

Marine industry careers

Québec's marine transport industry: an economic driving force

The St. Lawrence River permits large volumes of raw materials and manufactured products (imports and exports) to be transported inexpensively. Annually, some 120 million tonnes of cargo are transhipped in Québec ports and more than 6 million passengers are carried on domestic ferries and cruise ships.



Photo: Port de Québec

An industry riding the crest of the environmental wave

Energywise, marine transport posts an excellent performance. On one litre of fuel, a ship can carry one tonne of cargo 241 km, compared to 95 km for a train and 28 km for a truck.

Daily adventure

Marine careers are anything but ordinary. Open to all, they offer the opportunity to travel with structure yet freedom. They require autonomy yet a team spirit and an affinity for physical and intellectual work. Those plying them learn about natural elements as well as state-of-the-art technologies.

Promising careers in many areas

The marine industry offers excellent job prospects for young people entering the labour market—on board ships, in ports and in offices. Because the industry is so flexible, workers can easily move among jobs throughout their professional career.

Growing human resources requirements

The maritime sector, which generates 12,300 direct jobs and 6,000 indirect jobs in Québec, offers excellent prospects for young workers, given the upturn in activities and the sector's aging work force.

Good wages

Wages are generally very lucrative—well above the Québec average for skilled occupations.



Photo: Comité sectoriel industrie maritime

Jobs at sea

Contrary to popular belief, you don't have to leave the country to have a career at sea. Exciting job opportunities are available on the St. Lawrence River, working for Québec or Canadian companies and coming home regularly.

The extended family of mariners includes Navigation Officers, Mechanical Engineers, Seamen and Cooks. Job organization on board ship is shown in the chart below.

On ships, we find...

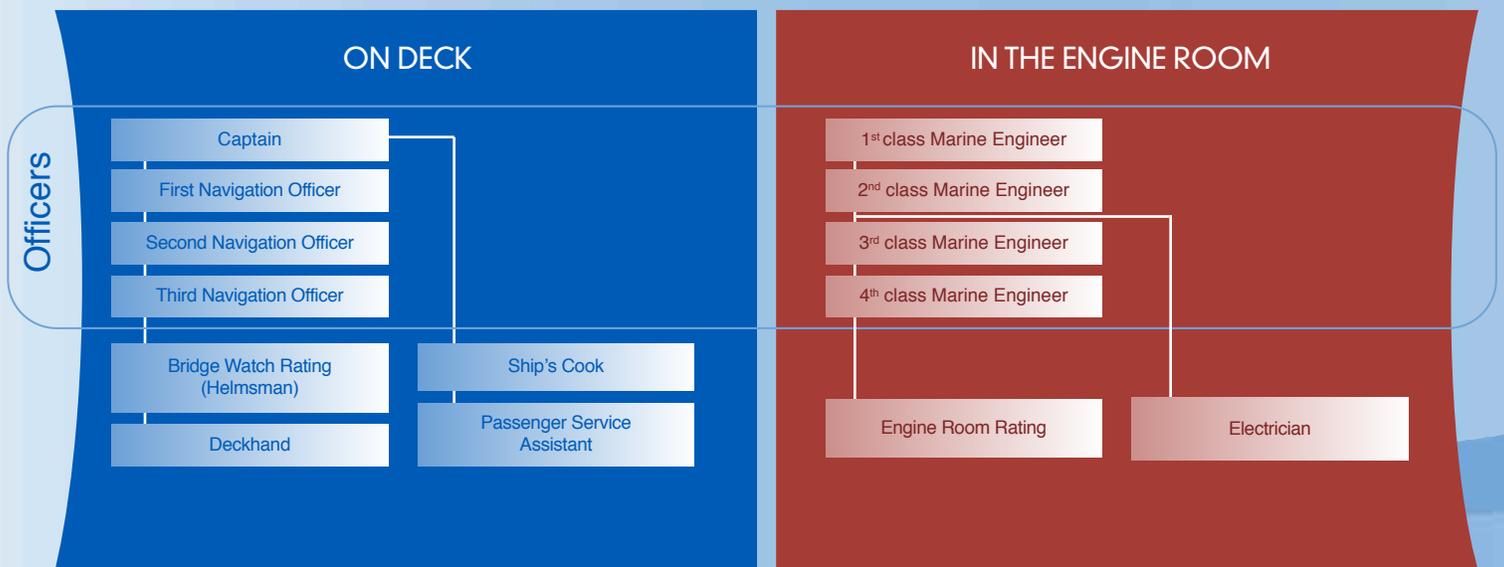


Photo: Comité sectoriel industrie maritime



What does a Navigation Officer do?

Navigation Officers direct operations on passenger and cargo ships in Canada and abroad. They are responsible for safety on board and for planning ships' navigation routes. They coordinate and oversee deckhands' activities and supervise cargo loading and unloading.

Photo: Comité sectoriel industrie maritime

What does a Helmsman do?

Helmsmen (Bridge Watch Rating) are able seamen who, in addition to performing deckhand duties, work a shift at the navigating bridge or steer the ship, following the Navigation Officer or Captain's instructions. Helmsmen monitor navigational aids and act as the ship's lookout.



What does a Deckhand do?

Deckhands operate deck equipment (winches, booms, wires, etc.) and perform maintenance on it. Under the supervision of the Boatswain (Bosun) and Deck Officers, they participate in mooring and berthing manoeuvres, ship refuelling and cargo loading and unloading operations.

Photo: Comité sectoriel industrie maritime

What does a Ship's Cook do?

Ship's Cooks prepare a range of tasty, healthy meals for the entire crew. They are responsible for food procurement and food supply management. They organize and oversee all galley activities, supervise their staff (Stewards) and apply ship galley safety and health standards.



Photo: Comité sectoriel industrie maritime



What does a Marine Engineer do?

Marine Engineers are responsible for the operation and maintenance of the ship's propulsion systems and auxiliary engines. In addition to coordinating the work of engine room staff, they ensure that the ship's different systems—electrical generators, freshwater supply, steam circuits, sewage treatment and compressed circuits—are in good working order, using the latest automation and monitoring technologies. They must be able to quickly detect reasons for system failures and react effectively.

Photo: Comité sectoriel industrie maritime

What does a Engine Room Rating do?

Engine Room Ratings assist Marine Engineers in operating, maintaining and repairing engines, machines and various equipment. In addition to ensuring a clean, safe work environment, they check monitoring instruments linked to the ship's mechanical, electrical and hydraulic systems.



What does a Ship's Electrician do?

Ship's Electricians work with Marine Engineers to install, maintain, test and repair ships' electrical and electronic equipment. They must be able to quickly detect problem sources, pinpoint defects, find solutions and perform the required repairs. They are responsible for ensuring that all equipment and systems comply with applicable standards.

Photo: Comité sectoriel industrie maritime

Jobs on land

Twice as many people work on land in the marine sector (in ports and company offices) than on board ship. Fleet managers, Crew Managers, Naval Architects, Dock Labourers, Marine Secretaries and Experts... all are indispensable to the industry's smooth operations. Along with seamen, these workers are often what we refer to as the St. Lawrence maritime community.

What does a Ship Operator do?

Ship Operators own or lease a ship or ships for operations or outfitting.

What does a Marine Security Specialist do?

Marine Security Specialists ensure that their organization's activities conform to the marine security regulatory standards in force. They help develop policies and procedures, assess the risk and vulnerability of their company's operations, prepare and implement security plans, and plan and coordinate annual inspections and drills. They are also responsible for training and raising employee awareness regarding marine security.



What does a Cargo Inspector do?

Cargo Inspectors are responsible for inspecting the cargo transported aboard ships. Depending on their specialty, they may be in charge of visual observation of tanks, volume and temperature measurements, sampling cargo or counting packages loaded and unloaded. They prepare the documentation, reports and manifests attesting to cargo quantity and quality, and communicate frequently with port terminals, ship personnel and customers to inform them of inspection operations' progress.

Photo : Comité sectoriel industrie maritime

What does a Charterer do?

Charterers are individuals or companies that lease a ship from a Ship Operator for a given time or lease storage space on board ship for a specific voyage.

What does a Marine Inspector do?

Marine Inspectors inspect ships and craft to ensure compliance with standards and regulations. They approve plans before vessel construction, modification or repair, and are responsible for checking safety, navigation, loading/unloading and mechanical systems. They may also be asked to give their expert opinion on problems or defects observed during their inspections, their goal being to continually increase marine transport safety.

What does a Shipping Agent do?

Shipping Agents represent ship owners or charterers vis-à-vis local authorities. They are responsible for ensuring that all of a vessel's needs during its stopover in the port are met efficiently and economically. They prepare and finalize documentation and obtain the necessary authorizations for cargo consignment, customs clearing and other purposes. However, their work may also extend to procurement, crew relief and cargo routing logistics. Many shipping agencies also offer marine brokerage services, which include commercial transactions between carrier and shipper.



What does a Transportation Logistics Technician do?

Transportation Logistics Technicians plan and organize all stages of merchandise routing, ensuring that cargo is delivered from point of origin to final destination problem-free and on time. They manage supply procurement, inventories, production orders and distribution. They must be familiar with the different modes of transport's specific features (local and international).

Photo: Institut maritime du Québec

What does a Shipping Industry Researcher do?

Shipping Industry Researchers advance knowledge in many fields, such as river navigation efficiency and safety, environmental protection technologies, shipbuilding, ship equipment and operation (marine engineering), government marine policies and programs, transportation network, the marine environment and marine biotechnologies. They are responsible for developing research methodologies that respect established scientific rules pertaining to formulation of hypotheses, surveys, sampling, experimentation, etc. Very often, researchers work on a project basis.

What does a Marine Transport Analyst do?

Marine Transport Analysts collect, analyze and interpret data regarding marine transportation of passengers and cargo, port management and transportation planning. They issue notices or recommendations to the authority to which they report for decision-making purposes. They collaborate in preparing, implementing and evaluating various assistance programs for the industry.

They participate in drafting legislation and regulations, policies, orientation documents and strategic planning, and contribute to research, studies and sector committees, as needed.



Photo: Institut maritime du Québec

What does a Naval Architecture Technician do?

Naval Architecture Technicians are involved in designing and modifying various floating structures (ships, sailboats, drilling platforms, etc.). They draft plans, assess vessel stability, develop engine room and electrical room layouts in keeping with architectural constraints and prepare the list of materials required for a given project. They may also plan and oversee construction and repair work, test the quality of systems installed, estimate costs and perform certain worksite monitoring.

And much more...

The marine industry offers a wide range of land-based and seagoing career opportunities. Many employers hope to recruit enough new workers to be able to continue their activities and grow in the coming years. Workers opting for the marine sector will have many offers to choose from... both on land and at sea.



Photo: Port de Québec

Boarding Agent
Maritime Lawyer
Dock Labourer
Marine Instructor
Port Warden
Ship Manager
Naval Engineer
Marine Traffic Control Officer
Crane Operator
Welder
Cargo Charter Specialist
Environmental Specialist
Marine Safety Specialist
Securing Superintendent
Ship or Operations Superintendent
Warehouse Worker

Useful links

- Human Resources Sectorial Committee of the Maritime Industry: www.csmoim.qc.ca
- Institut maritime du Québec: www.imq.qc.ca
- Le Saint-Laurent.com: www.lesaint-laurent.com