Electrician's Mate
(EM)

Electrician's Mates are responsible for the operation of a ship's electrical power generation systems, lighting systems, electrical equipment and electrical appliances. They perform installation, operation, adjustment, routine maintenance, inspection, test and repair of electrical equipment. EM's also perform maintenance and repair of related equipment.

What they do
The duties performed by EMs include:

- installing power and lighting circuits;
- repairing distribution circuits;
- running wiring for lights and other equipment;
- maintaining operating efficiency of distribution panels, switches, switchboards, controllers, voltage regulators, current transformers and voltage transformers;
- maintaining operating efficiency of electric motors;
- repairing electrical equipment and appliances;
- installing and maintaining storage batteries;
- inspecting, maintaining, testing and repairing electric power equipment;
- maintenance and repair of shipboard elevator systems;
- interpreting electrical sketches, diagrams and blueprints;
- maintenance and repair of various propulsion and auxiliary control consoles;
- connecting electric power machinery and electric power equipment.

Normal color perception is required.

Working Environment
Most work in the EM rating is performed indoors, under varied conditions at sea and ashore. Work may be done in a shop-like environment. EM's do mostly physical work of a technical nature and usually work closely with other ratings. EM's are stationed primarily aboard USN ships.

Opportunities
While about 4200 men and women work in the EM rating, the high application rate makes placement opportunities competitive for qualified applicants.

O*Net SOC Code O*Net SOC Title
17-3023.00 Electrical and Electronic Engineering Technicians
47-1011.00 First-Line Supervisors/Managers of Construction Trades and Extraction Workers
47-2111.00 Electricians
49-1011.00 First-Line Supervisors/Managers of Mechanics, Installers, and Repairers
49-2092.00 Electric Motor, Power Tool, and Related Repairers
49-2093.00 Electrical and Electronics Installers and Repairers
49-2094.00 Electrical and Electronics Repairers, Commercial and Industrial Equipment
49-2095.00 Electrical and Electronics Repairers, Powerhouse, Substation, and Relay
49-2096.00 Electronic Equipment Installers and Repairers, Motor Vehicles
49-9012.00 Control and Valve Installers and Repairers, Except Mechanical Door
49-9042.00 Maintenance and Repair Workers, General
49-9051.00 Electrical Power-Line Installers and Repairers
49-9098.00 Helpers - Installation, Maintenance, and Repair Workers
51-2022.00 Electrical and Electronic Equipment Assemblers
51-8013.00 Power Plant Operators
51-8021.00 Stationary Engineers and Boiler Operators

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

(Rev 01/08)