



# OCEANS OF OPPORTUNITY

Qualify for a career in **Oceans Technology** in one year at the NSCC Waterfront Campus

[nsc.ca/oceanstech](http://nsc.ca/oceanstech)

**nscc**

# Oceans Technology program

The Oceans Technology Advanced Diploma program offered at the NSCC Waterfront Campus is designed specifically for engineering technicians and technologists, engineers and natural scientists who want to learn how to apply their foundational skills and knowledge in marine settings.

Developed in response to growing industry demand and in cooperation with several dozen major ocean sector companies, this program will equip you with the advanced skills employers are looking for today. Nova Scotia's oceans technology sector now encompasses more than 200 companies and generates more than \$1 Billion in revenue annually.

## Graduate Profile

Oceans Technology graduates will apply their understanding of marine science to solve real-world problems. Graduates will work in applications where electrical, mechanical, electronic and instrumentation technologies intersect with the marine environment. This may involve working on a vessel or as part of a team that designs or manufactures devices to be deployed in the marine environment, or a combination of these activities.

## Graduates will:

- test, troubleshoot and calibrate electro-mechanical and electronic devices in a marine environment;
- understand the physical marine environment (temperature, salinity, bio-fouling issues, currents, pressure, etc.) and its impact on telemetry, energy flow, data transmission and device performance;
- understand the biological and chemical marine environments as they relate to design and operation of devices and the marine/environmental properties being monitored;
- have knowledge of the factors that must be considered to minimize the environmental impact when operating in a marine setting;

- plan and manage projects, analyze data and prepare technical reports;
- have basic seamanship skills and the appropriate safety training to enable them to work safely either at sea or in a land-based industrial setting.

The Oceans Technology Advanced Diploma program is offered at the NSCC Waterfront Campus to take advantage of the concentration of technology programming and research capability. Learning will take place in a state-of-the-art Oceans Lab, as well as in a variety of real-world settings made possible through NSCC's extensive partnerships with industry.

## Topics May Include:

- Oceanography
- Marine Electro-Mechanical Systems
- Sampling Systems and Methods
- Marine Acoustics and Spatial Data
- Remote and Autonomous Vehicles
- Navigation and Positioning
- Underwater Photography
- Seamanship and Marine Safety
- Industry Seminar
- Oceans Technology Project

## Admission Requirements

Undergraduate degree in a natural science or Engineering, or a diploma in an engineering, technology/technician program (electro-mechanical, environmental engineering, geographic sciences, mechanical, electrical, electronic or industrial instrumentation) or equivalent.

## Internship

The Oceans Technology Program includes an opportunity to compete for an internship at the end of the program.

**To learn more about the Oceans Technology program contact Anne Rodger at 902-491-4814 or [anne.rodger@nsc.ca](mailto:anne.rodger@nsc.ca)**