



Australian Government

UEE42911 Certificate IV in Refrigeration and Air-conditioning Systems

Release: 5

UEE42911 Certificate IV in Refrigeration and Air-conditioning Systems

Modification History

Release	Action	Core/Elective	Details	Points
2	Update	Group A	HLTCPR211A Perform CPR	10

5	Update	Elective	HLTAID001 - Provide cardiopulmonary resuscitation	10
5	Edit	Core	Correct title of UEENEEJ110A - Select refrigerant piping, accessories and associated controls	50
5	Edit	Core	Correct title of UEENEEJ153A - Find and rectify faults in motors and associated controls in refrigeration and air conditioning systems	50
5	Edit	Core	Correct title of UEENEEK145A - Implement and monitor energy sector environmental and sustainable policies and procedures	20
5	Edit	Elective	Correct title of UEENEEJ191A - Select residential air conditioning system equipment, components and accessories	40

Description

Scope

This qualification provides the competencies to determine heat loads and select equipment for basic commercial refrigeration or residential air conditioning applications. It includes regulatory requirements for purchasing and handling refrigerants.

Note:

1. Basic commercial refrigeration includes commercial coldrooms, freezer rooms and cabinets with single a compressor or condensing unit. This does not include large, complex commercial applications or industrial applications.
2. Residential air conditioning applications are those covered under the Building Code of Australia's – Class 1A Residential Buildings.

3. The Ozone Protection and Synthetic Greenhouse Gas Legislation Amendment Bill 2003 apply to this qualification. Prior to planning the delivery of any training and/or assessment activities all legislative and regulatory requirements shall be identified and included.

^ From 1 July 2022 the elective unit HLTAID001 must no longer be delivered and will be replaced in the Packaging Rules by the unit HLTAID009 - for more information see: <https://asqa.gov.au/news-events/news/reminder-about-superseded-hlt-first-aid-units>

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 granting this qualification will be met when competency is demonstrated and achieved for:

- All the Core competency standard units, defined in the Core Competency Standard Units table below and
- A combination of Elective competency standard units to achieve a total weighting of 50 points in accordance with the Elective Competency Standard Units table below.

Note: UEENEEJ109A - 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		Weighting Points
All Core competency standard units to be achieved		
UEENEEE038B	Participate in development and follow a personal competency development plan	20
UEENEEE101A	Apply Occupational Health and Safety regulations, codes and practices in the workplace	20

UEENEEE102A	Fabricate, assemble and dismantle utilities industry components	40
UEENEEE103A	Solve problems in ELV single path circuits	40
UEENEEE105A	Fix and secure electrotechnology equipment	20
UEENEEE107A	Use drawings, diagrams, schedules, standards, codes and specifications	40
UEENEEE124A	Compile and produce an energy sector detailed report	60
UEENEEE137A	Document and apply measures to control OHS risks associated with electrotechnology work	20
UEENEEJ102A	Prepare and connect refrigerant tubing and fittings	30
UEENEEJ103A	Establish the basic operating conditions of vapour compression systems	60
UEENEEJ104A	Establish the basic operating conditions of air conditioning systems	20
UEENEEJ106A	Install refrigerant pipe work, flow controls and accessories	60
UEENEEJ107A	Install air conditioning and refrigeration systems, major components and associated equipment	80
UEENEEJ108A	Recover, pressure test, evacuate, charge and leak test refrigerants	60
UEENEEJ109A	Verify functionality and compliance of refrigeration and air conditioning installations	20
UEENEEJ110A	Select refrigerant piping, accessories and associated controls	50
UEENEEJ111A	Diagnose and rectify faults in air conditioning and refrigeration systems and components	40
UEENEEJ113A	Commission air conditioning and refrigeration systems	40
UEENEEJ127A	Establish the thermodynamic parameters of refrigeration and air conditioning systems	80

UEENEEJ129A	Establish heat loads for commercial refrigeration and/or air conditioning applications.	80
UEENEEJ153A	Find and rectify faults in motors and associated controls in refrigeration and air conditioning systems	50
UEENEEJ170A	Diagnose and rectify faults in air conditioning and refrigeration control systems	70
UEENEEJ192A	Analyse the psychrometric performance of HVAC/R systems	50
UEENEEJ194A	Solve problems in low voltage refrigeration circuits	40
UEENEEK145A	Implement and monitor energy sector environmental and sustainable policies and procedures	20
UEENEOP012A	Disconnect / reconnect composite appliances connected to low voltage installation wiring	60
UEENEOP017A	Locate and rectify faults in low voltage composite appliances using set procedures	20
UEENEOP024A	Attach cords and plugs to electrical equipment for connection to a single phase 230 Volt supply	20
UEENEOP025A	Attach cords, cables and plugs to electrical equipment for connection to 1000 Va.c. or 1500 Vd.c. supply	20
Total points in core		1230

Elective Competency Standard Units

Complete Elective units to achieve a total of weighting of 50 points from the following groups:

Group	Minimum points	Maximum points
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A	Imported and Common Elective Units Imported units from other training packages and/or state accredited courses can be added to this group, but they must be selected from qualifications where the unit is first packaged at AQF level 4. If units have not being assigned a weighting by the relevant EE-Oz Industry Technical Advisory Committee, their weighting will be 10 points.	0	20
B	Qualification Elective Units	0	30
C	Qualification Elective Units You may select all your elective units from this Group	20	50

Group A – Imported and Common Elective Units You may complete units to a maximum weighting of 20		Weighting Points
UEENEEC001B	Maintain documentation	20
UEENEEC002B	Source and purchase material/parts for installation or service jobs	20
UEENEEC003B	Provide quotations for installation or service jobs	20
UEENEEC010B	Deliver a service to customers	20
UEENEEED101A	Use computer applications relevant to a workplace	20
UEENEEEEE020B	Provide basic instruction in the use of electrotechnology apparatus	20
CPCCOHS1001A	Work safely in the construction industry	10
HLTAID001 ^ HLTAID009	Provide cardiopulmonary resuscitation Provide cardiopulmonary resuscitation (must be delivered from 1 July 2022)	10
	Imported units from other training packages and/or state accredited courses can be added to this group, but they must be selected from	Up to 20 points

	<p>qualifications where the unit is first packaged at AQF level 4. If units have not being assigned a weighting by the relevant EE-Oz Industry Technical Advisory Committee, their weighting will be 10 points.</p> <p>Note: For further information see Application of the NQC Flexibility Formula, UEE11 Electrotechnology Training Package, Version 1, Volume 1 Qualification Framework</p>	
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Group B – Qualification Elective Units		Weighting Points
You may complete units to a maximum weighting of 30		
UEENEEJ114A	Resolve problems in hydronic systems	40
UEENEEJ115A	Resolve problems in beverage dispensers	40
UEENEEJ116A	Resolve problems in transport refrigeration systems	20
UEENEEJ117A	Resolve problems in ultra-low temperature refrigeration systems	20
UEENEEJ118A	Resolve problems in post mix refrigeration systems	20
UEENEEJ119A	Resolve problems in ice making systems	20
UEENEEJ120A	Resolve problems in industrial refrigeration systems	20
UEENEEJ167A	Resolve problems in central plant air conditioning systems	40
UEENEEJ168A	Maintain microbial control of refrigeration and air conditioning systems	20
UEENEEJ171A	Resolve problems in refrigerated beverage vending cabinets	20
UEENEEJ174A	Apply safety awareness and legal requirements for hydrocarbon refrigerants	10

UEENEEJ175A	Service and repair self contained hydrocarbon air conditioning and refrigeration systems	20
UEENEEJ176A	Install and commission hydrocarbon refrigeration systems, components and associated equipment	20
UEENEEJ178A	Apply safety awareness and legal requirements for ammonia refrigerant	10
UEENEEJ179A	Repair and service ammonia refrigeration systems	20
UEENEEJ180A	Install and commission ammonia refrigeration systems, components and associated equipment	20
UEENEEJ182A	Repair and service secondary refrigeration systems	20
UEENEEJ184A	Apply safety awareness and legal requirements for carbon dioxide refrigerant	10
UEENEEJ185A	Repair and service carbon dioxide refrigeration systems	20
UEENEEJ186A	Install and commission carbon dioxide refrigeration systems, components and associated equipment	20
UEENEEJ188A	Repair and service self contained carbon dioxide refrigeration and heat pump systems	20

Group C – Qualification Elective Units		Weighting Points
You must complete units to a minimum weighting of 20		
You may select all your elective units from this Group		
UEENEEC005B	Estimate electrotechnology projects	40
UEENEEJ190A	Select basic commercial refrigeration system equipment, components and accessories	40
UEENEEJ191A	Select residential air conditioning system equipment, components and accessories	40

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.

END OF QUALIFICATION