

Marine Engineering Officer

Run the engine room of a ship. Four years at a maritime academy, a Coast Guard license, then months at sea and months at home.

TYPICAL PAY

\$112,230

a year, full time

PAY RANGE

\$83k to \$173k

starting to experienced

TIME TO QUALIFY

4 to 5 years

after high school

DEMAND

Very high

job outlook

LICENCE NEEDED

Yes

regulated job

WHERE YOU WORK

Cargo ships, tankers, cruise ships, government vessels, shipyards

How you get there

- 1 High school** Grades 11 and 12
 Physics, math through pre-calculus, chemistry and any shop or auto class. Academies look at grades and at whether you can handle structure.
- 2 Maritime academy** 4 years
 Four years for a marine engineering degree. Massachusetts Maritime, for example, requires 152.5 credits, well above a standard engineering degree, because the license training sits on top.
- 3 Sea terms and cadet shipping** Each summer
 Around 50 days a year of shipboard training, on a training ship or aboard working commercial vessels.
- 4 Coast Guard license exam** Final year
 Pass it and you hold a third assistant engineer license, steam, motor and gas turbine, unlimited horsepower. Senior students have to earn it before the degree is issued.
- 5 Sail and upgrade** 5 to 15 years
 Log sea service, sit the next exam, move up through second and first assistant toward chief engineer.

Pros and cons

- + Six figure pay within a few years of high school graduation
- + Months of paid leave between contracts
- + You spend nothing while aboard, so savings build fast
- Months away from home, missing birthdays and funerals
- The engine room is hot, loud and physically demanding
- No privacy and the same small group of people for the whole contract

Good to know

Your degree is held hostage by an exam

At Massachusetts Maritime Academy senior marine engineering students have to complete the academics and earn the Coast Guard license before the degree is awarded. Fail the license exam and you...

It is a heavier degree than most engineering programs

Marine engineering at Massachusetts Maritime takes 152.5 credits, compared with about 128 for a standard engineering degree, because the license training and sea terms sit on top of the normal coursework.

Optional boosts

Liquefied natural gas and tanker endorsements. Dynamic positioning. Steam and gas turbine time. Civilian government sailing.

Where these numbers come from

My Next Move: Marine Engineers and Naval Architects
 Massachusetts Maritime Academy: Marine Engineering
 Cal Poly Maritime, formerly the California State University Maritime Academy
 Marine Engineers' Beneficial Association

Numbers checked September 2026. Pay figures are typical full-time annual amounts in United States dollars, based on Bureau of Labor Statistics wage data and published pay scales. They vary by state, employer and experience. Tuition is for in-state students at public schools unless the card says otherwise. Sources, links and the click-through version: <https://career.help/us/careers/marine-engineering-officer>



Scan for the full clicker