

Engineman (EN)



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Engineman operate and maintain diesel engines and reduction gears used for ship propulsion and auxiliary machinery such as diesel generators, pumps and oil purifiers. They also maintain auxiliary machinery outside of main machinery spaces, such as electro hydraulic steering engines and elevators, refrigeration plants, air conditioning systems and desalinization plants. They will also operate and maintain compressed gas producing plants, deck equipment including cranes, winches and hoists, condensers and heat exchange devices and small boats.

What they do

The duties performed by ENs include:

- aligning piping systems for oil, water, and air for controlling the operation of diesel engines used for ship propulsion and service systems;
- controlling operation of diesel generators used to produce electrical power;
- cleaning, adjusting, testing and performing other preventive maintenance on a ship's auxiliary boilers, main engines, diesel generators and other auxiliary machinery including steering engines, elevators, winches, pumps and associated valves;
- operating and maintaining desalinization plants (distilling plants) to make fresh water from sea water;
- maintaining refrigeration plants, air conditioning systems and galley equipment;
- repairing or replacing valves, pumps, heat exchangers, compressors, steam turbines and hydraulic or pneumatic control devices;
- operating and maintaining small boats.
- making entries in and analyzing machinery operating records and reports.

Credit Recommendations

The American Council on Education recommends that semester hour credits be awarded in the vocational certificate or lower-division bachelor's/associate's degree categories for courses taken in this rating on machine technology, machine shop mathematics, blueprint reading and metric system of measurement.

Qualifications and Interests

Engineman should have clear speech, physical stamina, manual dexterity and the ability to work with others as a team. They should know how to use common hand and power tools and enjoy working with mechanical devices.

Other helpful characteristics are resourcefulness and an interest in learning new ideas and skills. Curiosity, record keeping talent and physical strength are also required.

Normal hearing is required

Working Environment

Engineman work any where on a ship in main engine rooms, auxiliary machinery rooms, engine rooms or shops. These locations are

Career Path After Recruit Training

Enlistees are taught the fundamentals of this rating through on-the-job training or formal Navy schooling. Advanced technical and operational training is available during later stages of career development.

School	Present Location	Approximate Training Time	Subjects	Training Methods
Basic Engineering Common Core	Great Lakes, IL	9 Weeks	Introduction to technical documentation, basic mechanical theory, safety precautions and programs, alignment and operation of piping systems and equipment, hand tools, precision instruments, lubricants, bearings, couplings, gears, valves, pumps and the Maintenance Material Management System (3M). Introduction to technical documentation, basic watch standing procedures, alignment and operation of piping systems and equipment, hand tools, precision instruments, lubricants and lubricating systems, bearings, couplings, gears, valves, the Maintenance Material Management System (3M), basic technical knowledge, terminology and watch standing procedures for the operation of conventional marine steam propulsion systems and preventive maintenance of plant equipment.	Group instruction with practical application

After BECC school, Engineman will be assigned to Navy shops aboard ships, at repair bases, and various other shore facilities in the United States or overseas. During a 20-year period in the Navy, EN's spend about 70 percent of their time assigned to fleet units and 30 percent to shore stations. Shore assignments are normally at shore intermediate activities (SIMAs) as instructors in Apprenticeship Training schools or "C" Schools, as recruit company commanders or in recruiting duty.

sometimes hot and noisy. ENs may be required to perform some heavy physical work. They must be able to work closely with others and, in some cases, with limited supervision.

Opportunities

The Navy has a continuing need for qualified Engineman. Approximately 5,500 men and women perform duties in the EN rating aboard ships and at shore stations. Opportunities for placement are excellent for qualified candidates.

Related Civilian Jobs-O Net SOC Code O Net SOC Title

49-1011.00 First-Line Supervisors/Managers of Mechanics, Installers, and Repairers
49-3031.00 Bus and Truck Mechanics and Diesel Engine Specialists
49-3051.00 Motorboat Mechanics

49-9021.00 Heating, Air Conditioning, and Refrigeration Mechanics and Installers
49-9021.02 Refrigeration Mechanics
49-9041.00 Industrial Machinery Mechanics
49-9098.00 Helpers - Installation, Maintenance, and Repair Workers
51-8021.00 Stationary Engineers and Boiler Operators
51-9193.00 Cooling and Freezing Equipment Operators and Tenders
53-5031.00 Ship Engineers

Since Navy programs and courses are revised at times, the information contained on this rating card is subject to change.

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