TECHNOLOGY STUDIES: ENVIRONMENTAL SCIENCE, AS

Program code: ENVS-AS-COT

Location: Norwalk, Quinebaug Valley, Three Rivers

Program Description

As part of the Connecticut College of Technology (COT), the Technology Studies A.S. degree provides the knowledge and skills within specific high-demand technology fields. The program consists of lecture and lab course work in engineering, technology, industrial technology, mathematics, sciences, and foundational requirements that provide a solid comprehensive background for continuation in a four-year technology degree program or entry into the workforce. Upon completion of a Technology Studies A.S. degree, students can transfer to Central CT State University or the University of Hartford to complete designated B.S. degrees.

The Technology Studies: Environmental Science degree prepares individuals for careers in Connecticut's growing environmental science industry.

Program Learning Outcomes

1. Apply mathematical, scientific and technological principles and concepts to identify and formulate solutions to technical problems.
2. Apply critical thinking and problem-solving skills to solve technical problems.
3. Demonstrate the ability to function on teams.
4. Recognize the need to engage in life-long learning.

Environmental Science Learning Outcomes

In addition to the outcomes listed for the Technology Studies degree, students who complete the Environmental Science Option will:

1. Develop an understanding of the scientific basis for issues affecting the environment and their impact on society.
2. Understand and be skilled at collecting, analyzing and presenting scientific data by various means including up-to-date technologies.
3. Be able to use the scientific method for problem solving in biology, chemistry, physics and environmental sciences, and be able to use this skill to address issues related to the environment.
4. Research and assess the accuracy of appropriate information sources, involving both print literature and electronic sources including online databases and publications.
5. Communicate knowledge and understanding of environmental sciences and related societal issues in appropriate written, oral and mathematical means.
6. Demonstrate interrelationships and connections with other subject areas associated with a college-level education.
7. Use a wide array of knowledge, principles and skills acquired in laboratory, field and lecture setting for use in transferring to baccalaureate degree program or for use in seeking further training toward a technical degree.
8. Develop skills in biology, ecology, and environmental chemistry.
9. Develop an understanding of an ability to carry out microbiological testing of drinking and waste sewage.

Degree Requirements

Code	Title	Credits
Technology Studies General Education Core		
ENG 1010	Composition	3
MATH 1610	Precalculus	4
ART Elective (course vetted for ARHX)		3
CHEM 1110	Concepts of Chemistry	4
or CHEM 1210	General Chemistry I	
Elective HISX - Historical Knowledge Course or Elective SBSX course in ECON		3
ENG 1080	Composition II: Technical Writing	3
or COMM 1301	Public Speaking	
CCS 1001	College and Career Success	3
Technology Studies Program Core		
PHYS 1201	General Physics I	4
or PHYS 2201	Calculus-Based Physics I	
Elective BHEL - Behavioral Science Elective - choose an ANTH, PSY or SOC course		3
MATH 1200	Statistics I	3-4
or MATH 1201	Statistics I with Computer Applications	
Environmental Science Courses		
BIO 1220	General Biology II	4
ECON 1002	Principles of Microeconomics	3
PHIL 1101	Ethics	3
ENV 1010 & 1010L	Introduction to Environmental Science and Introduction to Environmental Science Lab	4
COMM 1301	Public Speaking	3
Choose three of the following Environmental Science electives: [1]		12
BIO 1210	General Biology I	
BIO 2700	Ecology	
CHEM 1220	General Chemistry II	
GEOL 1200	Introduction to Physical Geology	
MATH 2600	Calculus I	
PHYS 1202	General Physics II	
or PHYS 2202	Calculus-Based Physics II	
Total Credits		**62-63**

[1] Choices to be made with an Advisor based upon the student's desired transfer institution and baccalaureate degree plans.