>
<tr>
<td>STAT 371</td>
<td>Introductory Applied Statistics for the Life Sciences</td>
<td></td>
</tr>
<tr>
<td>PSYCH 210</td>
<td>Basic Statistics for Psychology</td>
<td></td>
</tr>
<tr>
<td>SOC/C &amp; SOC 360</td>
<td>Statistics for Sociologists I</td>
<td></td>
</tr>
<tr>
<td>GEN BUS 306 &amp; GEN BUS 307</td>
<td>Business Analytics I and Business Analytics II</td>
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</table>

#### Core

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>A A E 215</td>
<td>Introduction to Agricultural and Applied Economics</td>
<td>4</td>
</tr>
<tr>
<td>or ECON 101</td>
<td>Principles of Microeconomics</td>
<td></td>
</tr>
<tr>
<td>ECON 102</td>
<td>Principles of Macroeconomics</td>
<td>3-4</td>
</tr>
<tr>
<td>ECON 301</td>
<td>Intermediate Microeconomic Theory</td>
<td>4</td>
</tr>
<tr>
<td>or ECON 311</td>
<td>Intermediate Microeconomic Theory - Advanced Treatment</td>
<td></td>
</tr>
<tr>
<td>ECON 302</td>
<td>Intermediate Macroeconomic Theory</td>
<td>4</td>
</tr>
<tr>
<td>or ECON 312</td>
<td>Intermediate Macroeconomic Theory - Advanced Treatment</td>
<td></td>
</tr>
</tbody>
</table>

### Concentrations within the Major

First Year Seminar (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/#requirementstext) 1
International Studies (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/#requirementstext) 3
Physical Science Fundamentals 4-5
CHEM 103 General Chemistry I
or CHEM 108 Chemistry in Our World
or CHEM 109 Advanced General Chemistry
Biological Science 5
Additional Science (Biological, Physical, or Natural) 3
Science Breadth (Biological, Physical, Natural, or Social) 3
CALS Capstone Learning Experience: included in the requirements for each CALS major (see "Major Requirements") (http://guide.wisc.edu/undergraduate/agricultural-life-sciences/#requirementstext)
Students must complete 15 credits of AAE courses 200-level or above. Students may choose to focus their studies on an area of concentration as follows:

- Applied Economics
- Development Economics
- Environmental Economics
- Managerial Economics

### Capstone

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>A A E 500</td>
<td>Senior Capstone Experience</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Credits**: 41-45

1. A A E 215 Introduction to Agricultural and Applied Economics satisfies QR-B credit.
2. A A E 215 Introduction to Agricultural and Applied Economics, A A E 299 Independent Study and A A E 500 Senior Capstone Experience may not count toward the 15 credits required in the major.

### Concentrations Within the Major

#### Applied Economics

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAE courses, 200 level and above</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credits**: 15

1. AAE courses 200 level and above may not include A A E 215 Introduction to Agricultural and Applied Economics, A A E 299 Independent Study, or A A E 500 Senior Capstone Experience.

#### Development Economics

Select any of the following courses:

- A A E 319 The International Agricultural Economy 3
- A A E/AGRONOMY/NUTR SCI 350 World Hunger and Malnutrition 3
- A A E/INTL ST 373 Globalization, Poverty and Development 3
- A A E/INTL ST 374 The Growth and Development of Nations in the Global Economy 3
- A A E/ECON/INTL BUS 462 Latin American Economic Development 3
- A A E/ECON 473 Economic Growth and Development in Southeast Asia 3
- A A E/ECON 474 Economic Problems of Developing Areas 3
- A A E/ECON 477 Agricultural and Economic Development in Africa 3

AAE courses, 200 level and above 1

1. AAE courses 200 level and above may not include A A E 215 Introduction to Agricultural and Applied Economics, A A E 299 Independent Study, or A A E 500 Senior Capstone Experience.

#### Managerial Economics

Select any of the following courses:

- A A E 320 Agricultural Systems Management 3
- A A E 322 Commodity Markets 4
- A A E 323 Cooperatives and Alternative Forms of Enterprise Ownership 3
- A A E 335 Introduction to Data Analysis using Spreadsheets 2
- A A E 419 Agricultural Finance 3
- A A E/ECON 421 Economic Decision Analysis 4

AAE courses, 200 level and above 1

1. AAE courses 200 level and above may not include A A E 215 Introduction to Agricultural and Applied Economics, A A E 299 Independent Study, or A A E 500 Senior Capstone Experience.

### Environmental Economics

Select any of the following courses:

- A A E/ENVIR ST 244 The Environment and the Global Economy 4
- A A E 246 Climate Change Economics and Policy 3
- A A E/ECON/ENVIR ST 343 Environmental Economics 4
- A A E 352 Global Health: Economics, Natural Systems, and Policy 4
- A A E/ECON 371 Energy, Resources and Economics 3
- A A E/ECON/F&W ECOL 531 Natural Resource Economics 3
- A A E/ECON/ENVIR ST/URB R PL 671 Energy Economics 3

AAE courses, 200 level and above 1

1. AAE courses 200 level and above may not include A A E 215 Introduction to Agricultural and Applied Economics, A A E 299 Independent Study, or A A E 500 Senior Capstone Experience.

### University Degree Requirements

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.

**Residency**: 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.
Quality of Work

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.