

ENVIRONMENTAL SCIENCE: ENVIRONMENTAL SCIENCE AND TOXICOLOGY, AS

Program code: ESTX-AS

Location: Gateway

Program Description

The Environmental Science and Toxicology program is intended for students interested in areas such as environmental field technician, laboratory technician, regulations, pollution prevention and remediation, solid and hazardous waste, water and wastewater, and public health protection, among others. It offers students a broad educational approach to the many careers available to them in the environmental field and allows for full transfer to a four-year institution.

The above average growth in the number of businesses in the environmental science and toxicology fields has resulted in a high demand for qualified environmental science technicians and environmental technology technicians. This program can be used to meet the recently upgraded requirements for wastewater treatment plant operator licensure by the CT Department of Health Services.

Program Learning Outcomes

Upon successful completion of this degree program, graduates should be able to:

1. Understand contemporary environmental issues in the social sciences, humanities, and natural sciences
2. Know federal, state, and local laws, regulations, and standards affecting environmental science, toxicology, and forensic science operations
3. Apply concepts of chemistry, biology, physics, and mathematics to environmental science, toxicology, and forensic science
4. Acquire and analyze air, water, and soil samples for pollutants in the field and laboratory
5. Summarize the basic concepts of public health and occupational health and safety
6. Use computers for data processing, information management, and research in environmental science, toxicology, and forensic science
7. Understand and apply basic concepts of effective oral and written communication and documentation

Degree Requirements

Code	Title	Credits
General Education Courses		
ENG 1010	Composition	3
MATH 1200	Statistics I	3
COMM 1301	Public Speaking	3
ENV 1010	Introduction to Environmental Science	3
ECON 1001 or SOC 1001	Principles of Macroeconomics Principles of Sociology	3
ENG 1020	Composition II and Literature	3

or ENG 1030	Composition II and Non-fiction Texts	
CCS 1001	College and Career Success	3
Program Courses		
CENT 1016	Computer Applications for Technology	3
MATH 1610	Precalculus	4
BIO 1210	General Biology I	4
ENV 1010L	Introduction to Environmental Science Lab	1
ENV 2200	Toxicology	3
ENV 2295	Environmental Science & Toxicology Internship	3
CHEM 1210	General Chemistry I	4
CHEM 1220	General Chemistry II	4
PHYS 1201	General Physics I	4
CHEM 2410	Biochemistry	4
PHIL 1101	Ethics	3
Choose one of the following Restricted Electives:		3-4
BIO 1220	General Biology II	
BIO 2350	Microbiology	
ERTH 1010	Earth Science	
ERTH 1020	Natural Disasters	
ENV 1100	Environmental Regulations	
WMTR 1002	Special Topics in Water Treatment	
WMTR 1003	Special Topics in Water Distribution	

Total Credits 61-62

Students may earn only one Associate degree in this parent discipline.

- Environmental Science: Environmental Biology, AS
- Environmental Science: Environmental Science & Toxicology Certificate
- Environmental Science: Sustainability, AS