

# AGRICULTURAL AND APPLIED ECONOMICS, 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 (<https://guide.wisc.edu/undergraduate/#requirementsforundergraduestudytext>) section of the Guide.

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| General Education | <ul style="list-style-type: none"> <li>• Breadth–Humanities/Literature/Arts: 6 credits</li> <li>• 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</li> <li>• Breadth–Social Studies: 3 credits</li> <li>• Communication Part A &amp; Part B *</li> <li>• Ethnic Studies *</li> <li>• Quantitative Reasoning Part A &amp; Part B *</li> </ul> |
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\* 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

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="https://guide.wisc.edu/undergraduate/agricultural-life-sciences/#CALSThirdYearSeminarCourses">https://guide.wisc.edu/undergraduate/agricultural-life-sciences/#CALSThirdYearSeminarCourses</a> )	1
	International studies ( <a href="https://guide.wisc.edu/undergraduate/agricultural-life-sciences/#CALSIInternationalStudiesCourses">https://guide.wisc.edu/undergraduate/agricultural-life-sciences/#CALSIInternationalStudiesCourses</a> )	3
	Physical science fundamentals	4-5
CHEM 103 or CHEM 108 or CHEM 109	General Chemistry I Chemistry in Our World 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") ( <a href="https://guide.wisc.edu/undergraduate/agricultural-life-sciences/#CALSCapstoneRequirement">https://guide.wisc.edu/undergraduate/agricultural-life-sciences/#CALSCapstoneRequirement</a> )	

### MAJOR REQUIREMENTS

Code	Title	Credits
<b>Mathematics and Statistics</b>		
	Complete one of the following:	5-10
MATH 221	Calculus and Analytic Geometry I	
MATH 211 & MATH 213	Survey of Calculus 1 and Survey of Calculus 2	
MATH 171 & MATH 217	Calculus with Algebra and Trigonometry I and Calculus with Algebra and Trigonometry II	
MATH 211 & ECON 205	Survey of Calculus 1 and Quantitative Tools for Economics	
	Complete one of the following:	3-6
ECON 310	Statistics: Measurement in Economics	
STAT 301	Introduction to Statistical Methods	
STAT 324	Introduction to Statistics for Science and Engineering	
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 101	Introduction to Agricultural and Applied Economics	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	

### Focus Areas within the Major

Students must complete 15 credits of A A E courses numbered 200 or above. Students may choose to focus their studies on one of the following four areas (see course lists below):<sup>1</sup>

Applied Economics
Development Economics
Environmental Economics
Managerial Economics

### Capstone

A A E 500	Senior Capstone Experience	3
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**Total Credits** **41-50**

<sup>1</sup> A A E 299 Independent Study and A A E 500 Senior Capstone Experience may not count toward the 15-credit Focus Areas within the Major requirement.

## FOCUS AREAS WITHIN THE MAJOR

### Applied Economics

Any A A E course ([https://guide.wisc.edu/courses/a\\_a\\_e/](https://guide.wisc.edu/courses/a_a_e/)) numbered 200 or above.

### Development Economics

Code	Title	Credits
A A E 319	The International Agricultural Economy	3
A A E/ 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

### Environmental Economics

Code	Title	Credits
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

### Managerial Economics

Code	Title	Credits
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

## 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.