



# ENVIRONMENTAL SCIENCE & RESEARCH BACHELOR OF SCIENCE

## Degree Plan

Code	Title	Credits
<b>General Education Requirements</b>		
<i>Communications (9 credits)</i>		
ENG 110	Composition I	3
ENG 120	Composition II	3
COM 110	Fund. of Public Speaking	3
<i>Arts Humanities (6 credits)</i>		
Select an Arts and Humanities general education course ( <a href="https://uttc-public.courseleaf.com/academic-affairs/general-education-matrix/arts-humanities/">https://uttc-public.courseleaf.com/academic-affairs/general-education-matrix/arts-humanities/</a> ) <sup>1</sup>		6
<i>Social Sciences (6 credits)</i>		
Select a Social Sciences general education course ( <a href="https://uttc-public.courseleaf.com/academic-affairs/general-education-matrix/social-sciences/">https://uttc-public.courseleaf.com/academic-affairs/general-education-matrix/social-sciences/</a> ) <sup>1</sup>		6
<i>Math, Science Technology (38 credits)</i>		
BIO 150	General Biology I/LAB	4
BIO 151	General Biology II/LAB	4
CHM 121	General Chemistry I/LAB	4
CHM 122	General Chemistry II/LAB	4
CHM 341	Organic Chemistry I/LAB	4
CHM 342	Organic Chemistry II/LAB	4
CSC 101	Introduction to Computers	3
MTH 107	Precalculus	4
MTH 210	Elementary Statistics	3
MTH 165	Calculus I	4
<b>Institutional Specific (2 Credits)</b>		
FND 106	First Year Exp & Health Living	2
<b>Required Program Core Courses</b>		
ATM 340	Introduction to Weather and Climate	3
BIO 124	Environmental Science	3
BIO 230	Ecology	3
or HUM 240	Ethnobotany	
BIO 312	Evolution	3
BIO 315	Introduction to Genetics	3
BIO 320	Botany and Plant Systematics	3
BIO 431	Wildlife Management & Restoration	4
GEO 105	Physical Geology with Lab	4
GEO 415	Hydrogeology	3
or GEO 409	Water Quality	
GIS 105	Fundamentals of GIS	3
INT 297	Summer Internship	3
MTH 342	Environmental Research Statistics	3
RES 393	Senior Research I	3
RES 394	Senior Research II	3
RES 395	Senior Research III	3

RES 493	Senior Research Capstone	2
SOI 210	Introduction to Soil Science	3
TES 199	Intro to Scientific Literature	1
TES 222	Environmental Law and Conservation Programs	3
TES 410	Environmental Regulations	3
Required Program Core Courses Subtotal		120
<b>Total Credits</b>		<b>120</b>

<sup>1</sup> Denotes Native Studies institutional requirement.

## Program Learner Outcomes

Graduates of the UTTC Environmental Science & Research BS degree program will:

1. Apply mathematical concepts to find solutions to real world problems.
2. Synthesize scientific concepts and data, social dynamics, and cultural context to formulate sustainable solutions to environmental issues.
3. Defend an original research project.
4. Evaluate the interconnected and interdisciplinary relationships of environmental science