

# **NITEC IN MARINE ELECTRICAL TECHNOLOGY**

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## **MODULE OBJECTIVES**

### **Core Modules**

#### **Electrical Principles**

On completion of the module, students should be able to apply the basic laws and concepts of DC and AC circuits.

#### **Electronics Principles**

On completion of the module, students should be able to test and maintain simple digital and analogue electronic devices and circuits.

#### **Marine Electrical Installations**

On completion of the module, students should be able to install, operate and maintain marine electrical installations, electrical motor installations, electrical wiring systems and power cables according to the relevant codes of practice. In addition, they would be trained to perform basic welding operations.

#### **Electrical Machines and Control**

On completion of the module, students should be able to operate and maintain electrical motors, motor control circuits, motor drives. In addition, they would be trained to perform motor alignment and balancing.

#### **Marine Automation and Instrumentation**

On completion of the module, students should be able to set up aircraft equipment, perform connective device repair, minor corrosion control on electrical and electronic components and general cleaning on aircraft components or engine wire harnesses.

#### **Electrical Power and Distribution**

On completion of the module, students should be able to operate and maintain marine electrical power and distribution systems and equipment. In addition, they would be trained to set up shore-to-ship supply systems.

#### **Marine Electrical Drafting**

On completion of the module, students should be able to read, interpret and produce electrical diagrams and drawings for marine electrical installations.

#### **Marine Control Systems**

On completion of the module, students should be able to check the operation and oversee the servicing of marine auxiliary systems on board ships.

#### **On-The-Job Training I**

On completion of the module, trainees should be able to apply and integrate Year 1 skills and knowledge acquired at ITE Approved Training Centres, and further develop competencies at the workplace.

#### **On-The-Job Training II**

On completion of the module, trainees should be able to apply and integrate Year 2 skills and knowledge acquired at ITE Approved Training Centres, and further develop competencies at the workplace.