



# Electrician

(Special Class)

ANZSCO Code: 341112

## Occupation Description:

Special Class Electricians service and repair intricate and complex electrical and electronic circuitry.



## Their job involves:

- determining the load requirements for electrical wiring in buildings and premises using blueprints, wiring diagrams, codes and specifications to determine sequences and methods of operation.
- measuring and laying out installation reference points.
- selecting, cutting, connecting and installing wire and cable to terminals and connectors.
- using electrical and electronic test instruments to trace and diagnose faults.
- repairing and replacing faulty wiring and defective parts.
- positioning and installing single and three-phase electrical switchboards.
- connecting electrical systems to power supply.
- testing continuity of circuit.
- installing, testing and adjusting electric and mechanical parts of lifts.
- installing, testing and commissioning solar photo voltaic (PV) power generation systems

## 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 a Special Class Electrician.

You can find information about the employment, training, and document requirements below;

- For information on what evidence you need to include with your application, download the **Evidence guide**.
- For information about the employment experience requirements for a Pathway 1 application, please refer to the **Pathway 1 Employment Experience Guidelines**.
- If you are applying for a Pathway 2 assessment:
  - read the **Pathway 2 Assessment Guide**.
  - complete and submit **Observation report** with your application

In addition to these guides, find information on assessment for your specific occupation:

- **Pathway 1 Technical Assessment Guide**
- **Practical Experience Summary**

### Stage 2: Technical Interview

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, see **Technical Assessment Guide**.

### 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 about the Practical Assessment, see **Technical Assessment guide**.

## What skills and knowledge do I need?

The qualification relevant to this occupation is UEE30820 Certificate III in Electrotechnology Electrician

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

## Core Units

Code	Title
HLTAID009	Provide cardiopulmonary resuscitation
UETDRRF004	Perform rescue from a live LV panel*
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*
UEECD0044	Solve problems in multiple path circuits*
UEECD0046	Solve problems in single path circuits*
UEECD0051	Use drawings, diagrams, schedules, standards, codes and specifications*
UEECO0023	Participate in electrical work and competency development activities
UEEEL0003	Arrange circuits, control and protection for electrical installations*
UEEEL0005	Develop and connect electrical control circuits*
UEEEL0008	Evaluate and modify low voltage heating equipment and controls*
UEEEL0009	Evaluate and modify low voltage lighting circuits, equipment and controls*
UEEEL0010	Evaluate and modify low voltage socket outlets circuits
UEEEL0012	Install low voltage wiring, appliances, switchgear and associated accessories*
UEEEL0014	Isolate, test and troubleshoot low voltage electrical circuits*
UEEEL0018	Select wiring systems and select cables for low voltage electrical installations*
UEEEL0019	Solve problems in direct current (d.c.) machines*
UEEEL0020	Solve problems in low voltage a.c. circuits*
UEEEL0021	Solve problems in magnetic and electromagnetic devices*
UEEEL0023	Terminate cables, cords and accessories for low voltage circuits*
UEEEL0024	Test and connect alternating current (a.c.) rotating machines*
UEEEL0025	Test and connect transformers*
UEEEL0039	Design, install and verify compliance and functionality of general electrical installations*
UEEEL0047	Identify, shut down and restart systems with alternate supplies*
UEERE0001	Apply environmentally sustainable procedures in the energy sector

## Elective Units

Code	Title
<b>Option 1 – Voice and data communications</b>	
UEEDV0005	Install and maintain cabling for multiple access to telecommunication services
UEEDV0008	Install, modify and verify coaxial and structured communication copper cabling*
<b>Option 2 – Electrical installations</b>	
UEEEL0049	Install and maintain emergency safety systems*
UEEEL0076	Inspect, test and maintain emergency lighting systems
UEEEL0075	Inspect, test and maintain emergency alarm systems and equipment*
UEECO0002	Maintain documentation
<b>Option 3 – Electrical control</b>	
UEEIC0047	Use instrumentation drawings, specifications, standards and equipment manuals
UEEIC0002	Assemble, enter and verify operating instructions in microprocessor equipped devices
UEEIC0013	Develop, enter and verify discrete control programs for programmable controllers*

## 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:

1. Go to the following website:  
<http://training.gov.au/Search>.
2. Enter a unit code (e.g. MSMWHS200) into the 'Title or code' search box.
3. Click on the 'NRT' button.
4. Click on the 'Search' button.
5. Read the Unit of Competency information.

# What employment and training evidence do I need?

## Pathway 1

Your evidence needs to demonstrate that you meet the minimum employment experience requirements for your nominated occupation:

- No formal training – 6 years' employment experience
- Relevant formal training – 4 years' employment experience

**Formal training** is training that is accredited by the authorised governing body in the country where the qualification was undertaken. It must be in your nominated occupation, or an occupation directly related to your nominated occupation.

Your **employment** must be in your nominated occupation, or in an occupation that is directly related to your nominated occupation and must include at least 12 months' employment in your nominated occupation within the last 3 years (currency).

It also has to be paid and full-time (or equivalent part-time). Full-time employment refers to working the standard number of hours defined as full-time in the country where the employment was undertaken. Part-time employment is counted on a pro rata basis.

An **apprenticeship** can be considered as employment experience if:

- it has been completed and meets the definition of formal training
- the employer details are recorded in the employment section of the application form and supported by sufficient official employment evidence.

## Pathway 2

Your evidence needs to demonstrate that you:

- Hold an accepted Australian qualification for your nominated occupation (please refer to Pathway 2 Assessment Guide on our website for the full list of accepted qualifications) or a current, identified Australian occupational licence (not subject to restrictions).
- Worked full-time (or equivalent part-time) in paid employment in your occupation, or in an occupation that is directly related to your nominated occupation, for a total of at least 3 years.
- Worked full-time (or equivalent part-time) in your occupation for 12 months in the last 3 years (currency):

o For applicants who hold an Australian qualification, the 12 months' employment must have been completed in Australia.

o For Australian occupational licence holders, this employment must have been undertaken in Australia or New Zealand after obtaining the full licence.

## IMPORTANT NOTE:

Work that may have been carried out unlicensed/illegally in Australia cannot be considered as evidence. If you have been residing in Australia for an extended period, we may consider allied electrical work for the purpose of currency. Allied electrical work is electrical work that does not require a licence to practice in Australia. Evidence of allied work carried out in Australia may be used for the judgement of currency only and cannot be counted towards the overall employment duration, which must have been completed offshore.