



Marine Science

Program: Engineering Technology

Program Code:

TE_MRN

Academic Area:

Science, Technology, Engineering and Mathematics

Type:

Associate in Science

CIP Code:

15.0806

Program Statement

This program is designed to prepare students as technicians and scientists working in various areas of the marine industry and marine research. Participants gain an understanding of aquatic life, ocean science, marine and environmental technologies, and have the opportunity to select specialized courses in the areas of at-sea monitoring/fisheries technology, marine science transfer, oceanographic instrumentation/remotely operated vehicle (ROV) technology, renewable energy and water quality.

Program Information

- Choose electives to specialize if desired.
- Some elective courses in this program are only available in the evening and/or at satellite locations.
- Many marine industry and research careers require good physical health and the ability to swim. Students with issues in this area should discuss them with the program director before enrollment.

After Bristol

- Graduates can work as technicians in a variety of marine trades professions, such as fisheries observers, oceanography and hydrographic survey technicians, remotely operated vehicle (ROV) technicians or water quality professionals.
- If you plan to transfer to a four-year institution, speak with your Advisor and visit Transfer Affairs.

Degree Requirements

General Courses

Course #	Title	Credits
CSS 101	College Success Seminar	1
ENG 101	Composition I: College Writing	3
ENG 102	Composition II: Writing about Literature	3
	HST 113 or HST 114	3



Elective Courses

Course #	Title	Credits
	Human Expression Elective	3
	Multicultural and Social Perspectives Elective	3

Program Courses

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

Program Electives

Course #	Title	Credits
	Marine Science Technical Electives	12-16
	Two-course Math Sequence	7-8

Science Courses

Course #	Title	Credits
BIO 132	Marine Biology	4
CHM 113	Fundamentals of Chemistry I	4
EGR 141	Introduction to Environment	3
GIS 101	Introduction to Geographic Information Systems	3
PHY 101	Technical Physics I	4
PHY 211	General Physics I	4
SCI 119	Coastal Science	4
SCI 240	Introduction to Oceanography	4

Recommended Course Sequence - Semester 1

Course #	Title	Credits
CSS 101	College Success Seminar	1
EGR 102	Introduction to Sustainable and Green Energy Technologies	3
EGR 103	Computer Skills for Engineers and Technicians	3
EGR 141	Introduction to Environment	3
ENG 101	Composition I: College Writing	3
	MTH 152, MTH 172 or MTH 214	7-8



Recommended Course Sequence - Semester 2

Course #	Title	Credits
ENG 102	Composition II: Writing about Literature	3
SCI 119	Coastal Science	4
	MTH 172, MTH 214 or MTH 215	4
	Program Elective	3
	Multicultural and Social Perspectives Elective	3

Recommended Course Sequence - Summer

Summer courses will reduce fall and spring semester course loads.

Recommended Course Sequence - Semester 3

Course #	Title	Credits
CHM 113	Fundamentals of Chemistry I	4
GIS 101	Introduction to Geographic Information Systems	3
	Program Elective	3
	HST 113 or HST 114	3
	Human Expression Elective	3

Recommended Course Sequence - Semester 4

Course #	Title	Credits
BIO 132	Marine Biology	4
PHY 101	Technical Physics I	4
SCI 240	Introduction to Oceanography	4
	Program Elective	3
	Total credits:	70-76

Category Descriptions

HST 113 or HST 114

Credits: 3

Choose one of the following:

Course #	Title	Credits
HST 113	United States History to 1877	3
HST 114	United States History from 1877	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.

Multicultural and Social Perspectives Elective

Credits: 3

Choose one of the following:

Course #	Title	Credits
ART 106	Survey of Art History II: Modern Art	3
GVT 111	U.S. Government	3
GVT 112	Comparative Government	3
HST 111	The West and the World I	3
HST 112	The West and the World II	3
HST 113	United States History to 1877	3
HST 114	United States History from 1877	3
HST 257	History of Modern East Asia (China and Japan)	3
PSY 271	Global Leadership	3
SOC 101	Principles of Sociology	3
SOC 212	The Sociology of Social Problems	3
SOC 252	The Sociology of Human Relations	3

Marine Science Technical Electives

Credits: 12-16

Choose four of the following:



Course #	Title	Credits
BIO 121	Fundamentals of Biological Science I	4
BIO 122	Fundamentals of Biological Science II	4
BIO 130	The Biology and Behavior of Birds	4
INT 210	Internship Experience I	3
INT 220	Internship Experience II	3
CHM 114	Fundamentals of Chemistry II	4
CHM 120	Environmental Chemistry	4
EGR 140	OSHA 40-Hour Hazardous Waste Operations and Emergency Response (HAZWOPER)	3
EGR 151	Electrical Machinery	3
EGR 171	Fluid Systems	4
EGR 172	Material Science	4
EGR 241	Clean Water Technology I	4
EGR 242	Clean Water Technology II	4
EGR 244	Basic Drinking Water Treatment	4
EGR 245	Hazardous Waste/Waste Management	4
EGR 264	Oceanographic Technology	3
EGR 268	Fisheries Technologies and Monitoring Techniques	4
EGR 282	Wind Power Technology	4
EGR 284	Solar Power	4
EGR 299	Engineering Projects	4

Two-course Math Sequence

Credits: 7-8

Choose one two-course math sequence.

Course #	Title	Credits
	MTH 152 and MTH 172	7
	MTH 214 and MTH 215	8