

**Environmental Science: Earth, Atmosphere, and Geological Resources, B.S.**

[Please refer to the Undergraduate Catalog for further program requirements and course descriptions.](#)

<b>First Year – 28-31 Hours</b>			
<b>Fall Semester:</b>	<b>Hrs</b>	<b>Spring Semester:</b>	<b>Hrs</b>
ESC 1500/1500L: <i>Introduction to Environmental Science I/Lab</i> (Natural Science)	4	ESC 1510/1510L: <i>Introduction to Environmental Science II/Lab</i> (Natural Science)	4
GEOL 1110/1110L: <i>Physical Geology/Lab</i>	4	GEOL 1120/1120L: <i>Historical Geology/Lab</i>	4
MATH 1130: <i>College Algebra</i> or MATH 1730: <i>Combined Precalculus</i> (Quantitative Reasoning)	3-4	MATH 1830: <i>Calculus for Management, Life, and Social Sciences</i> or MATH 1950: <i>Calculus w/ Analytic Geometry I</i> (Quantitative Reasoning)	3-4
Writing and Communication (ENGL 1010 or 1011)	3-4	Writing and Communication (ENGL 1020)	3
	14-16		14-15
<b>Second Year – 32-33 Hours</b>			
<b>Fall Semester:</b>	<b>Hrs</b>	<b>Spring Semester:</b>	<b>Hrs</b>
BIOL 1110/1110L: <i>Principles of Biology I/Lab</i>	4	BIOL 1120/1120L: <i>Principles of Biology II/Lab</i>	4
CHEM 1110/1110L: <i>General Chemistry I/Lab</i>	4	CHEM 1120/1120L: <i>General Chemistry II/Lab</i>	4
ENGL 2820: <i>Scientific Writing*</i>	3	GEOG 1010: <i>Physical Geography</i>	3
GEOL 2100/2100L: <i>Introductory Geographic Information Systems and Remote Sensing/Lab</i>	4	MATH 2100: <i>Introductory Statistics</i>	3
Elective	0-1	Behavioral and Social Science	3
	15-16		17
<b>Third Year – 30-37 Hours</b>			
<b>Fall Semester:</b>	<b>Hrs</b>	<b>Spring Semester:</b>	<b>Hrs</b>
BIOL 3060/3070: <i>Ecology/Lab</i>	4	ESC 4840: <i>Values and the Environment</i>	3
ESC 3400: <i>Environmental Survey Methods</i> or ESC 3600: <i>Air and Water Pollution Control</i> or GEOL 4450: <i>Hydrology</i>	3-4	GEOG 2000-4000 Level or ESC 4070: <i>Principles of Conservation Biology</i>	3
GEOL 3410/3410L: <i>Mineralogy</i>	4	GEOL 3420/3420L: <i>Petrology/Lab</i>	4
Humanities and Fine Arts	3-4	Approved GEOL Elective (3000-4000 Level)	3-4
Elective	0-3	Individual and Global Citizenship**	3-4
	14-19		16-18
<b>Fourth Year – 28-36 Hours</b>			
<b>Fall Semester:</b>	<b>Hrs</b>	<b>Spring Semester:</b>	<b>Hrs</b>
Approved Senior Experience	2	ESC 4100: <i>Environmental Law and Agencies</i>	3
Elective (3000-4000 Level)	3	Approved GEOL Elective (3000-4000 Level)	3-4
Humanities and Fine Arts**	3-4	Approved GEOL Elective (3000-4000 Level)	3-4
Humanities and Fine Arts**	3-4	Humanities and Fine Arts**	3-4
Behavioral and Social Sciences	3	Elective	0-3
	14-16		14-20

\*Students can substitute ESC 4495r: *Departmental Thesis* for ENGL 2820.

\*\*1-5 hours of 3000-4000 Level coursework needed within General Education.

<b>Completed:</b>			
<b>Graduation Requirements:</b>	<b>Hrs</b>	<b>Degree Requirements:</b>	<b>Hrs</b>
120 Total Hours		27-33 General Education Hours	
39 Upper Division (3000-4000 Level) Hours*		86-92 Program Major Hours	
30 Hours at UTC		Minor ( <i>Not Required</i> )	
45 Hours at 4-year Institution		0-7 Elective Hours	
		Foreign Language ( <i>Not Required</i> )	