

# 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 (<http://guide.wisc.edu/undergraduate/#requirementsforundergraduestudytext>) 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

Code	Title	Credits
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.

First Year Seminar ( <a href="http://guide.wisc.edu/undergraduate/agricultural-life-sciences/#CALSThirdYearSeminarCourses">http://guide.wisc.edu/undergraduate/agricultural-life-sciences/#CALSThirdYearSeminarCourses</a> )	1
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International Studies ( <a href="http://guide.wisc.edu/undergraduate/agricultural-life-sciences/#CALSThirdYearSeminarCourses">http://guide.wisc.edu/undergraduate/agricultural-life-sciences/#CALSThirdYearSeminarCourses</a> )	3
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Physical Science Fundamentals	4-5
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CHEM 103	General Chemistry I
or CHEM 108	Chemistry in Our World
or CHEM 109	Advanced General Chemistry

Biological Science	5
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Additional Science (Biological, Physical, or Natural)	3
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Science Breadth (Biological, Physical, Natural, or Social)	3
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CALS Capstone Learning Experience: included in the requirements for each CALS major (see "Major Requirements") (<http://guide.wisc.edu/undergraduate/agricultural-life-sciences/#CALSCapstoneRequirement>)

### MAJOR REQUIREMENTS

Code	Title	Credits
<b>Mathematics and Statistics</b>		

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

Select one of the following:	5
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MATH 211	Calculus
MATH 217	Calculus with Algebra and Trigonometry II
MATH 221	Calculus and Analytic Geometry I

Select one of the following:	3-6
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ECON 310	Statistics: Measurement in Economics
STAT 301	Introduction to Statistical Methods
STAT 324	Introductory Applied Statistics for Engineers
STAT 371	Introductory Applied Statistics for the Life Sciences
PSYCH 210	Basic Statistics for Psychology
SOC/ C&E SOC 360	Statistics for Sociologists I
GEN BUS 306 & GEN BUS 307	Business Analytics I and Business Analytics II

#### Core

A A E 215	Introduction to Agricultural and Applied Economics <sup>1</sup>	4
or ECON 101	Principles of Microeconomics	
ECON 102	Principles of Macroeconomics	3-4
ECON 301	Intermediate Microeconomic Theory	4
or ECON 311	Intermediate Microeconomic Theory - Advanced Treatment	
ECON 302	Intermediate Macroeconomic Theory	4

or ECON 312	Intermediate Macroeconomic Theory - Advanced Treatment	
<b>Concentrations within the Major</b>		
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: <sup>2</sup>		15
Applied Economics		
Development Economics		
Environmental Economics		
Managerial Economics		
<b>Capstone</b>		
A A E 500	Senior Capstone Experience	3
<b>Total Credits</b>		<b>41-45</b>

**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

Code	Title	Credits
AAE courses, 200 level and above <sup>1</sup>		15
<b>Total Credits</b>		<b>15</b>

**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

Code	Title	Credits
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 <sup>1</sup>		

**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

Code	Title	Credits
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 <sup>1</sup>

**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

Code	Title	Credits
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 <sup>1</sup>		

**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

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.

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.