

# Electrical and Electronics Engineering

## Median Yearly Income (2010)

This unit group is for all electrical and electronic engineers: These engineers design, plan, research, evaluate and test electrical and electronic equipment and systems.

### WHAT YOU DO

**Electrical and electronics engineering** is a broad field encompassing the study of control systems, electromagnetics and antennas, power systems, communications, and computer hardware and software.

**In the oceans technology sector,** electrical and electronic engineers install, commission and deploy devices in the marine environment and on board marine vessels to enhance efficiency and effectiveness in all aspects of oceans-related industries such as communication systems to support military operations or search and rescue efforts.

### WHAT YOU NEED

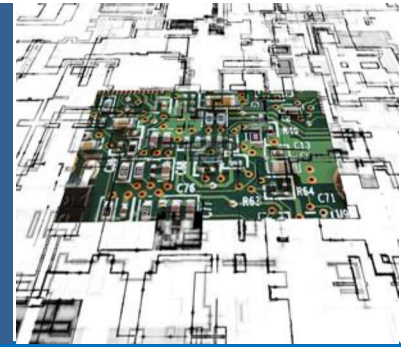
- ❖ Problem-solving and decision-making skills are essential;
- ❖ A keen interest in the design and operation of electrical systems and equipment;
- ❖ Able to think in an analytical and logical manner;
- ❖ Able to communicate and cooperate with others; and
- ❖ Computer skills are essential.



**Electrical and electronics engineers perform some or all of the following duties:**

- ❖ Conduct research into the feasibility, design, operation and performance of electrical networks, machinery and electronic communications, instrumentation and control systems;
- ❖ Design specifications for electrical and electronic systems and equipment;
- ❖ Develop maintenance and operating standards for electrical and electronic systems and equipment; and
- ❖ Investigate electrical or electronic failures.

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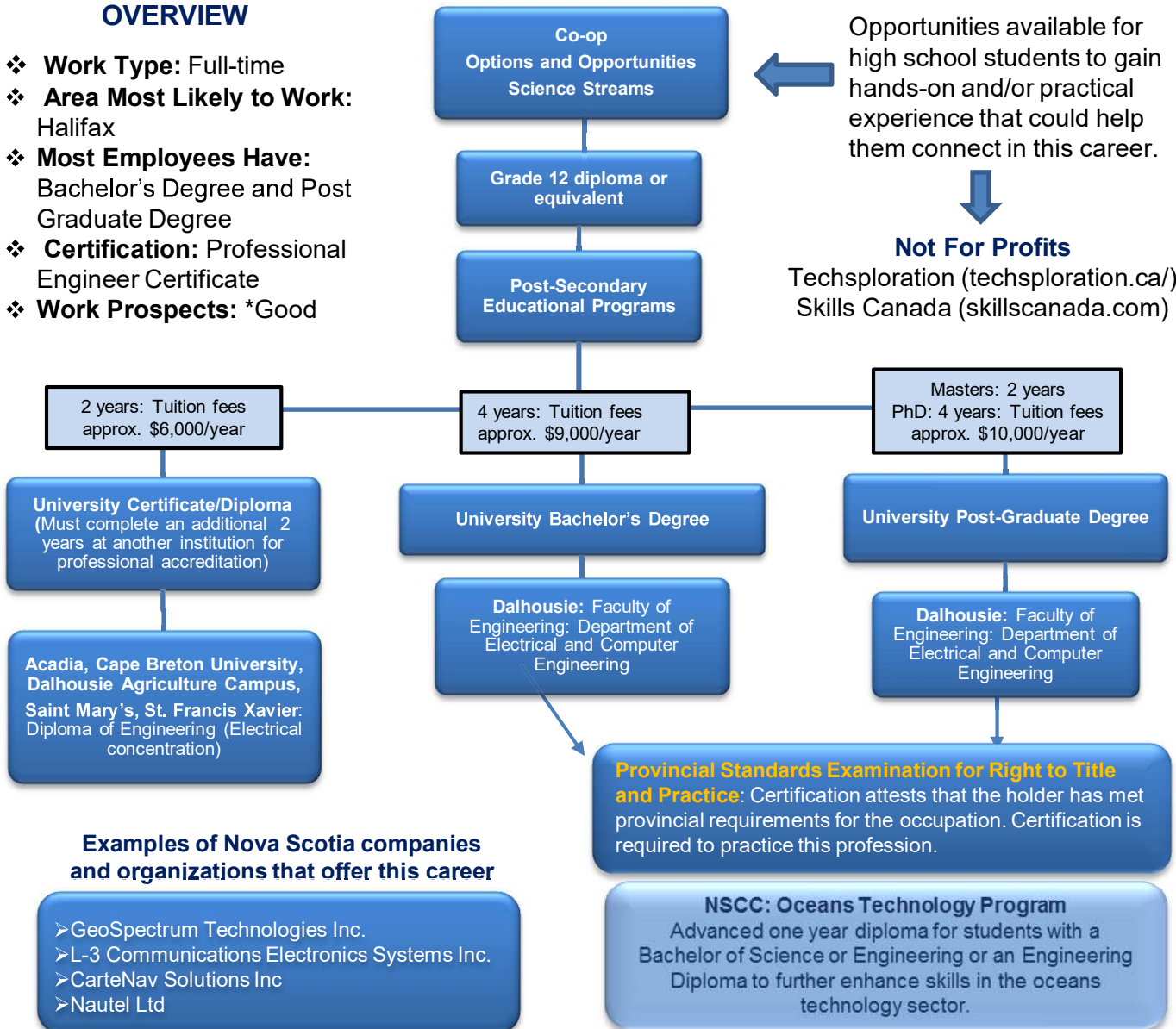
## CAREER PATHWAY

### OVERVIEW

- ❖ **Work Type:** Full-time
- ❖ **Area Most Likely to Work:** Halifax
- ❖ **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.

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



### 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](http://careeringear.nsc.ca))
- Engineers Nova Scotia (<http://www.engineersnovascotia.ca>)
- 2133 national occupation classification (<http://www5.hrsdc.gc.ca/NOC/English/NOC/2011/ProfileQuickSearch.aspx?val=2&val1=2133&val65=electrical+engineer>)