

BACHELOR OF SCIENCE, MAJOR IN ENVIRONMENTAL SCIENCE (SUSTAINABILITY)

Code	Title	Hours
Bachelor of Science, Major in Environmental Science (Sustainability)		
Core Curriculum		
Component Area I (Communication)		6
Component Area II (Mathematics) ¹		3
Component Area III (Life and Physical Science)		8
Component Area IV (Language, Philosophy, and Culture) ²		3
Component Area V (Creative Arts)		3
Component Area VI (U.S. History)		6
Component Area VII (Political Science/Government)		6
Component Area VIII (Social and Behavioral Sciences) ³		3
Component Area IX (Component Area Option) ⁴		4
Degree Specific Requirements		
BIOL 1401	Environmental Science ⁵	4
BIOL 1411	General Botany	4
BIOL 1413	General Zoology	4
BIOL/GEOG 2320	Sustainability and Environment (This course is dual listed as GEOG 2320)	3
BIOL 3409	General Ecology	4
BIOL 4374	Biostatistics	3
CHEM 1411	General Chemistry I	4
ECON 3352	Energy & Environmental Econ	3
or GEOG 4351	Economic Geography	
GEOG 1401	Weather and Climate ⁵	4
GEOG 2464	Intro to Geographic Info Sys	4
GEOG 4331	Conservation of Natural Res	3
GEOG 4432	Geomorphology	4
GEOG 4361	Geographic Information Systems for Public Health	3-4
or GEOG 4468	Remote Sensing	
Select one of the following:		4
GEOL 1403	Physical Geology	
GEOL 1405	Geologic Hazards & Resources	
GEOL 3326	Environmental Geology	3
MATH 1314	Pre Calculus Algebra ⁶	3
PLSC 1107	Plant Science Laboratory	1
PLSC 1307	Plant Science	3
PLSC 3440	Soil Science	4
POLS 3395	Environmental Policy	3
SOCI 3336	Social Change And Development	3
or SOCI 4337	Environment And Society	
or POLS 3366	Public Administration	
STAT 1369	Elementary Statistics	3
or STAT 3379	Statistical Methods in Practice	
Prescribed Electives		
Select 15 hours from the following advanced electives:		15
BIOL 3461	Wildlife Biology	
BIOL 4330	Aquatic Biology	
ENGL 3330	Intro to Technical Writing	
GEOG 3301	Environmental Geography	

GEOG 3310	Sustainable Development
GEOG 4330	Hydrology and Water Resources
GEOG 4333	Field Studies
GEOG 4357	Population Geography
GEOG 4361	Geographic Information Systems for Public Health
GEOG 4468	Remote Sensing
GEOL 4426	Hydrogeology
HLTH 4390	Environmental Health
PHIL 3372	Philosophy of Science
PHIL 4306	Philosophy of Biology
PLSC 4330	Soil Fertility Mgt Fertilizers
PLSC 4370	Forage Crops & Pasture Mgmt
PLSC 4397	Integrated Pest Management
POLS 3302	Introduction to Public Policy
POLS 3339	Nonprofit Organizations
POLS 3366	Public Administration

Total Hours 120-121

- 1 MATH 1314 needed as a prerequisite for CHEM 1411, STAT 1369, and BIOL 4374.
- 2 SOCI 2319 needed as a prerequisite for SOCI 3336.
- 3 ECON 2301 need as a prerequisite for ECON 3352.
- 4 GEOG 2355 or GEOG 2356 plus 1 semester credit hour.
- 5 Satisfies the Core Curriculum requirement for Component Area III (Life and Physical Science).
- 6 Satisfies the Core Curriculum requirement for Component Area II (Mathematics).

First Year

Fall	Hours	Spring	Hours
BIOL 1401 ¹		4 Component Area IX (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaix)	1
ENGL 1301 ²		3 ENGL 1302 ²	3
GEOG 1401 ¹		4 GEOL 1403 or 1405 ¹	4
HIST 1301 ³		3 HIST 1302 ³	3
MATH 1314 ⁴		3 STAT 1369 or 3379	3
		17	14

Second Year

Fall	Hours	Spring	Hours
Component Area VIII (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaviii) ⁵		3 Component Area IV (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaiv) ⁷	3
BIOL 1411		4 Component Area IX (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareaix) ⁸	3
BIOL 2320		3 BIOL 1413	4
CHEM 1411		4 GEOG 2464	4
POLS 2305 ⁶		3 POLS 2306 ⁶	3
		17	17

Third Year

Fall	Hours	Spring	Hours
BIOL 4374		3 BIOL 3409	4
GEOG 4331		3 ECON 3352 or GEOG 4351	3

GEOL 3326	3	GEOG 4432	4
PLSC 1107	1	GEOG 4468 or 4361	3-4
PLSC 1307	3		
		13	14-15

Fourth Year

Fall	Hours	Spring	Hours
Prescribed Elective ⁹		4 Component Area V (http://catalog.shsu.edu/undergraduate/academic-policies-procedures/degree-requirements-academic-guidelines/core-curriculum/#componentareav)	3
Prescribed Elective ⁹		4 Prescribed Elective ⁹	4
PLSC 3440		4 Prescribed Elective ⁹	3
POLS 3395		3 SOCI 3336, 4337, or POLS 3366	3
		15	13

Total Hours: 120-121

- 1 Satisfies the Core Curriculum requirement for Component Area III (Life and Physical Science).
- 2 Satisfies Core Curriculum requirement for Component Area I (Communication).
- 3 Satisfies Core Curriculum requirement for Component Area VI (U.S. History).
- 4 Satisfies the Core Curriculum requirement for Component Area II (Mathematics). MATH 1314 satisfies prerequisite requirement for CHEM 1411, STAT 1369, and BIOL 4374
- 5 ECON 2301 needed as prerequisite for ECON 3352.
- 6 Satisfies Core Curriculum requirement for Component Area VII (Political Science/Government).
- 7 SOCI 2319 suggested. Needed as prerequisite for SOCI 3336.
- 8 GEOG 2355 or GEOG 2356 suggested plus 1 semester credit hour.
- 9 See, Advanced Elective (Environmental Science) course list below.

Code	Title	Hours
Advanced Elective (Environmental Science)⁹		
BIOL 3461	Wildlife Biology	4
BIOL 4330	Aquatic Biology	3
ENGL 3330	Intro to Technical Writing	3
GEOG 3301	Environmental Geography	3
GEOG 3310	Sustainable Development	3
GEOG 4330	Hydrology and Water Resources	3
GEOG 4333	Field Studies	3
GEOG 4357	Population Geography	3
GEOG 4361	Geographic Information Systems for Public Health	3
GEOG 4468	Remote Sensing	4
GEOL 4426	Hydrogeology	4
HLTH 4390	Environmental Health	3
PHIL 3372	Philosophy of Science	3
PHIL 4306	Philosophy of Biology	3
PLSC 4330	Soil Fertility Mgt Fertilizers	3
PLSC 4370	Forage Crops & Pasture Mgmt	3
PLSC 4397	Integrated Pest Management	3
POLS 3302	Introduction to Public Policy	3
POLS 3339	Nonprofit Organizations	3
POLS 3366	Public Administration	3

The Texas Higher Education Coordinating Board (THECB) marketable skills initiative is part of the state's **60x30TX plan** and was designed to help students articulate their skills to employers. Marketable skills are those skills valued by employers and/or graduate programs that can be applied in a variety of work or education settings and may include interpersonal, cognitive, and applied skill areas.

The BS in Environmental Science (Sustainability) is designed to provide graduates with the following marketable skills:

- Ability to use the scientific method to address environmental problems.
- Ability to think critically.
- Ability to generate and/or interpret geospatial data based geographic information systems (GIS) and remote sensing.
- Ability to to apply knowledge of the environment and ecosystems to address environmental issues.
- Ability to problem solve.