

# Great careers start here.



## Instrumentation and Electrical Apprenticeship

### About the NETTS Program

The National Energy Technician Training Scheme (NETTS) is a collaboration between Programmed and major energy organisations – including Santos, Shell, Woodside, and Jadestone – to build a skilled workforce for the future. NETTS is specifically designed as an entry pathway into the energy sector which requires no previous experience. Programmed and your host company provide ongoing support, mentoring and guidance throughout the apprenticeship, and you will also gain a range of life skills, safety knowledge and industry-specific training. Throughout your time in the program, you will gain exposure to multiple sites across the energy industry and supplier contractor facilities.

### About the Role

As an Instrumentation Electrical Apprentice, you will learn a range of fault-finding methods and engineering techniques to maintain, repair, calibrate and rebuild electrical and instrumentation equipment used on a process plant. The equipment

that you will be working on is essential in the operation of processing oil and gas.

### Where will you be working?

The first 12 months of the program are based at the ACEPT South Metro TAFE Campus in Munster, WA. During this time you will also be seconded to external electrical companies across the Perth metro area, to gain additional experience in areas such as domestic electrical installation.

You will then transition onto a FIFO roster at one of the NETTS host company facilities. These facilities are both on- and off-shore WA and interstate. As an example, you may spend some time at onshore at a Gas Plant or you might be working on a Platform or Rig off the coast of Karratha. You will still be required to return to TAFE at regular intervals for further electrical training in between your FIFO swings.

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## What type of 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, electrical switchgear and variable speed drives: used to drive and control various electrical equipment
- 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 instrumentation
- 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: used to control and monitor the process including PH, moisture, CO<sub>2</sub>, gas chromatographs and metering
- Valves: used to distribute, isolate and control the process of each unit

## What type of tools and equipment will you use?

Instrumentation electrical apprentices use a wide variety of hand tools, power tools and machinery tools including:

- Multimeters, hand pumps, insulation testers and various types of calibration equipment, personal gas meters, synchroscopes, watt meters, clip on amp meters, phase meters, wire strippers, wire crimpers, soldering irons, portable power tools, current injection sets and locking and tagging systems
- Pliers, side cutters, multi-grips, insulated screwdrivers, jewellers' screwdrivers, spanners, ratchets and sockets, hammers and hacksaws
- Tube cutters, demurrers, benders, punches, chisels, hand files, taps and dies
- Rulers, tape measures, vernier callipers, dial indicators and gauges

- Mobile Plant equipment, such as Forklifts and Elevated Work Platforms

## What training will be provided?

Over the course of the four-year apprenticeship you will receive:

- Regular training and assessment at SMTAFE ACEPT Campus as you work towards completion of:
- Certificate II Process Plant Operation
- Certificate III Engineering (Industrial Electrician)
- Certificate IV Engineering (Instrumentation)
- Additional training in a variety of safety and trade-related courses and tickets & licences, including:
- Forklift, Dogging, EWP, Working at Heights, Confined Space Entry, Gas Test Atmospheres
- First Aid, Industry Safety Induction (ISI) and Helicopter Survival & Emergency (BOSIET)
- Additional training in various life skills including mental health & resilience, communication, cultural awareness, finances and much more

## What requirements are there to become an instrument and electrical Apprentice?

- Completion of Year 12 (by course commencement) with a capacity to apply English, Maths and Science knowledge to your studies/work
- A strong desire to work in the energy industry with a willingness to learn new concepts
- The ability to work as part of a team
- The ability to work a FIFO roster in remote locations, working 12 hour shifts
- The ability to pass a pre-employment medical and regular drug & alcohol screening tests
- Australian Citizenship/Permanent Residency

For more information and to apply, visit:

**[programmed.com.au/nettswa](http://programmed.com.au/nettswa)**