



An electro technical officer is one of the most important people on a vessel, especially when it comes to his/her expertise of handling electrical equipment of the vessel.

For those who are interested in maritime jobs, a ship officer handling the electrical supervision of the vessel can be a suitable career choice. As an electro technical officer, your main duty would be to ensure functioning and maintenance of electrical equipments on vessel.

### **What does an electro technical officer do?**

An electro technical officer handles several responsibilities on vessel mainly related to electrical systems. Like most jobs at sea, as a ship officer handling electronics on a vessel, you are most likely to work under a chief engineer who supervises everything on a ship. And while under a chief engineer, your ship jobs would include the following things.

- Maintenance and working of electrical equipments on board
- Working of electrical parts like engine rooms, radio communications, electronic navigation needs like echo sounders, Gyro compass, Weather Fax, auto pilot, RADAR system, Broadcast and internal aerial system, telephone and talk back system and satellite communications
- Look into basic electric needs like refrigeration, bridge systems and control rooms
- Maintenance of emergency systems including emergency switches, fire alarms and detectors
- Vessel's electrical components like navigational lights, battery backups and electrically operated propelling machinery
- Assist chief officer in handling routine works especially related to electrical handling
- Coordinate work with on shore technicians

- During emergencies, an electrical officer plays important role like every other ship officer. You would be required to handle the emergency situations and ensure all the equipment needed for safety is always ready
- An **electro technical officer** looks into electrical and technical aspects on a vessel. Hence working of computer controlled machinery would be supervised by an ETO.
- An **electrical officer** is immensely important on cruise ships and passenger vessels which have huge electrical requirements and unmanned technology handling them. Everything from refrigeration to air conditioning on such vessels would come under your supervision as an electro technical officer.

### **What are the knowledge and skills needed to be an ETO?**

An ETO can be seen as a higher version of an electrical officer. The qualifications and qualities needed to become an ETO are

- A foundation degree in electrical/engineering/electrical engineering/marine engineering field
- An electrical engineering degree- a minimum Bachelor's level qualification
- Electro technical training like STCW 95 basic safety training course including fire fighting, fire prevention, elementary first aid course training
- ENG1' seafarer's medical certificate and/or certification for physical and mental fitness
- Training for handling electrical, navigational and communication equipment
- A course in Electro Technical engineering (optional but not necessary but may come as an added advantage)
- As Per New STCW-2010 Manila amendments, Elector technical officer has to obtain certificate of competency from Maritime Authorities by applying for exams conducted by them.

Besides a simple Bachelor's degree in engineering, as an aspirant of an ETO post, you can also take up additional short term diploma courses of full Bachelor's courses dealing with electro technical handling and maintenance. Besides these qualifications, for a person seeking careers at sea, you must possess following qualities too:

- Physical strength to handle heavy duty on board work



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- **Mental fitness**
- Ability to stay away from family for long intervals
- Ability to work under pressure
- Ability to handle practical situations
- Independent decision making capacity
- Task prioritization and organization
- Ability to keep calm and not panic under emergency situations
- To be able to work under a senior while maintaining a team of your own
- Flair for circuits and wires (source: <https://www.marineinsight.com>)