

Environmental

Program: Engineering Technology

Program Code:

TE ENV

Academic Area:

Science, Technology, Engineering and Mathematics

Type:

Associate in Science

CIP Code: 15.0507

Program Statement

This program provides students with a broad understanding of the environment and current environmental issues. Students utilize their knowledge of water resources, environmental regulations, sampling techniques, and hazardous materials to prepare for state licensure examinations and entry-level environmental technician positions.

Program Information

- The Environmental Technology concentration is an interdisciplinary program which allows students to utilize their knowledge in science, mathematics, engineering, and written and oral communication.
- Laboratories provide students with hands-on training on skills and instrumentation utilized on the job.
- Field trips offer students the opportunity to see various facilities and meet with personnel currently working in various environmental technology positions.
- Internships provide students with the opportunity to explore careers in their chosen areas and network with area professionals.

After Bristol

- Graduates work as Water Treatment Plant Operators or Wastewater Treatment Plant Operators working for municipalities or private contract operations companies
- Graduates work for private Environmental Consulting Firms and as Environmental Technicians in various industrial areas.

Infused General Education Competencies

Oral Communication

Degree Requirements



General Courses

Course #	Title	Credits
CSS 101	College Success Seminar	1
	CHM 111, CHM 113 or CHM 115	4
ENG 101	Composition I: College Writing	3
ENG 102	Composition II: Writing about Literature	3
HST 114	United States History from 1877	3
	MTH 152 and MTH 172	7

Elective Courses

Course #	Title	Credits
_	Global and Historic Awareness Elective	3
_	Human Expression Elective	3

Program Courses

Course #	Title	Credits
CAD 101	Computer Aided Drafting	3
CHM 120	Environmental Chemistry	4
EGR 141	Introduction to Environment	3
EGR 183	Energy Efficiency and Conservation Measures	3
EGR 244	Basic Drinking Water Treatment	4
EGR 245	Hazardous Waste/Waste Management	4
	INT 101: Work-Based Experience	0-1
GIS 101	Introduction to Geographic Information Systems	3
GIS 102	Applications of Geographic Information Systems	3
	EGR 102 or EGR 103	3

Program Electives

Course #	Title	Credits
	Environmental Technical Electives	9-12

Suggested Technical Electives

Course #	Title	Credits
	Water Treatment	
	Wastewater Treatment	
	Environmental Technology	
	Hazardous Waste	



Recommended Course Sequence - Semester 1

Course #	Title	Credits
CSS 101	College Success Seminar	1
ENG 101	Composition I: College Writing	3
	CHM 111, CHM 113 or CHM 115	4
MTH 152	College Algebra	3
	EGR 102 or EGR 103	3
EGR 141	Introduction to Environment	3

Recommended Course Sequence - Semester 2

Course #	Title	Credits
CAD 101	Computer Aided Drafting	3
CHM 120	Environmental Chemistry	4
ENG 102	Composition II: Writing about Literature	3
MTH 172	Precalculus with Trigonometry	4

Recommended Course Sequence - Summer

Summer courses will reduce fall and spring semester course loads.

Recommended Course Sequence - Semester 3

Course #	Title	Credits
EGR 183	Energy Efficiency and Conservation Measures	3
EGR 245	Hazardous Waste/Waste Management	4
GIS 101	Introduction to Geographic Information Systems	3
HST 114	United States History from 1877	3
	Global and Historic Awareness or Human Expression Elective	3

Recommended Course Sequence - Semester 4

Course #	Title	Credits
	INT 101: Work-Based Experience	0-1
EGR 244	Basic Drinking Water Treatment	4
GIS 102	Applications of Geographic Information Systems	3
	Global and Historic Awareness or Human Expression Elective	3
	Program Elective	3
	Program Elective	3
	Total credits:	65-70





Category Descriptions

CHM 111, CHM 113 or CHM 115

Credits: 4

Choose one of the following:

Course #	Title	Credits
CHM 113	Fundamentals of Chemistry I	4
CHM 115	Health Science Chemistry I	4

MTH 152 and MTH 172

Credits: 7

Course #	Title	Credits
MTH 152	College Algebra	3
MTH 172	Precalculus with Trigonometry	4

Global and Historic Awareness Elective

Credits: 3

Choose one of the following:

Course #	Title	Credits
ART 105	Survey of Art History I: Ancient through Renaissance Art	3
ART 106	Survey of Art History II: Modern Art	3
SOC 101	Principles of Sociology	3
SOC 212	The Sociology of Social Problems	3
SOC 252	The Sociology of Human Relations	3

Human Expression Elective

Credits: 3

Choose one of the **Human Expression** electives.

The following electives are recommended: ARC 201, COM 101, COM 114, PHL 152 or World Language.

INT 101: Work-Based Experience

Credits: 0-1

Student may choose INT 210 as a Technical Elective.



Course #	Title	Credits
INT 101	Work-Based Experience	1

EGR 102 or EGR 103

Credits: 3

Choose one of the following:

Course #	Title	Credits
EGR 102	Introduction to Sustainable and Green Energy Technologies	3
EGR 103	Computer Skills for Engineers and Technicians	3

Environmental Technical Electives

Credits: 9-12

Choose three of the following:

Course #	Title	Credits
	CAD Elective(s)	
	EGR Elective(s)	
	GLG Elective(s)	
INT 210	Internship Experience I	3
INT 220	Internship Experience II	3
MTH 214	Calculus I	4
	SCI Elective(s)	

Water Treatment

Course #	Title	Credits
GLG 101	Introduction to Physical Geology	4
EGR 140	OSHA 40-Hour Hazardous Waste Operations and Emergency Response (HAZWOPER)	3
EGR 151	Electrical Machinery	3
SCI 112	Principles of Ecology	4

Wastewater Treatment





Course #	Title	Credits
GLG 101	Introduction to Physical Geology	4
SCI 112	Principles of Ecology	4
EGR 151	Electrical Machinery	3
EGR 140	OSHA 40-Hour Hazardous Waste Operations and Emergency	3
	Response (HAZWOPER)	
EGR 241	Clean Water Technology I	4
EGR 242	Clean Water Technology II	4

Environmental Technology

Course #	Title	Credits
EGR 140	OSHA 40-Hour Hazardous Waste Operations and Emergency	3
	Response (HAZWOPER)	
GLG 101	Introduction to Physical Geology	4
SCI 112	Principles of Ecology	4

Hazardous Waste

Course #	Title	Credits
EGR 140	OSHA 40-Hour Hazardous Waste Operations and Emergency	3
	Response (HAZWOPER)	
GLG 101	Introduction to Physical Geology	4
EGR 241	Clean Water Technology I	4