

Air-conditioning and Refrigeration Mechanic



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ANZSCO Code: 342111

Occupation Description:

Air-conditioning and Refrigeration Mechanics assemble, install, maintain and repair commercial and domestic air-conditioning and refrigeration systems and equipment.



Their job involves:

- › establishing job requirements from drawings and specifications, and laying out installation reference points
- › drilling holes, installing mounting brackets and cutting, bending and threading piping
- › installing and repairing components such as compressors, motors, condensers, evaporators, switches and gauges, and copper lines for steam, gas, refrigerant, compressed air, oil and chilled water
- › bolting, soldering, riveting, welding and brazing pipes to connect equipment, and checking alignment and accuracy of fit
- › filling systems with gas or fluid to check for leaks
- › test-operating refrigeration systems, checking mechanisms and making adjustments
- › removing test gas and fluid using vacuum pumps, and filling with refrigerant
- › checking and overhauling refrigeration systems, diagnosing faults and repairing and replacing defective components
- › adjusting system controls and mechanisms and reassembling systems
- › recording causes of malfunctioning and action taken

How will I be assessed?

Stage 1: Documentary Evidence Assessment

1

We will review your documentary evidence to ensure it meets the employment and training requirements and indicates that you have the necessary skills, knowledge and experience as an Air-conditioning and Refrigeration Mechanic.

You can find more information about the employment and training requirements, and the documents required in the Pathway 1, Pathway 2 and Evidence guides on our website.

> vetassess.com.au

Stage 2: Technical Assessment

2

If you are successful in Stage 1, you will complete a technical interview with our assessor. The assessor will ask you questions about the knowledge required to work in your trade in Australia and how you apply that knowledge.

For more information about the technical interview, read the Technical Assessment Guide on our website.

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Stage 3: Practical Assessment

3

If you are successful in Stage 2, an assessor will assess you via a Practical Assessment where you will complete a series of work-based tasks that demonstrate your trade skills.

For more information on Stage 3, see the Technical Assessment Guide on our website.

> vetassess.com.au

What skills and knowledge do I need?

The qualification relevant to this occupation is the **UEE32220 Certificate III in Air Conditioning and Refrigeration**.

To be awarded this qualification, you must demonstrate your skills and knowledge in the units of competency listed in the table below. Each unit of competency defines a selection of knowledge and skills required in Australian workplaces.

Core Units

Code	Title
UEECD0007	Apply work health and safety regulations, codes and practices in the workplace
UEECD0016	Document and apply measures to control WHS risks associated with electrotechnology work*
UEECD0019	Fabricate, assemble and dismantle utilities industry components*
UEECD0020	Fix and secure electrotechnology equipment*
UEECD0042	Solve problems in ELV single path circuits*
UEECD0051	Use drawings, diagrams, schedules, standards, codes and specifications*
UEECO0010	Participate in refrigeration and air conditioning work and competency development activities
UEERA0031	Diagnose and rectify faults in air conditioning and refrigeration control systems*
UEERA0035	Establish the basic operating conditions of air conditioning systems*
UEERA0036	Establish the basic operating conditions of vapour compression systems*
UEERA0044	Find and rectify faults in single phase motors and associated controls*
UEERA0045	Find and rectify faults in three phase motors and associated controls*
UEERA0050	Install refrigerant pipe work, flow controls and accessories*
UEERA0051	Install, commission, service and maintain air conditioning systems*
UEERA0052	Install, commission, service and maintain low temperature systems*
UEERA0053	Install, commission, service and maintain medium temperature systems*
UEERA0059	Prepare and connect refrigerant tubing and fittings*
UEERA0062	Recover and charge refrigerants*
UEERA0079	Safely handle refrigerants and lubricants*
UEERA0081	Select refrigerant piping, accessories and associated controls*
UEERA0092	Solve problems in low voltage refrigeration and air conditioning circuits*
UEERA0094	Verify functionality and compliance of refrigeration and air conditioning installations*
UEERE0001	Apply environmentally and sustainable procedures in the energy sector
UEERL0001	Attach cords and plugs to electrical equipment for connection to a single phase 230 Volt supply*
UEERL0002	Attach cords, cables and plugs to electrical equipment for connection to 1000 V a.c. or 1500 V d.c.*
UEERL0004	Disconnect - reconnect electrical equipment connected to low voltage (LV) installation wiring*
UEERL0005	Locate and rectify faults in low voltage (LV) electrical equipment using set procedures*



You must demonstrate competency in all core and elective units of competency.

Elective Units

Code	Title
UEERA0006	Apply safety awareness and legal requirements for carbon dioxide refrigerant
UEERA0007	Apply safety awareness and legal requirements for flammable refrigerants
UEERA0074	Resolve problems in industrial refrigeration systems*
UEERA0066	Repair and service carbon dioxide refrigeration systems*
UEERA0070	Resolve problems in central plant air conditioning systems*
UEERA0084	Service and repair self-contained flammable refrigerants air conditioning and refrigeration systems*
UEERA0067	Repair and service secondary refrigeration systems*

You must demonstrate competency in all core and elective units of competency.

NOTE:

* — indicates that a unit requires a pre-requisite/s

How do I find out more about each unit of competency?

You are strongly encouraged to review each of the units of competency shown above.

To do this:

- › Go to the following website:
<http://training.gov.au/Search>
- › Enter a unit code (e.g.UEECD0007) into the search box
- › Click on the 'NRT' button
- › Click on the 'Search' button
- › Read the Unit of Competency information.

What will I receive after the assessment?

If you **successfully** complete Stage 3 you will receive:

- › A Skills Assessment Result Letter to support your visa application.

And if applying under Pathway 1:

- › An Offshore Technical Skills Record (OTSR) that lists the units of competency in which you have been assessed as having successfully demonstrated the required trade skills and knowledge.

If you are **unsuccessful** in Stage 3 you will receive:

- › A Skills Assessment Result Letter outlining the reasons why you were deemed not to have met the relevant competencies.

What is an Offshore Technical Skills Record (OTSR)?

The OTSR is a form of technical skills documentation that VETASSESS issues to individuals who successfully complete the practical skills assessment in UEE32220 Certificate III in Air Conditioning and Refrigeration.

The OTSR lists the technical skills and knowledge demonstrated against the qualification and any gaps that need to be bridged to meet the full standard, for example the Australian wiring rules for electrical trades.

The Australian Refrigeration Council Ltd (ARC), the peak body for the refrigeration and air conditioning industry in Australia, will provide you a Trainee Licence against the OTSR which will allow you to work under supervision till you meet the requirements for a full (unrestricted) licence. You might also need to meet other non-skill requirements as well as obtain additional licences/permits from the state and territory regulators. These requirements vary depending on the state or territory you want to work in. For further information about licensing requirements refer to <https://www.tradesrecognitionaustralia.gov.au/air-conditioning-and-refrigeration-mechanic>

To receive a full licence and a UEE32220 Certificate III in Air Conditioning and Refrigeration, you will need to undertake:

- › a minimum Australian context gap training, and
- › a period of supervised employment in your trade.

Registered Training Organisations (RTOs) in Australia, including TAFE institutes, offer the gap training course. You can find more information about gap training on the [Energy Skills Australia website](#).

Once you have successfully completed the gap training and been issued with a Statement of Attainment by the RTO, you can either:

- › Apply to the RTO where you completed your gap training for your Certificate III qualification. You can then present this qualification to the relevant licensing regulator to be issued a full licence, OR
- › Apply to VETASSESS for your Certificate III qualification. VETASSESS will review your gap training documentation and issue you with the required Certificate III qualification. You can present this qualification to the relevant licensing regulator to be issued a full licence. Please note that VETASSESS will charge an administrative fee for issuing the qualification and you might need to meet additional requirements.

Where can I find more information?

Please refer to our website: <http://www.vetassess.com.au/skills-assessment-for-migration/trade-occupations>

If you have further questions, contact us at:



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