

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

Program Requirements

First Year

Fall		Semester Credit Hours
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

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

Second Year

Fall		Semester Credit Hours
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

Spring

CHEM 222	Elements of Organic and Biological Chemistry	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

Third Year

Fall		Semester Credit Hours
SCSC 301	Soil Science	4
SCSC 307	Crop Biology and Physiology	4
	Select one of the following: ⁴	3
ESSM 313	Vegetation Sampling Methods and Designs in Ecosystems	
STAT 201	Elementary Statistical Inference	
STAT 302	Statistical Methods	
	General elective	3
Semester Credit Hours		14

Spring

RENR 205	Fundamentals of Ecology	3
or SCSC 444	or Forage Ecology and Management	
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

Fourth Year

Fall		Semester Credit Hours
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
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	Semester Credit Hours	14
Spring		
GEOG 390 or ESSM 351/ RENr 405	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
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	Semester Credit Hours	15
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	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.