

Career Paths in Maritime Engineering

Positions/Average Hourly Wage

Duties/Codes for ship types

Job Legend	
CS Cargo Ships	PV Passenger Vessels
CR Cruise Ships	RB Recreational Boats
FS Ferry System	RE Research
FF Fishing Fleet	SY Shipyards
ME Manufacturing &	TS Tankships
MB Military Bases	TT Tug/Towboats

Port Engineer

\$40

The Port Engineer or Superintendent Engineer provides support and direction for all Chief Engineers throughout the fleet of vessels within a company.

CR, CS, FS, MB, PV, TS, TT

Chief Engineer

\$73

The Chief Engineer is a licensed officer in charge of the mechanical propulsion and Engine Department on the vessel.

CR, CS, FF, FS, MB, PV, RB, RE, TS, TT

Assistant Engineer

\$40

The Assistant Engineer (First, Second or Third Engineer) is a qualified, licensed officer and assists the Chief Engineer in running the operation and maintenance of the Engine Department.

CR, CS, FF, FS, MB, PV, RE, TS

Junior Engineer, Electrician, Welder, Pumpman, Refrigerating Engineer, Mechanic, Machinist, Oiler, Fireman/Watertender

\$25

At sea, the unlicensed Engineer or Qualified Member of the Engineering Department (QMED) is responsible for basic routine maintenance and repair duties. On shore, the equivalent position would include technical and specialized duties.

CR, CS, FS, MB, ME, PV, RE, SY, TS

Wiper (Entry Level) Deckhand/Engineer

\$22

The Wiper and Deckhand/Engineer serve as the entry-level, unlicensed member of the Engine Department and are responsible for keeping the equipment clean.

CR, CS, FF, FS, MB, PV, RB, RE, TS, TT

Minimum Criteria for Jobs Onboard a Vessel

- Pass applicable vision test, hearing test, general medical exam, and/or physical ability determination
- Pass criminal record review (if applicable)
- Pass chemical test for dangerous drugs
- Fingerprints
- Photograph
- US Citizenship or Nationality with proof of legal resident status
- Pass national driver registration (NDR) review

Chart Source: QSE Solutions and Workforce Development Council of Seattle-King County

Wage data is from www.workforceexplorer.com.

Wages are representative of the Seattle-Bellevue-Everett MSA, March 2010.

A wide range of certificates and degrees are offered by King County's Community and Technical Colleges and private training providers. To learn more about the training programs available, visit www.checkoutcollege.com or www.careerbridge.wa.gov.

Maritime Transportation

Trends

The movement of huge amounts of cargo, as well as passengers, in and out of U.S. waters and sometimes over the oceans depends on workers in water transportation occupations. The maritime industry has a rich assortment of career opportunities to fit a multitude of interests and lifestyles. In addition to a career path for maritime engineers, the maritime industry also offers on-deck careers starting with the role of an ordinary seaman. Or, if being at sea doesn't appeal, there are a number of maritime jobs on land related to shipbuilding, shipping, port management, surveying, customs and much more.

The Puget Sound Maritime Industry supports 60,237 workers and generates \$10 billion in business for our area (Seattle's Maritime Cluster, Sommers/Wenzel May 2009). The ports of Everett, Seattle, and Tacoma together manage 100% of the region's import and export of goods. The Washington State Ferry system is the largest in the country. More than 250,000 jobs relate to Puget Sound port activities.

Excellent job opportunities are anticipated over the next decade as the need to replace workers, particularly officers, will generate many job openings. High turnover, the prospect of many retirements in the water transportation industry as a whole, and growth in the level of trade occurring worldwide will cause more jobs to be created than there will be people available to take them. Employment in water transportation occupations is projected to grow nationally by 15 percent over the 2008-2018 period, faster than the average for all occupations. Job growth will stem from increasing tourism, increasing international trade, and growth in offshore oil and gas production. (Bureau of Labor Statistics, Occupational Outlook Handbook 2010-2011 Edition).

Wages

The average annual wage in King County in March 2010 for selected water transportation occupations ranged from \$46,735 for Sailors and Marine Oilers to \$72,147 for Ship Engineers. (Washington State Employment Security Department).

Note: Wages are averages of all occupations within the sector – including entry level and high level positions.]

For detailed information about occupations within this sector (e.g. current wage ranges per occupation, training schools, employment projections, and a link to jobs listed at WorkSource):

1. Go to www.workforceexplorer.com,
2. Click on the 'Wage and Benefit Information' link, and
3. Click on the 'Occupation Explorer' link to start your search.