



Pêches et Océans
Canada

Fisheries and Oceans
Canada

Garde côtière
canadienne

Canadian
Coast Guard



Marine Engineering Officer



Normand Aucoin
Marine Engineering Officer
CCGS Des Groseilliers

Testimonial

" I find that the diversity of operations make the work most interesting. As a Marine Engineering Officer, the Eureka meteorological station resupply missions in Extreme Arctic pose particular challenges.

Personally, I always work to enhance our methods and our installations. I appreciate that the Commanding Officer and the Chief Engineer support our initiatives and give us all the necessary latitude to execute our work

Moreover, I appreciate the lay-day system since it allows us to have other passions and to return to work feeling re-energized.

What is a Marine Engineering Officer?

As a Marine Engineering Officer, your role is important for the safety of the vessel and the well-being of the crew. The good working order of motors and all machinery and the rapid detection of anomalies are essential to keep the Coast Guard vessels operational for the execution of their missions.

Engineering Officers are responsible for the operation and maintenance of propulsion and auxiliary machinery. Their responsibilities also include the maintenance of various systems on board the ship, such as electricity production machinery, pumps and fuel transfer systems, hydraulic and cooling systems, vapour circuits, water treatment systems and compressed air circuits.

To do so, the Engineering Officer uses the latest automation and control technologies. As Engineering Officer, you must be able to diagnostic rapidly all equipment problems and execute the necessary repairs.

The Engineering Officer supervises the Assistant Engineer. The tasks and responsibilities of the Engineering Officer vary based on the rank, from Junior Engineering Officer to Chief Engineer.



Canada 

What academic training and professional development do I need?

- Canadian Coast Guard College Study Program leading to a Nautical Science Degree and Officer Certification.
- 4-year College Program with practical training in marine engineering. The candidate will access higher ranks by accumulating sea time and passing Transport Canada exams.
- Certification may also be obtained by accumulating Engine Room Rating sea time, ongoing training and successful completion of Transport Canada exams.

Where can I study?

- The Canadian Coast Guard College located in Sydney, Nova Scotia, offers a paid 4-year Marine Mechanics Engineering in both official languages, after which students obtain a Nautical Science Degree and a 4th Class Marine Engineer certificate. Students are then deployed on one of the Canadian Coast Guard vessels. Higher ranks are accessed through sea time experience and successful completion of Transport Canada exams.
- L'Institut Maritime du Québec offers a 4-year marine mechanical engineering technology course, including sea time, leading to a 4th class Marine Engineer rank.

What are my career opportunities?

- Marine Engineering Officer (several ranks);
- Chief Engineer;
- Fleet management;
- Various positions within the Federal Public Services;
- Various marine-related positions.

What qualities and interests are essential?

- Marked interest for science and technology;
- Interest in working at sea;
- Leadership;
- Good manual dexterity;
- Enjoy team work;
- Be able to work irregular schedules;
- Taste for adventure and travel

Average annual income : 50,000\$ to 72,000\$ (under review)

Salary increases with rank.

Engineering Officers work a schedule called lay-day, or a period of 14 to 42 days at sea followed by equivalent time off with pay.

For more information

Canadian Coast Guard College : www.cgc.gc.ca

Canadian Coast Guard National site : www.ccg-gcc.gc.ca

Comité sectoriel de main-d'oeuvre de l'industrie maritime: www.csmoim.gc.ca

Institut Maritime du Québec : www.imq.qc.ca

Transports Canada: www.tc.gc.ca