



## Offshore Wind Power Technician Certificate

**Program:** Engineering

**Program Code:**

OW

**Academic Area:**

Science, Technology, Engineering and Mathematics

**Type:**

Certificate of Achievement

**CIP Code:**

15.0899

### Program Statement

This certificate program is aimed towards preparing technicians and skilled workers for the offshore wind industry. Participants will learn topics in electrical machinery, fluid systems, operations and maintenance, and offshore safety and survival, and will gain hands-on experience on assembly, installation, and maintenance of wind power systems. The program also enables participants to study wind turbine performance characteristics in a wind tunnel to make them conversant with wind turbine operation and need for maintenance.

### Program Information

- This program focuses on the understanding of fundamental engineering principles behind offshore wind turbine operation and applying such fundamental knowledge in solving technical problems in turbine maintenance.
- Students are trained to troubleshoot systems and assemblies in a wind turbine including gearbox, generator, hydraulics, pneumatics, and electrical power devices.
- The program covers specialist topics in offshore safety and survival that aligns with the global wind industry standards and prepares participants for certification.
- 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.

### Hints for Successful Completion

Successful completion of this program requires participants to be able to identify the challenges with offshore wind turbines operations and maintenance (O&M) and design cost-effective and practical solutions.

### Related Programs

All courses may be applied to an Associate in Science in General Studies, STEM Transfer Studies.



## After Bristol

Graduates will have the option to enhance their qualification by enrolling in Associate in Sciences programs at Bristol Community College, gain Global Wind Organization (GWO) certification and work as certified technicians for an offshore wind farm operator.

## Program Requirements

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
ENG 101	Composition I: College Writing	3
MTH 152	College Algebra	3
SCI 112	Principles of Ecology	4
EGR 281	Offshore Safety and Survival	4

## Recommended Course Sequence - Semester 1

Course #	Title	Credits
EGR 151	Electrical Machinery	3
EGR 171	Fluid Systems	4
MTH 152	College Algebra	3
SCI 112	Principles of Ecology	4

## Recommended Course Sequence - Semester 2

Course #	Title	Credits
ENG 101	Composition I: College Writing	3
EGR 282	Wind Power Technology	4
EGR 283	Wind Power Operations and Maintenance	4
EGR 281	Offshore Safety and Survival	4
<b>Total credits:</b>		<b>29</b>