



| NSW Department of Education

# Electrician

As an electrician you'll face new challenges every day. Neither repetitive nor monotonous, electrical work requires intelligent problem solving. You'll install, maintain and repair electrical power, lighting and communication systems in industrial, commercial and domestic properties.

## What electricians do

Electricians read blueprints so they can test, install, maintain and repair wiring, electrical and power systems in our homes, businesses and factories. Their work may be stable and constant on a construction site or irregular and time-sensitive, fixing power outages where speed and safety are essential.

Electricians specialising in construction mainly install wiring systems in new factories, businesses and homes. Electricians specialising in maintenance fix and upgrade existing electrical systems and repair equipment. They also inspect equipment to ensure its operational so they can correct problems before breakdowns occur.

Electricians who work in maintenance in large factories repair motors, transformers, generators, and electronic controllers on tools and industrial robots. They also advise management as to whether the continued operation of equipment could be hazardous.

Electricians can also work for the entertainment industry installing and managing complex lighting and sound requirements for events, gigs and musicals.

## Will I get a job?

Moderate growth in this occupation is predicted, with 11,000 new jobs in Australia in the next four years, bringing the total to 169,200.

## What will I earn?

\$1,351-\$1,650 median full-time weekly salary (before tax, excluding super).

## You'll like this job if...

You like working with your hands. You have normal colour vision, manual dexterity. You like being your own boss. You focus on the facts and details. You apply logical analysis and critical thinking to solve problems.

## A day in the life...

Work as an electrician may involve these tasks:

- examine blueprints, wiring diagrams and specifications to determine sequences and methods of operation
- repair or replace faulty wiring and defective parts
- use electrical and electronic test instruments to trace and diagnose faults
- select, cut and connect wires and cables to terminals and connectors
- connect electrical systems to power supplies
- test continuity of circuits
- measure and lay out installation reference points
- position and install electrical switchboards
- install, test and adjust the electric and mechanical parts of lifts.

## VET qualifications

The following government-subsidised qualifications are available in NSW:

### Certificate IV in Electrical – Instrumentation (UEE40411)

- Up to 4 years full-time
- Available as a fee-free apprenticeship
- Graduates employed or in further study: 97.5%\*

### Certificate III in Electrotechnology Electrician (UEE30811)

- Up to 2 years full-time
- Available as a fee-free apprenticeship
- Graduates employed or in further study: 95.4%\*

### Certificate IV in Electrical – Rail Signalling (UEE41211)

- Up to 4 years full-time
- Available as a fee-free apprenticeship
- Graduates employed or in further study: 94.8%\*

### Certificate IV in ESI – Power Systems Substations (UET40512)

- Up to 4 years full-time
- Available as a fee-free apprenticeship
- Graduates employed or in further study: 94.8%\*

## Roles to look for

- Electrician
- Electrical mechanic
- Lift electrician
- Sub-station technician
- Signal electrician

## Main employing industries

- Manufacturing
- Construction
- Electrical contracting
- Electricity supply
- Electronic security and fire protection
- Lifts and escalators
- Signalling
- Renewable and sustainable energy
- Transport
- Public sector

## Other jobs you may like...

- Electrical fitter
- Electronics and communications technician
- Air-conditioning and refrigeration mechanic
- Switchboard manufacturing
- Appliance servicing
- Line worker
- Cable joiner



To find out more regarding these related jobs, visit [education.nsw.gov.au/job-guides](https://education.nsw.gov.au/job-guides).

### Information sources

Income: Australian Government Department of Employment, Australian Jobs Report 2017, Occupation Matrix. ANZSCO ID: 2211. Earnings can vary greatly depending on the skills and experience of the worker, and the demands of the role. Career trend: Australian Government Department of Employment 2017 employment projections to May 2022. Graduate outcomes: National Centre for Vocational Education Research. \*Approximately 6 months after they completed VET.

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