



REFRIGERATION AND AIR-CONDITIONING MECHANIC LEVEL 2

EES Course Number: PNGNATTB20121

**Program Area: Refrigeration & Air-conditioning
Sector**

Description:

Those gaining this qualification will be able to install and carry out basic routine maintenance on refrigeration and air-conditioning installations and equipment which is mainly routine and predictable. Typical work function includes working safely, installing RAC equipment, terminating cords & cable, welding, brazing and soldering operations, and using test equipment, fault-finding and diagnosing circuits, servicing and repair RAC equipment, including testing, recovering and charging RAC systems.

On completion of the required modules, learners will find opportunities to perform groups of foundation and basic work activities in a particular job at this level which is mainly routine and predictable. Learners will also be eligible to pursue higher qualifications (i.e Level 3).

Career opportunities:

Career and job opportunities include electrical trade assistance, sales person, and store man, etc.

Entry requirements:

It is recommended that learners wishing to undertake this course must complete RAC level 1 competency training as pre-requisite; physically, mentally and medically fit; non-color blind; and have a good moral character. Recognition of prior learning and current competencies will be considered on application.

Workplace Skills Developed:

Learners completing this qualification will be competent to:

- **RAC201** – APPLY SAFETY AWARENESS AND LEGAL REQUIREMENTS FOR HYDROCARBON REFRIGERANTS
- **RAC202** – ORGANISE AND ANALYSE AND COMMUNICATE WORK RELATED INFORMATION
- **RAC203** – ASSIST IN THE PROVISION OF ON-THE-JOB TRAINING – IDENTIFY TRAINING NEEDS – ASSIST TRAINEES

- **RAC204** – TERMINATE AND CONNECT ELECTRICAL WIRING
- **RAC205** – FIND FAULT AND REPAIR / RECTIFY BASIC ELECTRICAL FAULTS
- **RAC206** – FIND FAULT AND REPAIR ELECTRICAL EQUIPMENT/COMPONENT UP TO 1000 VAC/1500 VDC
- **RAC207** – DISMANTLE, REPLACE AND ASSEMBLE ENGINEERING COMPONENT
- **RAC208** – TEST, RECOVER, EVACUATE AND CHARGE REFRIGERATION SYSTEM
- **RAC209** – SERVICE AND REPAIR DOMESTIC AND LIGHT COMMERCIAL RAC EQUIPMENT
- **RAC210** – PERFORM PRECISION ELECTRICAL AND ELECTRONICS MEASUREMENT
- **RAC211** – FIND FAULT IN RAC SYSTEM AND ELECTRICAL CIRCUIT
- **RAC212** – SHUT DOWN AND ISOLATE MACHINES AND EQUIPMENT

Modules:

Learners must complete the following modules for these qualification

- Organizing, analyzing Workplace related information
- Occupational Health & Safety policies and procedures for Hydrocarbon refrigerants
- Assist in providing OJT training
- Terminate, and test electrical RAC wiring systems
- Disassemble and assemble engineering components
- Test, recover, evacuate and charge refrigeration systems
- Service and repair RAC equipment
- Fault-finding and diagnosing RAC 240volts systems
- Fault-finding and diagnosing RAC 415 volts systems
- Isolation procedure

Technical-Academic Award:

Learners will receive the Certificate of Competency in Level 2 Refrigeration and Air-conditioning Mechanic on successful completion of the required modules/relevant course requirements.

Duration:

- 4 weeks

Course Location:

- Pacific Maritime Training college

Course Fees:

- TBA