



Ocean Engineering

Median Yearly Income (2010): \$79,218

This unit group is for all civil engineers: Civil engineers plan, design, develop and manage projects for the construction or repair of buildings, earth structures, ports and coastal installations, and systems related to transportation services and water distribution.

WHAT YOU DO

Ocean engineering is a combination of several types of engineering: a mix of mechanical, electrical, civil, acoustical and chemical engineering techniques and skills, coupled with a basic understanding of how the oceans work.

In the oceans technology sector, ocean engineers work in an array of fields such as the oil and gas industry, military, and marine navigation. They design and build instruments and infrastructure that must stand up to the wear and tear of frequent use and that will survive the harsh conditions of the ocean environment.



Ocean Technology Council of Nova Scotia, 2015

WHAT YOU NEED

- ❖ A keen interest in planning and designing;
- ❖ Problem-solving and decision-making skills;
- ❖ Able to think in an analytical and logical manner;
- ❖ Able to communicate and cooperate with others;
- ❖ Excellent computer skills; and
- ❖ Good near and far vision.

Ocean engineers perform some or all of the following duties:

- ❖ Develop construction specifications and procedures;
- ❖ Evaluate and recommend appropriate building and construction materials;
- ❖ Ensure construction plans meet guidelines and specifications;
- ❖ Plan and design major civil projects;
- ❖ Act as project or site supervisor;
- ❖ Supervise technicians, technologists and other engineers; and
- ❖ Review and approve designs, calculations and cost estimates.

Ocean Engineering



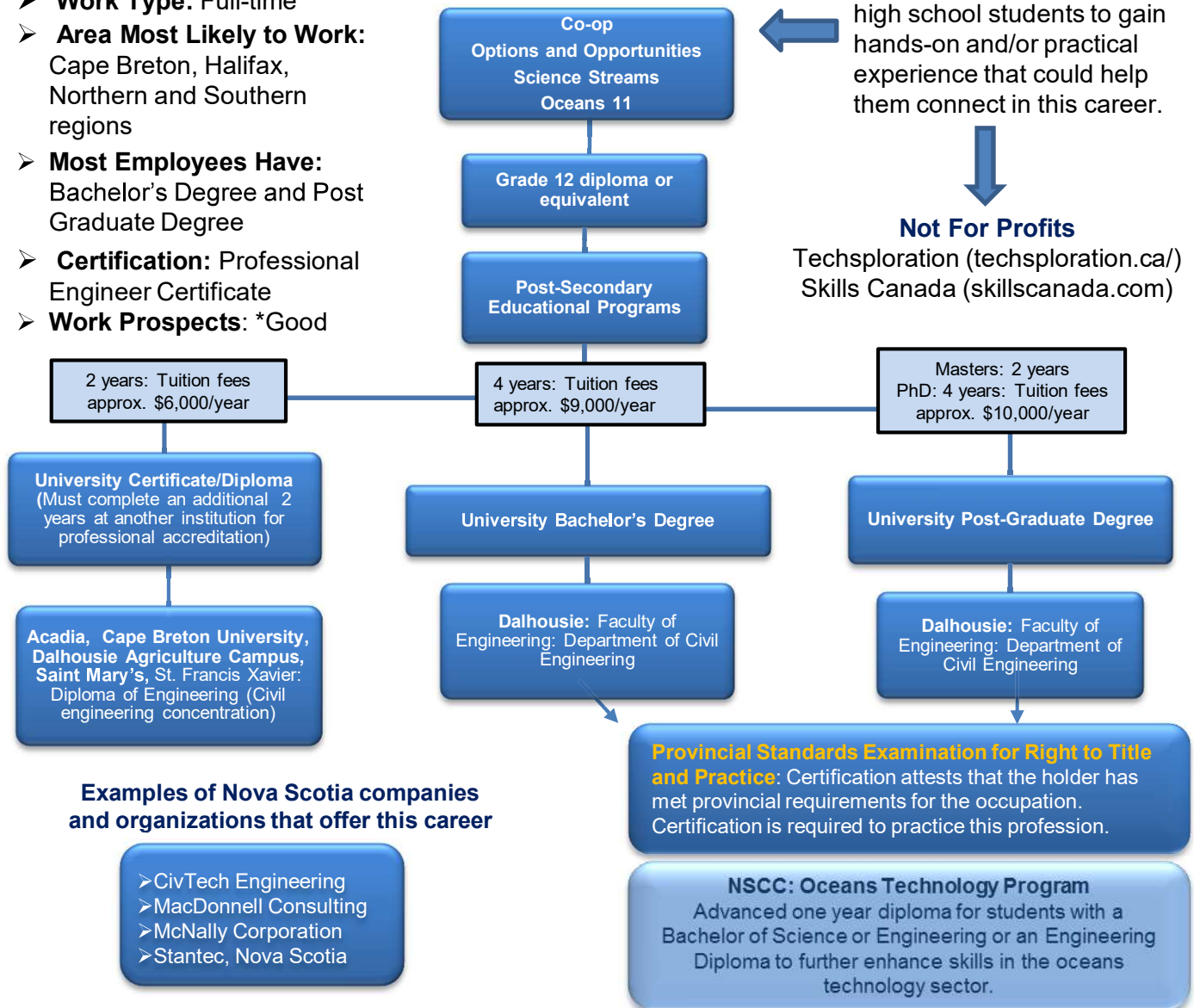
Ocean Technology Council of Nova Scotia 2015

CAREER PATHWAY

OVERVIEW

- **Work Type:** Full-time
- **Area Most Likely to Work:** Cape Breton, Halifax, Northern and Southern regions
- **Most Employees Have:** Bachelor's Degree and Post Graduate Degree
- **Certification:** Professional Engineer Certificate
- **Work Prospects:** *Good

Opportunities available for high school students to gain hands-on and/or practical experience that could help them connect in this career.



References and Resource Links

- *The employment outlook over the next few years for this occupational group is "good", which indicates the chances of a qualified individual finding work is above average.
- Careers Nova Scotia (<http://careers.novascotia.ca/>)
- Create your career plan (careeringear.nsc.ca)
- Engineers Nova Scotia (<http://www.engineersnovascotia.ca>)
- 2131 national occupation classification (<http://www5.hrsdc.gc.ca/NOC/English/NOC/2011/QuickSearch.aspx?val65=2131>)