Offshore Wind Power

Program: Engineering Technology
Program Code:
TE_OWP
Academic Area:
Science, Technology, Engineering and Mathematics
Type:
Associate in Science
CIP Code:
15.1704

Program Statement

This program aims to prepare skilled workers, technicians, team leaders, researchers, and scientists for the offshore wind industry. Participants will learn topics in electrical machinery, fluid systems, operations and maintenance, leadership, corrosion management, and offshore safety and survival.

Program Information

- This program is focused around understanding the engineering principles behind offshore wind turbine operation and maintenance and applying such fundamental knowledge in solving technical problems.
- Students are trained to troubleshoot key systems and assemblies in a wind turbine including gearbox, generator, hydraulics, pneumatics, and electrical power devices.
- The program contains a course in offshore safety and survival that provides theoretical knowledge and practical skills to ensure a safe working condition when offshore.
- Students are encouraged to discuss their career options with the program coordinator before enrollment as many marine industries including offshore wind, require physical fitness due to the nature of work and health and safety considerations.
- Completing courses in the summer will reduce fall and spring semester course loads.

After Bristol

- Graduates will be able to work as technicians for an offshore wind farm operator or in a wide variety of roles in marine trade such as oceanography, hydrographic survey, technicians for onshore wind turbines, Remotely Operated Vehicle (ROV) operators, corrosion engineers, or water quality professionals.
- If you are considering transferring to a four-year institution, speak with your advisor and visit Transfer Services for additional information.

Degree Requirements

General Education Courses

Course #	Title	Credits
ENG 101	Composition I: College Writing	3
ENG 102	Composition II: Writing about Literature	3
COM 104	Fundamentals of Public Speaking	3
CIS 120	Programming: Logic, Design and Implementation	3
HST 114	United States History from 1877	3
PHL 152	Ethics: Making Ethical Decisions in a Modern World	3
SCI 112	Principles of Ecology	4

Program Courses

Course #	Title	Credits
EGR 151	Electrical Machinery	3
EGR 171	Fluid Systems	4
EGR 282	Wind Power Technology	4
EGR 283	Wind Power Operations and Maintenance	4
EGR 211	Programmable Control Systems	4
	EGR 215 or PRM 101	3
EGR 299	Engineering Projects	4
MTH 172	Precalculus with Trigonometry	4
EGR 281	Offshore Safety and Survival	4
EGR 285	Power Transmission in Offshore Environment	4
EGR 286	Data and Command Center Management	4
EGR 287	Corrosion Management and Control	3

Recommended Course Sequence - Semester 1

Course #	Title	Credits
ENG 101	Composition I: College Writing	3
EGR 151	Electrical Machinery	3
COM 104	Fundamentals of Public Speaking	3
EGR 171	Fluid Systems	4
HST 114	United States History from 1877	3

Recommended Course Sequence - Semester 2

Course #	Title	Credits
ENG 102	Composition II: Writing about Literature	3
EGR 282	Wind Power Technology	4
PHL 152	Ethics: Making Ethical Decisions in a Modern World	3
MTH 172	Precalculus with Trigonometry	4
CIS 120	Programming: Logic, Design and Implementation	3

Recommended Course Sequence - Semester 3

Course #	Title	Credits
EGR 211	Programmable Control Systems	4
EGR 281	Offshore Safety and Survival	4
EGR 283	Wind Power Operations and Maintenance	4
SCI 112	Principles of Ecology	4

Recommended Course Sequence - Semester 4

Course #	Title	Credits
	EGR 215 or PRM 101	3
EGR 285	Power Transmission in Offshore Environment	4
EGR 286	Data and Command Center Management	4
EGR 287	Corrosion Management and Control	3
EGR 299	Engineering Projects	4
	Total credits:	**67**

Category Descriptions

EGR 215 or PRM 101

Credits: 3

Choose one of the following:

Course #	Title	Credits
EGR 215	Lean Six Sigma	3
PRM 101	Foundations of Project Management	3