

PLANT AND ENVIRONMENTAL SOIL SCIENCE - BS, SOIL AND WATER EMPHASIS

Program Requirements

First Year

		Semester Credit Hours
Spring		
AGEC 105	Introduction to Agricultural Economics	3
COMM 203	Public Speaking	3
American history (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history) ¹		3
Government/Political science (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#government-political-science) ¹		3
Mathematics (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#mathematics) ²		3
Semester Credit Hours		15

Fall

SCSC 205	Problem Solving in Plant and Soil Systems	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
Government/Political science (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#government-political-science) ¹		3
Mathematics (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#mathematics) ²		3
Semester Credit Hours		15

Second Year

Spring		
CHEM 222 or CHEM 227	Elements of Organic and Biological Chemistry or Organic Chemistry I	3
HORT 201	Horticultural Science and Practices	3
Select one of the following:		4
BIOL 101	Botany	
BIOL 111	Introductory Biology I	
CHEM 120	Fundamentals of Chemistry II	
GEOL 101 & GEOL 102	Principles of Geology and Principles of Geology Laboratory	
PHYS 201	College Physics	
Select one of the following:		3
ENTO 201	General Entomology	
ENTO 401	Principles of Integrated Pest Management	

PLPA 301	Plant Pathology	
SCSC 446	Weed Management and Ecology	
Creative arts (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts) ¹		3

Semester Credit Hours 16

Fall

CHEM 119	Fundamentals of Chemistry I	4
Select one of the following:		3
ENTO 201	General Entomology	
ENTO 401	Principles of Integrated Pest Management	
PLPA 301	Plant Pathology	
SCSC 446	Weed Management and Ecology	
Language, philosophy and culture (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture) ¹		3
Directed elective ³		3
General elective		3

Semester Credit Hours 16

Third Year

Spring

ECCB 205 or SCSC 444	Fundamentals of Ecology or Forage Ecology and Management	3
SCSC 309	Water in Soils and Plants	4
SCSC 310	Soil Morphology and Interpretations	2
Directed elective ³		3
General elective		3

Semester Credit Hours 15

Fall

SCSC 301	Soil Science	4
SCSC 307	Crop Biology and Physiology	4
Select one of the following: ⁴		3
RWFM 313	Vegetation Sampling Methods and Designs in Ecosystems	
STAT 201	Elementary Statistical Inference	
STAT 302	Statistical Methods	
General elective		3

Semester Credit Hours 14

Fourth Year

Spring

GEOG 390 or ECCB 351	Principles of Geographic Information Systems or Geographic Information Systems for Resource Management	4
SCSC 455	Environmental Soil and Water Science	3
SCSC 458	Watershed, Water and Soil Quality Management	3
SCSC 481	Senior Seminar	2
General elective		3

Semester Credit Hours 15

Fall

SCSC 405	Soil and Water Microbiology	3
SCSC 406	Soil and Water Microbiology Laboratory	1

SCSC 422	Soil Fertility and Plant Nutrient Management	3
SCSC 432	Soil Fertility and Plant Nutrient Management Laboratory	1
Select one of the following: ⁵		3
SCSC 420	Brazilian Agriculture and Food Production Systems	
SCSC 421	International Agricultural Research Centers - Mexico	
SCSC 484	Internship	
SCSC 491	Research	
General elective		3
Semester Credit Hours		14
Total Semester Credit Hours		120

¹ Graduation requirements include a requirement for 3 hours of International and Cultural Diversity (<http://catalog.tamu.edu/undergraduate/general-information/degree-information/international-cultural-diversity-requirements/>) courses and 3 hours of Cultural Discourse (<http://catalog.tamu.edu/undergraduate/general-information/degree-information/cultural-discourse-requirements/>) courses. A course satisfying a Core category, a college/department requirement, or a free elective can be used to satisfy this requirement. Select in consultation with an academic advisor.

² Choose from core curriculum courses with a MATH prefix.

³ To be selected from SCSC 201 and SCSC 300-499 (<http://catalog.tamu.edu/undergraduate/course-descriptions/scsc/>) courses not already required on the degree plan and selected in consultation with an academic advisor.

⁴ Statistics course to be selected in consultation with academic advisor.

⁵ Students will complete an internship, study abroad or independent research experience.