

CLEAR PATH for ADVISING – Environmental Science: Engineering Science, B.S. 2019-2020

[Please see the Courses section of this catalog for complete course descriptions.](#)

First Year – 31-32 Hours			
Fall Semester:	Hrs	Spring Semester:	Hrs
ESC 1500/1500L: <i>Intro to Environmental Science I/Lab</i> (Natural Science)	4	ESC 1510/1510L: <i>Intro to Environmental Science II/Lab</i> (Natural Science)	4
BIOL 1110/1110L: <i>Principles of Biology I/Lab</i>	4	BIOL 1120/1120L: <i>Principles of Biology II/Lab</i>	4
MATH 1710: <i>Precalculus I</i>	3	MATH 1720: <i>Precalculus II</i>	3
ENME 1011: <i>Intro to 2 & 3-Dimensional Modeling</i>	1	ENME 1850: <i>Intro to Engineering Design</i>	2
ENGL 1010 or 1011 (Rhetoric and Writing I)	3-4	ENGL 1020 (Rhetoric and Writing II)	3
	15-16		16
Second Year – 32 Hours			
Fall Semester:	Hrs	Spring Semester:	Hrs
CHEM 1110/1110L: <i>General Chemistry I/Lab</i>	4	CHEM 1120/1120L: <i>General Chemistry II/Lab</i>	4
ENCE 2110: <i>Pollution Controls</i>	4	BIOL 3060/3070: <i>Ecology/Lab</i>	4
MATH 1950: <i>Calculus w Analytical Geometry I</i> (Math)	4	MATH 1960: <i>Calculus with Analytical Geometry II</i>	4
FAH: Historical Understanding	3	MATH 2200: <i>Elementary Linear Algebra</i>	3
ENGL 2820: <i>Scientific Writing</i> *	3		
	17		15
Third Year – 29-30 Hours			
Fall Semester:	Hrs	Spring Semester:	Hrs
ESC 3400/3400L: <i>Env. Survey Methods</i> , 3600: <i>Air/Water Pollution Control</i> , or 4520/4520L: <i>Limnology & Reservoir Ecology/Lab</i>	3-4	GEOG 2210: <i>Maps and Mapping</i>	3
CHEM 3010/3010L: <i>Organic Chemistry I/Lab</i>	4	ENCE 1040: <i>Vector Statics</i>	3
ENEV 3310: <i>Environmental Process Principles</i>	3	MATH 2450: <i>Intro to Differential/Difference Equations</i>	3
ENME 1030/1030L: <i>Basic Engineering Science/Lab</i>	4	FAH: Literature	3
		Behavioral and Social Science	3
	14-15		15
Fourth Year – 29 Hours			
Fall Semester:	Hrs	Spring Semester:	Hrs
Approved Senior Experience	2	ESC 4100: <i>Environmental Law and Agencies</i>	3
ENEV 4370: <i>Municipal & Industrial Waste Management</i>	3	ESC 4840: <i>Values and the Environment</i>	3
ENME 2240: <i>Intro to Engineering Computations</i>	3	FAH: Visual and Performing Arts	3
MATH 2100: <i>Introductory Statistics</i> (Statistics)	3	Non-Western Culture	3
FAH: Thought, Values and Beliefs	3	Behavioral and Social Science	3
	14		15

*Students can substitute ESC 4495r (Departmental Thesis) for ENGL 2820

**13-14 hours of 3000-4000 needed within General Education, Senior Experience, or Electives.

Completed:			
Graduation Requirements:	Hrs	Degree Requirements:	Hrs
120 Total Hours		27-28 General Education Hours	
39 Upper Division (3000-4000) Hours*		94-96 Program (Major) Hours	
30 Hours at UTC		Minor (<i>Not Required</i>)	
60 Hours at 4-year Institution		Elective Hours (<i>Not Required</i>)	
		Foreign Language (<i>Not Required</i>)	