ENTOMOLOGY, 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/#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

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 (https://guide.wisc.edu/undergraduate/agricultural-life-sciences/#CALSFirstYearSeminarCourses)		1
International studies (https://guide.wisc.edu/undergraduate/agricultural-life-sciences/#CALSInternationalStudiesCourses)		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") (https://guide.wisc.edu/undergraduate/agricultural-life-sciences/#CALSCapstoneRequirement)		

MAJOR REQUIREMENTS

Code	Title	Credits
Mathematics		9-11
Chemistry		5-9
Biology		10
Physics		3-5
Biological and Physical Science Electives		12
Entomology Core		15
Capstone		3
Total Credits		**57-65**

MATHEMATICS

Code	Title	Credits
Complete one of the following (or may be satisfied by placement exam):		
MATH 112 & MATH 113	College Algebra and Trigonometry	6
MATH 114	Precalculus	5
MATH 171	Calculus with Algebra and Trigonometry I	5
Complete one of the following:		
MATH 211	Survey of Calculus 1	4
MATH 217	Calculus with Algebra and Trigonometry II	5
MATH 221	Calculus and Analytic Geometry 1	5
STAT 371	Introductory Applied Statistics for the Life Sciences	3

CHEMISTRY

Complete one of the following:

Code	Title	Credits
CHEM 103 & CHEM 104	General Chemistry I and General Chemistry II	9
CHEM 109	Advanced General Chemistry	5

BIOLOGY

Complete one of the following options:

Code	Title	Credits
Option 1:		
BIOLOGY/BOTANY/ ZOOLOGY 151 & BIOLOGY/ BOTANY/ ZOOLOGY 152	Introductory Biology and Introductory Biology	10
Option 2:		
BIOLOGY/ ZOOLOGY 101 & BIOLOGY/ ZOOLOGY 102 & BIOLOGY/ BOTANY 130	Animal Biology and Animal Biology Laboratory and General Botany	10
Option 3:		
BIOCORE 381 & BIOCORE 382 & BIOCORE 383 & BIOCORE 384	Evolution, Ecology, and Genetics and Evolution, Ecology, and Genetics Laboratory and Cellular Biology and Cellular Biology Laboratory	10

PHYSICS

Complete one of the following:

Code	Title	Credits
PHYSICS 103	General Physics	4
PHYSICS 107	The Ideas of Modern Physics	3
PHYSICS 109	Physics in the Arts	3
PHYSICS 115	Energy and Climate	3
PHYSICS 201	General Physics	5
PHYSICS 207	General Physics	5

BIOLOGICAL AND PHYSICAL SCIENCE ELECTIVES

Complete 12 additional credits from any biological or physical science course (at least 8 credits must be numbered 300-399 or 200-299 with the intermediate-level designation). Recommended courses are listed below.

Recommended Biological and Physical Science Electives

Code	Title	Credits
GENETICS 466	Principles of Genetics	3
CHEM 341	Elementary Organic Chemistry	3
CHEM 342	Elementary Organic Chemistry Laboratory	1
CHEM 343	Organic Chemistry I	3
CHEM 344	Introductory Organic Chemistry Laboratory	2
CHEM 345	Organic Chemistry II	3
PHYSICS 104	General Physics	4
PHYSICS 202	General Physics	5
PHYSICS 208	General Physics	5
ENTOM (not used to meet other requirements), BOTANY, ZOOLOGY, F&W ECOL, MICROBIO, or PL PATH.		

ENTOMOLOGY CORE

Code	Title	Credits
ENTOM/ ZOOLOGY 302	Introduction to Entomology	4
Subset Courses		11

Must complete at least 3 credits from at least two subsets (organismal, suborganismal, or applied). Courses may not double count in more than one subset. May complete up to 3 credits from the subset labeled "other." See course lists below.

Organismal

Code	Title	Credits
ENTOM 331	Taxonomy of Mature Insects	4
ENTOM 432	Taxonomy and Bionomics of Immature Insects	4
ENTOM 450	Basic and Applied Insect Ecology	3
ENTOM 468	Studies in Field Entomology	3
ENTOM/BOTANY/ ZOOLOGY 473	Plant-Insect Interactions	3
ENTOM 490	Biodiversity and Global Change	3

Suborganismal

Code	Title	Credits
ENTOM 321	Physiology of Insects	3
ENTOM/ ZOOLOGY 371	Medical Entomology: Biology of Vector and Vector-borne Diseases	3-4
ENTOM/BOTANY/ PL PATH 505	Plant-Microbe Interactions: Molecular and Ecological Aspects	3
ENTOM/GENETICS/ ZOOLOGY 624	Molecular Ecology	3

Applied

Code	Title	Credits
ENTOM 344	From Flowers to Food: Pollinator Ecology and Conservation	3
ENTOM/M M & I/ PATH-BIO/ ZOOLOGY 350	Parasitology	3
ENTOM 351	Principles of Economic Entomology	3
ENTOM/ ZOOLOGY 371	Medical Entomology: Biology of Vector and Vector-borne Diseases	3
ENTOM 450	Basic and Applied Insect Ecology	3

Other

Code	Title	Credits
ENTOM 375	Special Topics	1-4
ENTOM 399	Coordinative Internship/ Cooperative Education	1-8
ENTOM 681	Senior Honors Thesis	2-4
ENTOM 682	Senior Honors Thesis	2-4
ENTOM 691	Senior Thesis	2
ENTOM 699	Special Problems	1-4

CAPSTONE

ENTOM 468 Studies in Field Entomology is the recommended capstone course (can double count in Entomology Core). ENTOM 681 Senior Honors Thesis, ENTOM 682 Senior Honors Thesis, ENTOM 691 Senior Thesis, ENTOM 699 Special Problems can be substituted in special circumstances (and can double count up to 3 credits in Entomology Core Category); see advisor.

Code	Title	Credits
ENTOM 468	Studies in Field Entomology	3

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.