ENTOMOLOGY, BS

REQUIREMENTS

UNIVERSITY REQUIREMENTS

All undergraduate students must complete both the following Core General Education (Core GenEd) and University Degree and Quality of Work requirements. The requirements below apply to students whose first term at UW-Madison or whose earliest post-high school college attendance at any institution is Summer 2026 or later.

Students whose first term at UW-Madison or whose earliest post-high school college attendance at any institution occurred before Summer 2026 should refer to the archived Guide (https://guide.wisc.edu/archive/) for the requirements that apply to them.

CORE GENERAL EDUCATION (CORE GENED) REQUIREMENTS

Civics & Perspectives	3 credits of Civics & Perspectives coursework.
Communicatio & Literacy	6 credits of Communication & Literacy coursework. This requirement may be partially satisfied by a qualifying placement test score. More information: https://go.wisc.edu/qualifyingenglishplacement (https://go.wisc.edu/qualifyingenglishplacement/)
Humanities & Arts	6 credits of Humanities & Arts coursework.
Mathematics & Quantitative Reasoning	6 credits of Mathematics & Quantitative Reasoning coursework. This requirement may be partially satisfied by a qualifying placement test score. More information: https://go.wisc.edu/qualifyingmathplacement (https://go.wisc.edu/qualifyingmathplacement/)
Natural Science & Wellness	Complete both: • 6 credits of Natural Science & Wellness or Natural Science & Wellness + Laboratory coursework. • one course must be in Natural Science & Wellness + Laboratory coursework.
Social & Behavioral Science	3 credits of Social & Behavioral Science coursework.
Total Credits	30 credits.

For more information see the policy (https://policy.wisc.edu/library/UW-1095/).

UNIVERSITY DEGREE AND QUALITY OF WORK REQUIREMENTS

All undergraduate degree recipients must complete the following minimum requirements. Requirements for some programs will exceed these requirements; see program requirements for additional information.

Total Degree	120 degree credits.
Residency	Complete 30 credits in residence. A course is considered "in residence" if it is taken when in undergraduate degree-seeking status and: • is offered by UW-Madison and completed on the UW-Madison campus or at an approved off-site location, or • is offered by UW-Madison in an online or distance format, or is completed during participation in a UW-Madison study abroad/study away program.
Quality of Work	Achieve at least the minimum grade point average specified by the school, college, and/or academic program.
Math	Demonstrate minimal mathematics competence by: • placing above MATH 96, or, • successfully completing MATH 96, or • successfully completing a more advanced mathematics course such as MATH 112, MATH 113, MATH 114, MATH 141, MATH 211, or MATH 221.
English Language	If required to take the UW-Madison English as a Second Language Assessment Test (MSN-ESLAT), demonstrate minimal English language competence by: • earning credit for ESL 118, or • achieving a qualifying MSN-ESLAT placement test score.
Language	Complete one: • 2 high school units of a single language other than English, or • one course with the second semester Language designation.
Major Declaration	Declare and complete the requirements for at least one major.

COLLEGE OF AGRICULTURAL AND LIFE SCIENCES REQUIREMENTS

CALS GRADUATION REQUIREMENTS

Cumulative Credits	• Students must earn 120 degree credits. • Students declared in Biological Systems Engineering BS must earn 125 degree 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.

In addition to the university's general requirements, all undergraduate students in CALS must satisfy a set of college and major requirements. Courses may not double count within university requirements, CALS college requirements, or major requirements. A course may count toward university requirements and a college and/or a major requirement; similarly, a course counted toward college requirements may also be used to satisfy a university and/or a major requirement.

CALS COLLEGE REQUIREMENTS

CALS First-Year Seminar	1 credit. See the full list of eligible courses below or use this link: https://go.wisc.edu/calsfirstyearseminars (https://go.wisc.edu/calsfirstyearseminars/)
Ethnic Studies	3 credits with the Ethnic Studies designation.
Communication A	Complete either: • 1 course with the Communication A designation, or • satisfaction of Communication A based on UW Placement Test.
Quantitative Reasoning A	Complete either: • 1 course with the Quantitative Reasoning A designation, or • satisfaction of Quantitative Reasoning A based on UW Placement Test.
Introductory Chemistry	Complete one: • CHEM 103 • CHEM 108 • CHEM 109
CALS International Comparisons	3 credits. See the full list of eligible courses below or use this link: https://go.wisc.edu/calsinternationalcomparisons (https://go.wisc.edu/calsinternationalcomparisons/)
Communication B	1 course with the Communication B designation.
Quantitative Reasoning B	1 course with the Quantitative Reasoning B designation.
Biological Science	5 credits with the Biological Science designation.
Additional Science	3 credits with the Biological, Physical, or Natural Science designations.
Science Breadth	3 credits with the Biological, Physical, Natural, or Social Science designations.
Humanities	6 credits with the Humanities or Literature designation.
Social Sciences	3 credits with the Social Sciences designation.
Capstone Learning Experience	Each major articulates the required capstone learning experience.

CALS First-Year Seminars

Code	Title	Credits
AN SCI 135	Grand Challenges and Career Opportunities in Animal and Dairy Sciences	1
BIOCHEM 100	Biochemistry First-Year Seminar	1
COUN PSY 125	The Wisconsin Experience Seminar	1
F&W ECOL 101	Orientation to Wildlife Ecology	1
F&W ECOL 105	Environment, Pollutants, and You	3
GENETICS 155	Freshman Seminar in Genetics	1
INTEGSCI 100	Exploring Biology	2
INTEGSCI 140	Exploring Service in STEM	1
INTER-AG 155	Issues in Agriculture, Environment, and Life Sciences	1
LSC 155	First-Year Seminar in Science Communication	1
MICROBIO 150	Microbiomes and Microbiology - First-Year Seminar	1
PLANTSCI/ AGROECOL 100	First-Year Seminar in Agroecology and Plant Science	1
PL PATH 155	Food Frontlines: Security, Sustainability, and Survival	1
SOIL SCI 155	First-year Seminar in Soil and Environmental Sciences	1
Learning Community/Student Group Courses		
The following learning community/student group courses are approved as CALS First-Year Seminars.		
COUN PSY 117	PEOPLE First Year Seminar	1
INTEGSCI 110	BioHouse Seminar: Biology for the 21st Century	1
INTER-AG 117	GreenHouse Roots Seminar	1
INTER-AG 140	CALS QuickStart: Foundations	1
INTER-AG 175	WISE Seminar	1

CALS International Comparisons

Code	Title	Credits
The 3 credit requirement may be fulfilled as either a stand-alone 3 credit course or as a set of courses as listed below.		
A A E/ENVIR ST 244	The Environment and the Global Economy	4
A A E 319	The International Agricultural Economy	3
A A E/ NUTR SCI 350	World Hunger and Malnutrition	3
A A E 352	Global Health: Economics, Natural Systems, and Policy (approved for enrollments Summer 2021 and later)	4
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 473	Economic Growth and Development in Southeast Asia	3
A A E/ECON 474	Economic Problems of Developing Areas	3
A A E/ECON/ INTL BUS 462	Latin American Economic Development	3
A A E/ECON 477	Agricultural and Economic Development in Africa	3
AGROECOL 377	Global Food Production and Health	3
AN SCI/DY SCI 370	Livestock Production and Health in Agricultural Development	3
ASIAN/HISTORY/ POLI SCI 255	Introduction to East Asian Civilizations (approved for enrollments Summer 2021 and later)	3-4
C&E SOC/SOC 341	Labor in Global Food Systems (approved for enrollments Summer 2020 and later)	3
C&E SOC/ENVIR ST/ SOC 540	Sociology of International Development, Environment, and Sustainability	3

CSCS 500	Global Health and Communities: From Research to Praxis	3
DY SCI 471	Food Production Systems and Sustainability	3
ENTOM/ ENVIR ST 201	Insects and Human Culture-a Survey Course in Entomology	3
ENTOM/ ENVIR ST 205	Our Planet, Our Health (approved for enrollments Fall 2026 and later)	3
ENTOM/ ZOOLOGY 371	Medical Entomology: Biology of Vector and Vector-borne Diseases	3
F&W ECOL/ ENVIR ST 100	Forests of the World (approved for enrollments Summer 2020 and later)	3
F&W ECOL/ ENVIR ST/ ZOOLOGY 360	Extinction of Species	3
LSC 251	Science, Media and Society (approved for enrollments Summer 2020 and later)	3
PL PATH/ BOTANY 123	Plants, Parasites, and People	3
PL PATH 311	Global Food Security	3
PLANTSCI 370	World Vegetable Crops	3
The following study abroad courses fulfill the CALS International Comparisons requirement. Only the specific course numbers and titles listed, including Topics titles (in parentheses), are approved to meet the CALS International Comparisons requirement.		
BIOCHEM 307	Study Abroad: Introduction to Biological Sciences Research in Japan (approved for enrollments Fall 2026 and later)	3
NUTR SCI/INTER-AG 421	Global Health Field Experience (UW Mobile Clinics and Health Care in Uganda)	3
INTER-AG 321 & INTER-AG/ NUTR SCI 421	Study Abroad Pre-Departure Seminar and Global Health Field Experience (UW Global Health Community Health and Asset-Based Community Development in Sri Lanka)	3
INTER-AG 321 & INTER-AG/ NUTR SCI 421	Study Abroad Pre-Departure Seminar and Global Health Field Experience (UW Agriculture, Health and Nutrition in Uganda)	3
INTER-AG/ NUTR SCI 421	Global Health Field Experience (UW Health, Education and Tanzanian Culture)	3

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
Complete one of the following:		
MATH 211	Survey of Calculus 1	4
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