

RENEWABLE NATURAL RESOURCES - BS

Program Requirements

First Year

		Semester Credit Hours
Fall		
AGEC 105	Introduction to Agricultural Economics	3
RENr 205 & RENr 215	Fundamentals of Ecology and Fundamentals of Ecology--Laboratory	4
Select one of the following:		1
ESSM 102	Introduction to Natural Resources and Ecosystem Management	
ESSM 201	Exploring Ecosystem Science and Management	
WFSC 101	Introduction to Wildlife and Fisheries	
Select one of the following:		3
ESSM 203	Forest Trees of North America	
ESSM 302	Wildland Plants of North America	
ESSM 303	Agrostology	
ESSM 304	Rangeland Plant Taxonomy	
WFSC 302	Natural History of the Vertebrates	
WFSC 335	Natural History of the Invertebrates	
Communication (http://catalog.tamu.edu/undergraduate/ general-information/university-core-curriculum/ #communication) ¹		3
Semester Credit Hours		14
Spring		
CHEM 119	Fundamentals of Chemistry I	4
ESSM 281	Seminar in Ecosystem Science and Management	1
Communication (http://catalog.tamu.edu/undergraduate/ general-information/university-core-curriculum/ #communication) ¹		3
Mathematics (http://catalog.tamu.edu/undergraduate/ general-information/university-core-curriculum/ #mathematics)		3
American history (http://catalog.tamu.edu/undergraduate/ general-information/university-core-curriculum/#american- history) ¹		3
Semester Credit Hours		14
Summer		
BIOL 101 or BIOL 113	Botany or Essentials in Biology	4
Semester Credit Hours		4
Second Year		
Fall		
ESSM 318	Coupled Social and Ecological Systems	3
Select one of the following:		3-4
ESSM 306	Plant Functional Ecology and Adaptation	
ESSM 311	Biogeochemistry and Global Change	
SCSC 301	Soil Science	

WFSC 414	Ecology of Lakes and Rivers	
WFSC 428	Wetland Ecosystem Management	
American history (http://catalog.tamu.edu/undergraduate/ general-information/university-core-curriculum/#american- history) ¹		3
Mathematics (http://catalog.tamu.edu/undergraduate/ general-information/university-core-curriculum/ #mathematics)		3
Emphasis area elective ²		3
Semester Credit Hours		15
Spring		
ESSM 301	Wildland Watershed Management	3
ESSM 313	Vegetation Sampling Methods and Designs in Ecosystems	3
ESSM 320 or WFSC 418	Ecosystem Restoration and Management or Ecology of the Coastal Zone	3
Government/Political science (http://catalog.tamu.edu/ undergraduate/general-information/university-core- curriculum/#government-political-science) ³		3
Emphasis area elective ²		3
Semester Credit Hours		15
Summer		
Select one of the following: ⁴		3
ESSM 484	Internship	
RPTS 484	Internship	
WFSC 484	Internship	
Semester Credit Hours		3
Third Year		
Fall		
ESSM 351/ RENr 405	Geographic Information Systems for Resource Management	3
Select one of the following:		3
AGEC 350	Environmental and Natural Resource Economics	
ESSM 406	Natural Resources Policy	
RENr 470	Environmental Impact Assessment	
WFSC 303	Fish and Wildlife Laws and Administration	
Government/Political science (http://catalog.tamu.edu/ undergraduate/general-information/university-core- curriculum/#government-political-science) ³		3
Language, philosophy and culture (http://catalog.tamu.edu/ undergraduate/general-information/university-core- curriculum/#language-philosophy-culture)		3
Emphasis area elective ²		3
Semester Credit Hours		15
Spring		
Select one of the following:		3-4
ESSM 306	Plant Functional Ecology and Adaptation	
ESSM 311	Biogeochemistry and Global Change	
SCSC 301	Soil Science	
WFSC 414	Ecology of Lakes and Rivers	
WFSC 428	Wetland Ecosystem Management	

Creative arts (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts) ¹	3
Emphasis area elective ²	3
Emphasis area elective ²	3
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Semester Credit Hours	12
Fourth Year	
Fall	
ESSM 481 Senior Seminar or WFSC 481 or Seminar	1
RENK 375 Conservation of Natural Resources	3
Emphasis area elective ²	3
Emphasis area elective ²	3
General elective	3
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Semester Credit Hours	13
Spring	
RENK 410 Ecosystem Management	4
Emphasis area elective ²	3
Emphasis area elective ²	3
General elective	3
General elective	2
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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 To be selected from an approved list in consultation with an academic advisor.

³ Credit by examination may be used to substitute for 3 hours of POLS 206 or POLS 207.

⁴ Students will complete an internship, study abroad or independent research experience.