ENVIRONMENTAL STUDIES - BS

Program Requirements

First Year		
Fall		**Semester Credit Hours**
ECON 202	Principles of Economics	3
GEOS 105	Introduction to Environmental Geoscience	3
MATH 140 or MATH 168	Mathematics for Business and Social Sciences or Finite Mathematics	3
POLS 206	American National Government	3
Select one of the following: [1]		4
ATMO 201 & ATMO 202	Weather and Climate and Weather and Climate Laboratory	
GEOG 203 & GEOG 213	Planet Earth and Planet Earth Lab	
GEOL 101 & GEOL 102	Principles of Geology and Principles of Geology Laboratory	
OCNG 251 & OCNG 252	The Blue Planet - Our Oceans and The Blue Planet - Our Oceans Laboratory	
	Semester Credit Hours	**16**
Spring		
ENGL 104	Composition and Rhetoric	3
GEOG 201	Introduction to Human Geography	3
MATH 142	Business Calculus	3
Select one of the following: [1]		4
ATMO 201 & ATMO 202	Weather and Climate and Weather and Climate Laboratory	
GEOG 203 & GEOG 213	Planet Earth and Planet Earth Lab	
GEOL 101 & GEOL 102	Principles of Geology and Principles of Geology Laboratory	
OCNG 251 & OCNG 252	The Blue Planet - Our Oceans and The Blue Planet - Our Oceans Laboratory	
Creative arts elective (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#creative-arts) [2]		3
	Semester Credit Hours	**16**
Second Year		
Fall		
ATMO 210	Climate Change	3
POLS 207	State and Local Government	3
GEOS 205	Environmental Geosciences Cornerstone	1
Life and physical sciences elective [3]		4
Select one of the following:		
BIOL 101	Botany	
BIOL 107	Zoology	
BIOL 111	Introductory Biology I	
BIOL 112	Introductory Biology II	
CHEM 119	Fundamentals of Chemistry I	
CHEM 120	Fundamentals of Chemistry II	
Communication elective (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#communication)		3
	Semester Credit Hours	**14**
Spring		
GEOG 330	Resources and the Environment	3
GEOG 304	Economic Geography	3
Life and physical sciences elective [3]		4
Select one of the following:		
BIOL 101	Botany	
BIOL 107	Zoology	
BIOL 111	Introductory Biology I	
BIOL 112	Introductory Biology II	
CHEM 119	Fundamentals of Chemistry I	
CHEM 120	Fundamentals of Chemistry II	
Language, philosophy and culture elective (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#language-philosophy-culture) [2]		3
Theme elective [4]		3
	Semester Credit Hours	**16**
Third Year		
Fall		
GEOG 335	Pattern and Process in Biogeography	3
GEOG 380	Workshop in Environmental Studies	3
PHIL 314	Environmental Ethics	3
STAT 303	Statistical Methods	3
Theme elective [4]		3
	Semester Credit Hours	**15**
Spring		
AGEC 350	Environmental and Natural Resource Economics	3
ATMO 444	The Science and Politics of Global Climate Change	3
GEOG 390	Principles of Geographic Information Systems	4
Environmental policy elective		3
Select one of the following:		
BESC 367	U.S. Environmental Regulations	
ECON 203	Principles of Economics	
ECON 323	Microeconomic Theory	
GEOG 306	Introduction to Urban Geography	
GEOG 309	Geography of Energy	
GEOG 401	Political Geography	
GEOG 406	Geographic Perspectives on Contemporary Urban Issues	
GEOG 430	Environmental Justice	
POLS 347	Politics of Energy and the Environment	
SOCI 328	Environmental Sociology	
URPN 202	Building Better Cities	
URPN 360	Issues in Environmental Quality	

URPN 361	Urban Issues	
URPN 371	Environmental Health Planning and Policy	
URPN 460	Sustainable Communities	
RWFM 470	Environmental Impact Assessment	
GEOS 431	Environmental Regulatory Compliance in Geoscience	
Theme Elective [4]		3
	Semester Credit Hours	**16**
Fourth Year		
Fall		
GEOS 430	Global Science and Policy Making	3
American history elective (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history)		3
Technical elective [5]		3
Select one of the following:		
ATMO 321	Computer Applications in the Atmospheric Sciences	
ATMO 464	Laboratory Methods in Atmospheric Sciences	
GEOG 312	Data Analysis in Geography	
GEOG 361	Remote Sensing in Geosciences	
GEOG 450	Field Geography	
GEOG 467	Dynamic Modeling of Earth and Environmental Systems	
GEOG 475	Advanced Topics in GIS (Geographic Information Systems)	
GEOG 352/ GEOL 352 or GEOL 352/ GEOG 352	GNSS in the Geosciences or GNSS in the Geosciences	
OCNG 470	Data Analysis Methods in Geosciences	
General elective [6]		3
Theme elective [4]		3
	Semester Credit Hours	**15**
Spring		
GEOS 405	Environmental Geosciences	3
American history elective (http://catalog.tamu.edu/undergraduate/general-information/university-core-curriculum/#american-history)		3
General elective [6]		3
Theme elective [4]		3
	Semester Credit Hours	**12**
	Total Semester Credit Hours	**120**

1. Choose one introductory course in the first semester and an additional one in the second semester of the freshman year.
2. It is recommended to select a course that also fulfills an international and cultural diversity (http://catalog.tamu.edu/undergraduate/general-information/degree-information/international-cultural-diversity-requirements/) and/or cultural discourse (http://catalog.tamu.edu/undergraduate/general-information/degree-information/cultural-discourse-requirements/) requirement. The graduation requirements include three hours of international and cultural diversity courses and three hours of cultural discourse courses.
3. Choose one Life and Physical Science Elective in the first semester and an additional one in the second semester of the sophomore year.
4. Choose 15 hours of courses in your chosen environmental theme from the list below.
5. Other courses which match the Environmental Programs' technical electives definition will be allowed by adjustment. Seek guidance regarding potential adjustments from the ENVP academic advisor.
6. KINE 199, MATH 102, MATH 150, and lower level AERS (http://catalog.tamu.edu/undergraduate/course-descriptions/aers/), MLSC (http://catalog.tamu.edu/undergraduate/course-descriptions/mlsc/), NVSC (http://catalog.tamu.edu/undergraduate/course-descriptions/nvsc/), and SOMS (http://catalog.tamu.edu/undergraduate/course-descriptions/soms/) courses cannot be used as general electives.

Two courses in the degree plan must be writing intensive courses designated by the Environmental Programs in the schedule of classes. Also, international and cultural diversity electives (3 hours) and cultural discourse (3 hours) must be incorporated into the degree.

Environmental Theme Electives

Code	Title	Semester Credit Hours
Urban Environment		
GEOG 306	Introduction to Urban Geography	3
GEOG 406	Geographic Perspectives on Contemporary Urban Issues	3
or ATMO 326 or Environmental Atmospheric Science		
URPN 202	Building Better Cities	3
URPN 361	Urban Issues	3
URPN 460	Sustainable Communities	3
Occupational Health and Safety		
PHLT 330	The Environment and Public Health	3
Select the remaining courses from the following:		
PHLT 331	Occupational Safety and Health I	3
PHLT 333	Accident Investigation	3
PHLT 334	Fire Safety and Workplace Hazards	3
PHLT 335	Hazardous Materials	3
PHLT 432	Human Factors and Ergonomic Health and Safety	3
PHLT 434	Project Cost Benefit and Economics	3
Environmental Regulation and Compliance		
GEOS 431	Environmental Regulatory Compliance in Geoscience	3
BESC 367	U.S. Environmental Regulations	3
GEOG 430	Environmental Justice	3
OCNG 350	Marine Pollution	3
Choose the remaining courses from the following:		
BESC 403	Sampling and Environmental Monitoring	3
BESC 411	Environmental Health and Safety Compliance	3
Geographic Information Science and Technology (GIST)		

GEOG 352/ GEOL 352	GNSS in the Geosciences	3
GEOG 361	Remote Sensing in Geosciences	4
Choose the remaining courses from the following:		
GEOG 392	GIS Programming	4
GEOG 461	Digital Image Processing in the Geosciences	4
GEOG 475	Advanced Topics in GIS (Geographic Information Systems)	4
GEOG 477	Terrain Analysis and Mapping	4
GEOG 478	WebGIS	4
GEOG 479	Principles of Geocomputation	4
Global Environment		
GEOS 410	Global Change	3
OCNG 350	Marine Pollution	3
GEOG 324	Global Climatic Regions	3
Choose the remaining courses from the following:		
ATMO 326	Environmental Atmospheric Science	3
GEOG 309	Geography of Energy	3
GEOG 370/ MARS 370	Coastal Processes	3
GEOG 400	Arid Lands Geomorphology	3
GEOG 331	Geomorphology	3
GEOG 360	Natural Hazards	3
GEOG 435	Principles of Plant Geography	3
OCNG 413	Polar Regions of the Earth: Science, Society and Discovery	3