



## ELECTRICAL LEVEL 1 / MARINE ELECTRICAL COURSE

### *Introduction*

This course offers relevant skills in understanding the principle of electrical equipment and maintenance of the ship. It covers the important principles and hands-on features governing the operation, maintenance, and repair of electrical equipment and common control systems found on board. Training instruction and activities are based on actual devices to take full advantage of the practical aspects of the work carried on board.

### *Objectives*

After completing this course those successful individuals should be able to show skills in trouble shooting and locating the faults on electrical circuit on board. They must possess professionalism on their workmanship and observe safety in every job undertaking.

### *Syllabus*

- Electrical Safety
- Electricity Sources and Fundamentals  
Battery and UPS Maintenance
- Types of Schematics
- Electric Motors and Generators  
Three Phase AC Motor Operation and Connection
- Brushless 3 Phase AC Generators
- Lighting and Motor Controller Speed Controller
- Electrical Testing and Measurements
- Pneumatic and Electro-pneumatics
- Introduction to Programmable Controller
- Basic Refrigeration and Air Conditioning

### *Course Outcomes*

The successful candidates demonstrated the skills in; differentiating the kind of electricity on the ship, can

analyze and trouble-shoot the problem in electrical circuits, trouble-shooting motor control boards and switchgears, synchronizing the generator, and handling and reading properly the test instruments.

### *Teaching and Mode of Delivery*

Lecture and Practical Exercise Method.

### *Requirement*

- All candidates should have a valid Fire Fighting certificate and valid medical fitness certificate.
- All candidates must be conversant and literate in English

### *Availability*

- Available upon request
- Candidates to bring along ID/passport on first day of course.

### *Assessment*

In addition to a formal written assessment the candidates will be assessed through oral examination.

### **TRAINING DETAILS**

Duration: 8 weeks  
Time: 08.00am to 03.00pm  
Venue: PMTC, Konedobu  
Course Fees: TBA  
Minimum number of trainees: 10 persons per class

*For further information please contact:*

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