



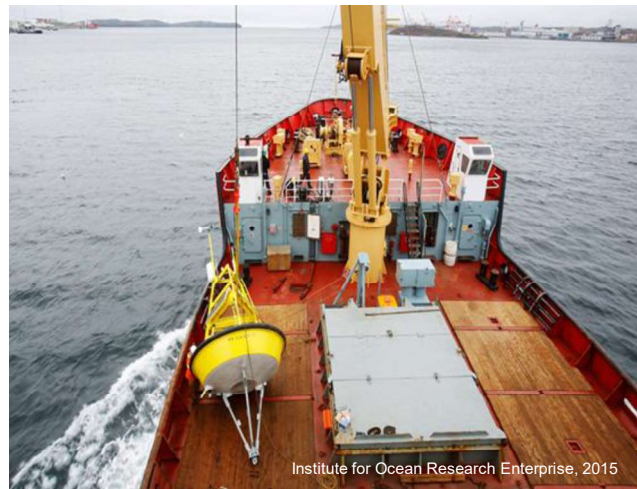
# Industrial and Manufacturing Engineering

Median Yearly Income (2010): \$78,246

Industrial and manufacturing engineers conduct studies, and develop and supervise programs to achieve the best use of equipment, human resources, technology, materials and procedures to enhance efficiency and productivity.

## WHAT YOU DO

**Industrial and manufacturing engineers** conduct studies, and develop and supervise programs to achieve the best use of equipment, human resources, technology, materials and procedures to enhance efficiency and productivity in all aspects of the oceans technology sector from offshore and coastal energy to shipbuilding and marine transportation.



**Industrial and manufacturing engineers perform some or all of the following duties:**

- ❖ Keen interest in organizing, managing, and integrating automation in the workplace;
  - ❖ Able to think analytically and logically;
  - ❖ Able to communicate and work well with others, as engineers often work in teams;
  - ❖ Enjoy problem-solving; and
  - ❖ Possess strong math skills.
- ❖ Plan and design plant layouts and facilities;
  - ❖ Study new machinery and facilities and recommend or select efficient combinations;
  - ❖ Conduct studies and implement programs to determine optimum inventory levels for production and to allow optimum utilization of machinery, materials and resources; and
  - ❖ Analyze costs of production.

# Industrial and Manufacturing Engineering



Ocean Technology Council of Nova Scotia, 2015

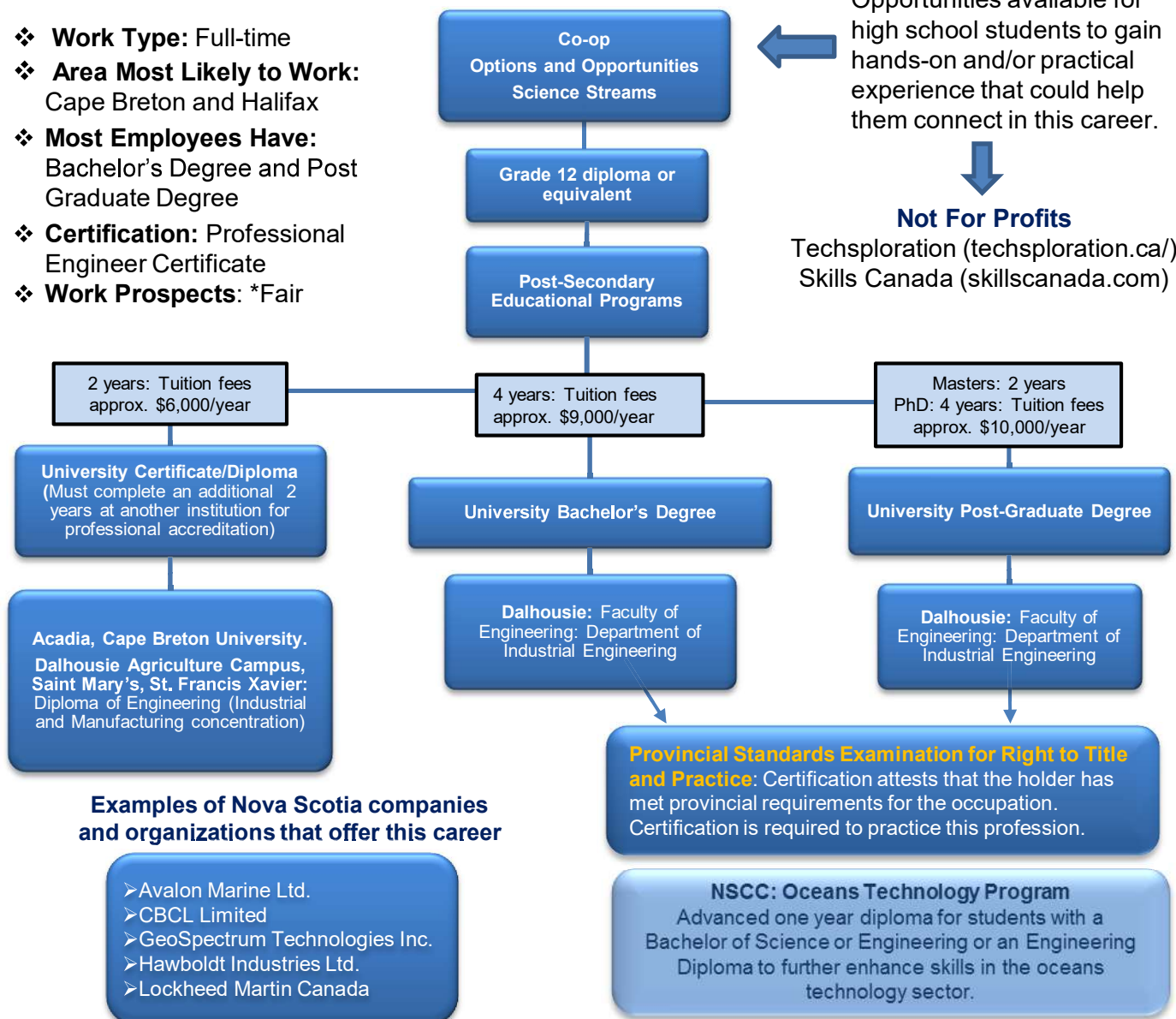
## CAREER PATHWAY

### OVERVIEW

- ❖ **Work Type:** Full-time
- ❖ **Area Most Likely to Work:** Cape Breton and Halifax
- ❖ **Most Employees Have:** Bachelor's Degree and Post Graduate Degree
- ❖ **Certification:** Professional Engineer Certificate
- ❖ **Work Prospects:** \*Fair

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

←  
**Not For Profits**  
 Techsploration (techsploration.ca/)  
 Skills Canada (skillscanada.com)



### Examples of Nova Scotia companies and organizations that offer this career

- Avalon Marine Ltd.
- CBCL Limited
- GeoSpectrum Technologies Inc.
- Hawboldt Industries Ltd.
- Lockheed Martin Canada

### References and Resource Links

- \* The employment outlook over the next few years for this occupational group is "fair", which indicates the chances of a qualified individual finding work is around average
- Careers Nova Scotia (<http://careers.novascotia.ca/>)
- Create your career plan (careeringear.nsc.ca)
- Engineers Nova Scotia (<http://www.engineersnovascotia.ca>)
- 2141 national occupation classification (<http://www5.hrsdc.gc.ca/NOC/English/NOC/2011/QuickSearch.aspx?val65=2141>)