

ENTOMOLOGY - BS

Program Requirements

First Year

Fall		Semester Credit Hours
AGLS 101 or ENTO 101	Modern Agricultural Systems and Renewable Natural Resources or Introduction to Academic Success in Entomology	1
BIOL 111	Introductory Biology I	4
CHEM 119	Fundamentals of Chemistry I	4
ENTO 201	General Entomology	3
MATH 140	Mathematics for Business and Social Sciences	3
Semester Credit Hours		15

Spring

BIOL 112	Introductory Biology II	4
CHEM 120	Fundamentals of Chemistry II	4
MATH 142 or PHIL 240	Business Calculus or Introduction to Logic	3
Communication (http://catalog.tamu.edu/undergraduate/ general-information/university-core-curriculum/ #communication)		3
Semester Credit Hours		14

Second Year

Fall		
CHEM 222 or CHEM 227	Elements of Organic and Biological Chemistry or Organic Chemistry I	3
ENTO 482	Occupational and Professional Development	2
POLS 206	American National Government	3
American History (http://catalog.tamu.edu/undergraduate/ general-information/university-core-curriculum/#american- history) ¹		3
Social and behavioral sciences (http://catalog.tamu.edu/ undergraduate/general-information/university-core- curriculum/#social-behavioral-sciences) ¹		3
General elective		1
Semester Credit Hours		15

Spring

POLS 207	State and Local Government	3
American history (http://catalog.tamu.edu/undergraduate/ general-information/university-core-curriculum/#american- history) ¹		3
Communication (http://catalog.tamu.edu/undergraduate/ general-information/university-core-curriculum/ #communication) ¹		3
Language, philosophy and culture (http://catalog.tamu.edu/ undergraduate/general-information/university-core- curriculum/#language-philosophy-culture) ¹		3

Technical elective ²	3	
Semester Credit Hours		15

Third Year

Fall		
ENTO 305	Evolution of Insect Structure	3
ENTO 306	Insect Physiology	3
Technical electives ²		7
General elective		3
Semester Credit Hours		16

Spring

ENTO 301	Biodiversity and Biology of Insects	4
ENTO 424	Insect Ecology	3
ENTO 481	Seminar	1
GENE 301 & GENE 312	Comprehensive Genetics and Comprehensive Genetics Laboratory	4
Creative arts (http://catalog.tamu.edu/undergraduate/ general-information/university-core-curriculum/#creative- arts) ¹		3
Semester Credit Hours		15

Fourth Year

Fall		
ENTO 428	Insect Biotechnology	3
ENTO 429	Insect Biotechnology Laboratory	1
Technical electives ²		7
General elective		3
Semester Credit Hours		14

Spring

ENTO 435	Case Studies in Problem Solving	3
ENTO 484 or ENTO 491	Professional Internship or Research	2
Technical electives ²		6
General electives		5
Semester Credit Hours		16
Total Semester Credit Hours		120

¹ To be selected in consultation with student's academic advisor in the department. Three hours of international and cultural diversity (<http://catalog.tamu.edu/undergraduate/general-information/degree-information/international-cultural-diversity-requirements/>) electives and three hours of cultural discourse (<http://catalog.tamu.edu/undergraduate/general-information/degree-information/cultural-discourse-requirements/>) are required for graduation; these courses may fulfill other degree requirements as well. See the list of approved courses.

² Technical electives must be selected in consultation with the student's advisor or from the current list of approved electives published by the department. See Technical Electives table.

Additional Requirements for a Baccalaureate Degree

- Foreign Language (two years of the same language in high school OR one year/two semester sequence in college)
- Writing Intensive Courses (two courses designated W in major or one W and one C course in major)

- International and Cultural Diversity Courses (three credit hours)
- Cultural Discourse Course (three credit hours)

Technical Electives

Code	Title	Semester Credit Hours
ACCT 209	Survey of Accounting Principles	3
AGEC 314	Marketing Agricultural and Food Products	3
AGEC 330	Financial Management in Agriculture	3
AGEC 340	Agribusiness Management	3
AGSM 335	Water and Soil Management	3
AGSM 337	Technology for Environmental and Natural Resource Engineering	3
ALED 440	Leading Change	3
ANSC 107	General Animal Science	3
ANSC 108	General Animal Science Laboratory	1
ANSC 303/ NUTR 303	Principles of Animal Nutrition	3
ANSC 305	Animal Breeding	3
ANSC 307/ FSTC 307	Meats	3
ANSC 318	Animal Feeds and Feeding	3
ANSC 320	Animal Nutrition and Feeding	3
ANSC 326/ FSTC 326	Food Bacteriology	3
ANSC 327/ FSTC 327	Food Bacteriology Lab	1
BESC 201	Introduction to Bioenvironmental Sciences	3
BESC 401	Bioenvironmental Microbiology	3
BESC 402	Microbial Processes in Bioremediation	3
BICH 303	Elements of Biological Chemistry	3
BICH 410	Comprehensive Biochemistry I	3
BICH 411	Comprehensive Biochemistry II	3
BICH 431/ GENE 431	Molecular Genetics	3
BIOL 206	Introductory Microbiology	4
BIOL 213	Molecular Cell Biology	3
BIOL 319	Integrated Human Anatomy and Physiology I	4
BIOL 320	Integrated Human Anatomy and Physiology II	4
BIOL 351	Fundamentals of Microbiology	4
BIOL 357	Ecology	3
BIOL 358	Ecology Laboratory	1
BIOL 413	Cell Biology	3
BIOL 456	Medical Microbiology	3
CHEM 228	Organic Chemistry II	3
CHEM 238	Organic Chemistry Laboratory	1
COMM 203	Public Speaking	3
ENTO 208 - ENTO 299 (http://catalog.tamu.edu/undergraduate/course-descriptions/ento/)		
ENTO 320	Honey Bee Biology	3
ENTO 322	Insects and Human Society	3
ENTO 401	Principles of Integrated Pest Management	3
ENTO 402	Field-Crop Insects	3
ENTO 403	Urban Entomology	3
ENTO 423	Medical Entomology	3
ENTO 431/ FIVS 431	The Science of Forensic Entomology	3
ENTO 432/ FIVS 432	Applied Forensic Entomology	1
ENTO 485	Directed Studies	0-4
ENTO 489	Special Topics in...	1-4
GENE 405/ BIMS 405	Mammalian Genetics	3
GENE 406/ BIOL 406	Bacterial Genetics	3
GENE 412	Population, Quantitative and Ecological Genetics	3
HORT 201	Horticultural Science and Practices	3
HORT 301	Garden Science	3
HORT 308	Plants for Sustainable Landscapes	3
HORT 315	Issues in Horticulture	3
MEPS 313	Introduction to Plant Physiology	3
PHYS 201	College Physics	4
PHYS 202	College Physics	4
PLPA 301	Plant Pathology	3
PLPA 303	Plant Pathology Laboratory	1
RENR 205	Fundamentals of Ecology	3
SCSC 105	World Food and Fiber Crops	3
SCSC 301	Soil Science	4
SCSC 304	Plant Breeding and Genetics	3
SCSC 405	Soil and Water Microbiology	3
SCSC 422	Soil Fertility and Plant Nutrient Management	3
SCSC 455	Environmental Soil and Water Science	3
STAT 302	Statistical Methods	3
VTPB 405	Biomedical Microbiology	4
VTPB 409	Introduction to Immunology	3
VTPB 487/ BIOL 487	Biomedical Parasitology	4