



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **UEE50310 Diploma of Electrical and Refrigeration and Air-conditioning**

**Release: 1**

## **UEE50310 Diploma of Electrical and Refrigeration and Air-conditioning**

### **Modification History**

Not Applicable

### **Description**

#### **Scope**

This qualification provides competencies to select, install, commission, maintain and diagnose faults/malfunctions on refrigeration systems and equipment that apply to commercial food storage and preservation and air conditioning and air distribution equipment and special applications and associated electrical systems. It includes ERAC requirements for an 'Electrician's licence' and regulatory requirements for purchasing and handling refrigerants.

### **Pathways Information**

Not Applicable

### **Licensing/Regulatory Information**

Not Applicable

### **Entry Requirements**

Not Applicable

### **Employability Skills Summary**

Not Applicable

## Packaging Rules

### Completion requirements

The requirements for awarding this qualification are that the following are successfully achieved:

- All of the Core competency standard units;
- The required number of Stream Core competency standard units;
- The required number of Elective competency standard units as prescribed in the respective Schedule; and
- All the required pre-requisite competency standard units have been met as required.
  - Note: 1 UEENEEG005B - Those holding an 'Unrestricted Electricians Licence or equivalent issued in an Australian State or Territory meet the requirements of this unit and its pre-requisite requirements.
  - Note: 2. UEENEEJ009B - Those holding an 'Certificate III in Refrigeration and Air-conditioning trade qualification or equivalent" meet the requirements of this unit and its pre-requisite requirements.

### Core Competency Standard Units

All Core competency standard units to be achieved

UEENEEE001B	Apply OHS practices in the workplace
UEENEEE002B	Dismantle, assemble and fabricate electrotechnology components
UEENEEE003B	Solve problems in extra-low voltage single path circuits
UEENEEE004B	Solve problems in multiple path d.c. circuits
UEENEEE005B	Fix and secure equipment
UEENEEE007B	Use drawings, diagrams, schedules and manuals
UEENEEE008B	Lay wiring/cabling and terminate accessories for extra-low voltage circuits
UEENEEE017B	Implement and Monitor OHS Policies and Procedures
UEENEEE024C	Compile and produce an electrotechnology report
UEENEEE033B	Document occupational hazards and risks in electrical work
UEENEEE036B	Document occupational hazards and risks in refrigeration and air-conditioning
UEENEEE038B	Participate in development and follow a personal competency development plan

## Core Competency Standard Units

All Core competency standard units to be achieved

UEENEEE084A	Write specifications for electrotechnology engineering projects
UEENEEG001B	Solve problems in electromagnetic circuits
UEENEEG002B	Solve problems in single and three phase low voltage circuits
UEENEEG003B	Install wiring and accessories for low voltage circuits
UEENEEG004B	Install low voltage electrical apparatus and associated equipment
UEENEEG005B	Verify compliance and functionality of general electrical installations
UEENEEG007B	Select and arrange equipment for general electrical installations
UEENEEG008B	Find and repair faults in electrical apparatus and circuits
UEENEEG009B	Develop and connect control circuits
UEENEEJ002B	Prepare refrigeration tubing and fittings
UEENEEJ003B	Determine the basic operating conditions of vapour compression systems
UEENEEJ004B	Determine the basic operating conditions of air conditioning systems
UEENEEJ006B	Install pipework for refrigeration and air conditioning systems
UEENEEJ007B	Install refrigeration and air conditioning systems, major components and associated equipment
UEENEEJ008B	Recover, pressure and leak test, evacuate and charge refrigerants
UEENEEJ009B	Verify compliance and functionality of refrigeration and air conditioning installations
UEENEEJ010B	Select refrigeration pipe/tube, accessories and associated controls
UEENEEJ011B	Diagnose and rectify faults in refrigeration and air conditioning systems and components
UEENEEJ013B	Commission refrigeration and air conditioning systems
UEENEEJ053B	Find and rectify faults in appliance motors and associated controls
UEENEEJ070B	Diagnose and rectify faults in refrigeration and air conditioning

**Core Competency Standard Units**

All Core competency standard units to be achieved

control systems

- UEENEPP001B Disconnect and reconnect fixed wired electrical equipment connected to a Low Voltage supply
- UEENEPP002B Attach cords and plugs to electrical equipment for connection to a single phase 250 Volt supply
- UEENEPP003B Attach cords and plugs to electrical equipment for connection to 1000 Va.c. or 1500 Vd.c. supply
- UEENEPP007B Locate and rectify faults in electrical low voltage equipment following prescribed procedures

**Stream Core Competency Standard Units**

At least 1 of the following competency standard units to be achieved

- BSBMGT502B Manage people performance
- BSBINM501A Manage an information or knowledge management system
- BSBMGT516C Facilitate continuous improvement
- BSBINN502A Build and sustain an innovative work environment
- BSBWOR502B Ensure team effectiveness

**OR**

### Core Competency Standard Units

All Core competency standard units to be achieved

At least 4 of the following competency standard units to be achieved

UEENEEC001B	Maintain documentation
UEENEEC002B	Source and purchase material/parts for installation or service jobs
UEENEEC003B	Provide quotations for installation or service jobs
UEENEEC010B	Deliver a service to customers
UEENEED001B	Use basic computer applications relevant to a workplace
UEENEEE009B	Comply with scheduled and preventative maintenance program processes
UEENEEE020B	Provide basic instruction in the use of electrotechnology apparatus
UEENEK042A	Participate in environmentally sustainable work practices
UEENEK045A	Implement&monitor, policies&procedures for environmentally sustainable electrotech work practice

### Elective Competency Standard Units

In accordance with Schedule 5 which forms an integral part of this qualification, achieve a Unit Strand Total of at least 9.

- Note:**
1. Pre-requisite pathways shall be identified and met for all elective units selected.
  2. In selecting elective units considerations to career planning advice should be given to units that form part of a pre-requisite pathway for the progression to achieve particular competencies or qualification at a higher level.
  3. Registered training organisations shall provide competency development advice in relation to any licensing requirements to practice that apply, or can contribute towards the qualification requirement, prior to establishing the competency development plan.

END OF QUALIFICATION

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