

# Electrical Instrumentation Apprenticeship

## FACT SHEET

As an Electrical and Instrumentation Apprentice, you'll learn how to fault find, test and maintain the systems that power and protect the plant. From high-voltage switchboards to gas detectors and transmitters, you'll be trained to work on the equipment that keeps everything running safely and efficiently. You'll gain hands-on experience across electrical, safety and process control systems – all critical to producing the energy that powers homes, businesses and industries around the world.

### Where will you be working?

You'll start your training at Woodside's Production Training Academy, located at the Karratha Gas Plant. This is where you'll build a solid foundation - learning how the LNG (liquefied natural gas) process works and picking up key industry and site knowledge.

After a couple of months, you'll move onto site and join one of Woodside's maintenance teams at their Burrup production facilities. You'll work alongside qualified tradespeople, getting real-world experience and learning on the job.

In the later years of your apprenticeship, you'll have opportunities to be seconded to external companies, including local domestic electrical businesses, to broaden your experience.

### What equipment will you be working on?

During your apprenticeship you'll get the opportunity to work on a wide range of plant equipment and machinery, including:

- **Gas Turbines** - used to drive and rotate larger generators, compressors and pumps
- **Electric motors and electrical switchgear (from 240VAC up to 33,000VAC)** - used to drive and control various electrical equipment in the process
- **Variable Speed Drives** - used to drive and control various electrical equipment in the process
- **Hazardous area equipment** - including various lighting, general purpose outlets, electric motors and instrumentation
- **Uninterruptible power supplies (both rotary and static) and battery banks** - used for emergency power back up
- **Transmitters** - used to control and monitor the process including level, flow, pressure and temperature and vibration.



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- **Fire and gas detection equipment** - to detect and protect the process plant for any fire or gas leak
- **Programmable logic controllers** - for control of various functions of the process and allowing the plant to operate in a safe manner
- **Analysers** - control and monitor the process including PH, moisture, CO<sub>2</sub>, gas chromatographs and metering
- **Valves** - distribute, isolate and control the process of each unit.

### What types of tools and machines will you use?

You'll work with a wide range of specialised tools to safely test, install, maintain and repair electrical systems and instrumentation equipment in an industrial environment.

- **Electrical test equipment** - like multimeters, clamp meters, insulation testers and gas monitors to check voltage, current, continuity, pressure, and gas levels in live systems.
- **Calibration tools and meters** - to fine-tune and verify the accuracy of instruments that monitor things like temperature, flow, and pressure.
- **Hand tools** – including pliers, side cutters, cable strippers, insulated screwdrivers and spanners to install and connect wiring and components safely.
- **Fitting tools** – such as tube cutters, benders, files, taps and dies to build or modify instrument panels, pipework and control systems.
- **Measurement tools** – like vernier calipers and dial indicators to measure components with precision during installation and maintenance.
- **Lifting and access gear** – including forklifts, overhead cranes and EWPs to move equipment and access high or hard-to-reach areas safely.





### What training will be provided?

Over the four-year apprenticeship, you will complete:

- Comprehensive onboarding and ongoing technical training at Woodside Energy's Training Academy
- Regular training and assessment through North Regional TAFE, working toward the successful completion of:
  - Certificate III in Engineering (Industrial Electrician)
  - Certificate IV in Engineering (Instrumentation)
- Additional training in safety and trade-specific modules, including: First Aid, CPR, Low Voltage Rescue, Working at Heights, Confined Space Entry, and more
- Rotations through various workgroups at Woodside Energy's onshore Burrup facilities

### What do you need to apply?

To be eligible for the Electrical Instrumentation Apprenticeship, you should have:

- Successful completion of Year 12 (or equivalent age level)
- A strong willingness to learn
- A desire to grow and develop a career in the electrical trade
- The ability to work well in a team
- Sound technical and problem-solving skills
- A good level of physical fitness and a commitment to health and wellbeing

You don't need previous experience - just the right mindset and a genuine interest in developing a trade career.

### About Woodside Energy

Woodside Energy is a global energy company, founded in Australia with a spirit of innovation and determination. They provide the energy the world needs to heat and cool homes, keep lights on, and enable industry.

Woodside led the development of the LNG industry in Australia. Today, Woodside aims to thrive through the global energy transition.

Woodside's success is driven by its people, and they aim to attract, develop and retain a diverse high-performing workforce. Their proven track record and distinctive capabilities are underpinned by more than 65 years of experience, making Woodside an employer and partner of choice.

These apprenticeships are delivered in collaboration with **Programmed**, a Group Training Organisation and recognised leader in apprentice employment and support.

As your legal employer, Programmed is with you every step of the way. You'll have a dedicated Training Coordinator who provides regular check-ins, mentoring, and support to help you succeed - both on the tools, with your studies and in your career.

We're more than just your employer - we're here to back you, guide you, and help you grow into a confident, capable tradesperson.

For more information and to apply, visit [programmed.com.au/woodside](https://programmed.com.au/woodside)