

Institute for Ocean Research Enterprise, 2015

# Physicist

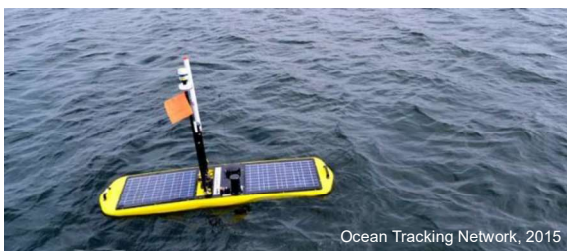
Median Hourly Income (2010): \$106, 644

Physicists conduct theoretical and applied research to extend knowledge of natural phenomena and to develop new processes and devices in a variety of fields such as electronics, communications, power generation and distribution, and remote sensing.

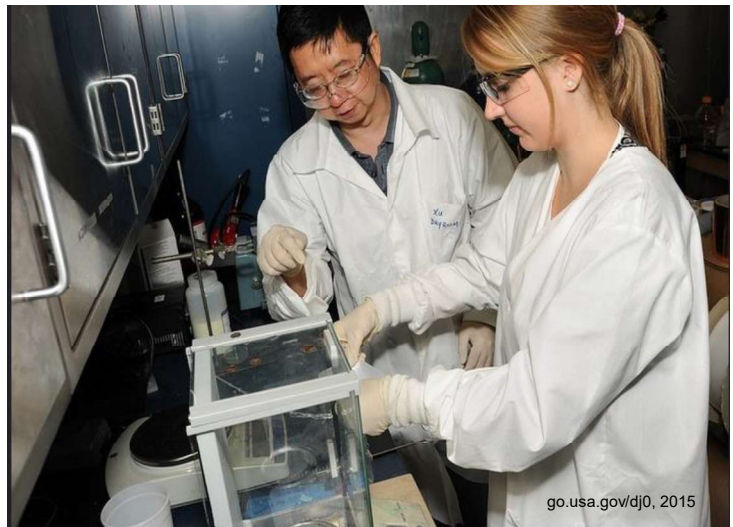
## WHAT YOU DO

### *In the oceans technology sector*

physicists conduct research that focuses on air-sea interactions on local and global scales, mixing processes, sediment transport, estuarine and coastal hydrodynamics, ocean acoustics, underwater communication, internal waves, signal processing, and physical-biological processes. In this sector, physicists also work alongside other specialists in order to design and develop new ideas and products.



Ocean Tracking Network, 2015



go.usa.gov/dj0, 2015

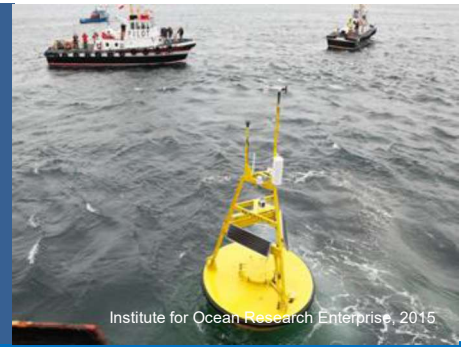
## WHAT YOU NEED

- ❖ You should be imaginative, patient, persistent, and curious;
- ❖ Mathematical, analytical, and mechanical inclined;
- ❖ You must have the ability to conduct research, use computers, and perform complex calculations; and
- ❖ Have excellent communication skills, as scientists often work in teams.

### *Physicists perform some or all of the following duties:*

- ❖ Design and conduct research in experimental and theoretical physics;
- ❖ Carry out analysis of research data and prepare research reports; and
- ❖ Participate as a member of a research or development team in the design and development of experimental, industrial equipment, instrumentation and procedures.

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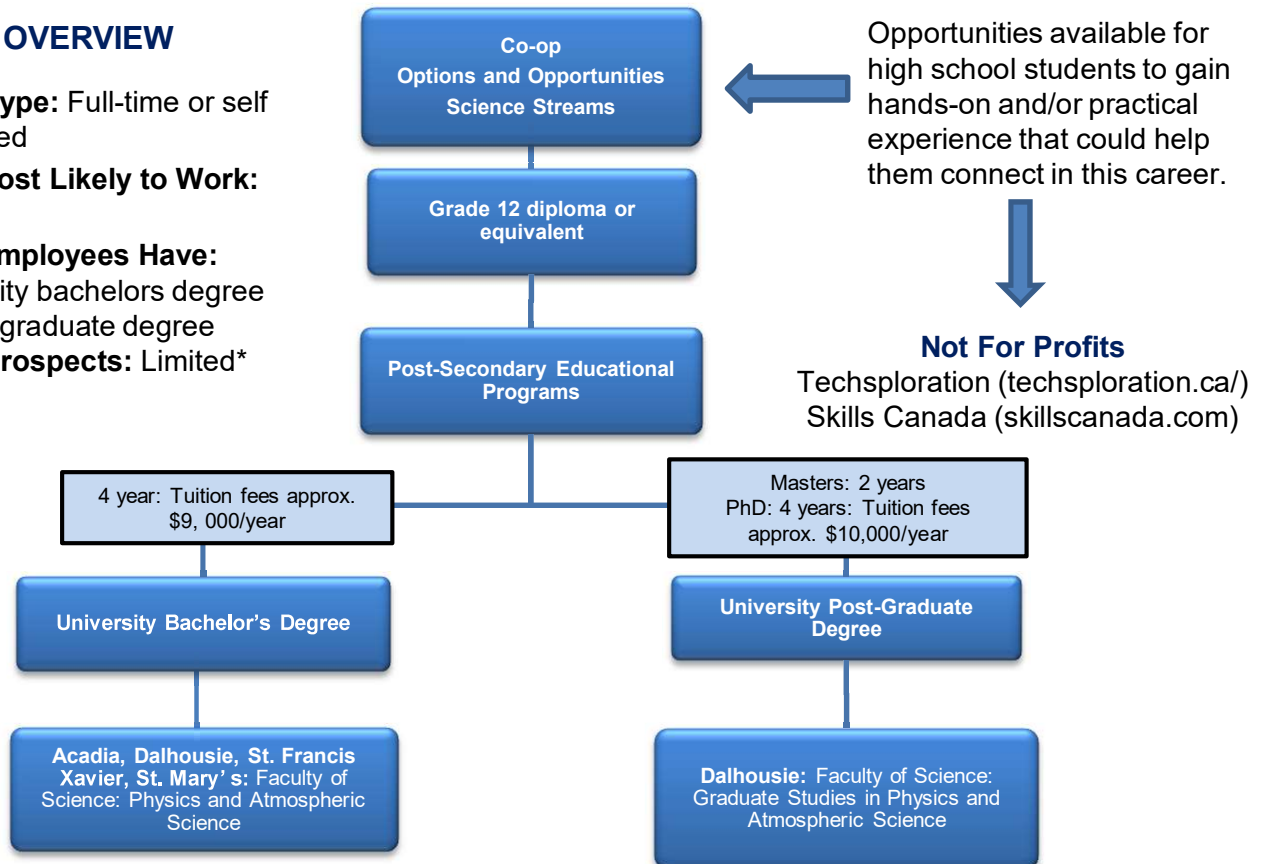


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## CAREER PATHWAY

### OVERVIEW

- ❖ **Work Type:** Full-time or self employed
- ❖ **Area Most Likely to Work:** Halifax
- ❖ **Most Employees Have:** University bachelors degree or post-graduate degree
- ❖ **Work Prospects:** Limited\*



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

- Department of Environment (Nova Scotia)
- Department of Fisheries and Oceans – Ecosystems and Ocean Sciences
- GeoForce Consultants
- Jasco Applied Sciences Ltd.
- Spartan Industrial Marine

**NSCC: Oceans Technology Program**  
Advanced one year diploma for students with a Bachelor of Science or Engineering or an Engineering Diploma to further enhance skills in the oceans technology sector.

### References and Resource Links

- \* The employment outlook over the next few years for this occupational group is "limited", which indicates the chances of a qualified individual finding work is below average
- Canadian Association of Physicists (<http://cap.ca>)
- Careers Nova Scotia (<http://careers.novascotia.ca/>)
- Create your career plan: [careeringear.nsc.ca](http://careeringear.nsc.ca)
- 2111 national occupation classification (<http://www5.hrsdc.gc.ca/NOC/English/NOC/2011/QuickSearch.aspx?val65=2111>)