

PLANT TECHNICIAN

ALSO KNOWN AS: **INDUSTRIAL MAINTENANCE TECHNICIAN** **MANUFACTURING TECHNICIAN** **PROCESS TECHNICIAN**
EQUIPMENT TECHNICIAN **SERVICE TECHNICIAN** **FACILITIES MAINTENANCE TECHNICIAN**

KEEP THE GEARS OF INDUSTRY TURNING SMOOTHLY.

As a Plant Technician, you'll be the backbone of manufacturing operations, ensuring machinery and equipment run efficiently and safely. This role combines technical expertise with practical problem-solving to maintain the heartbeat of industrial facilities.

KEY SKILLS

Skills which may benefit anyone considering a job as a plant technician include:

- ✔ Attention to detail
- ✔ Mechanical aptitude
- ✔ Problem solving
- ✔ Safety conscious
- ✔ Technical proficiency

CAREER PROGRESSION

In this role, you may have the opportunity to progress to other positions. Career progression opportunities include:

- Chemical Engineer
- Team Leader
- Renewable Energy Engineer
- Industrial Engineer

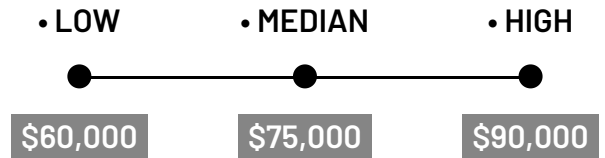
VALUES & ATTRIBUTES

Values and attributes of anyone considering a job as a plant technician include:

- ✔ Reliable
- ✔ Team Player
- ✔ Adaptable
- ✔ Initiative
- ✔ Continuous learning
- ✔ Investigative – “Thinker”

SALARY EXPECTATION

The expected salary for a Plant Technician can vary across different areas of manufacturing and may vary as you become more experienced.



RELATED INDUSTRIES

- ▶ Aerospace and Defence
- ▶ Chemicals, Hydrocarbons and Refining
- ▶ Furniture and Other Products
- ▶ General Manufacturing and Engineering
- ▶ Laboratory Operations
- ▶ Polymers, Plastic and Rubber
- ▶ Printing and Graphic arts
- ▶ Process Plant Operations
- ▶ Pulp, Paper and Packaging
- ▶ Renewables
- ▶ Sustainable Operations
- ▶ Textiles, Clothing and Footwear
- ▶ Timber and Wood
- ▶ Transport Equipment and Machinery

RECOMMENDED SCHOOL SUBJECTS

- Biology
- Engineering
- Engineering Skills
- Physics

CORE SCHOOL SUBJECTS

- General Mathematics
- Essential English
- Chemistry

JOB OVERVIEW

Plant Technicians play a vital role in maintaining and optimising the performance of industrial equipment and systems. They are responsible for the installation, maintenance, repair, and troubleshooting of various machinery and processes within manufacturing plants, refineries, power stations, and other industrial facilities. Their work is crucial in ensuring continuous operations, minimising downtime, and maintaining safety standards.

These professionals utilise a wide range of tools, diagnostic equipment, and technical knowledge to perform their duties. They need a combination of mechanical, electrical, and sometimes hydraulic or pneumatic skills.

A typical day might involve conducting routine maintenance checks, responding to equipment breakdowns, performing preventive maintenance, updating maintenance records, and collaborating with other departments to improve plant efficiency.

Plant Technicians often work in diverse industrial settings, adapting their skills to specific industry requirements. They play a key role in implementing and maintaining new technologies, contributing to process improvements, and ensuring compliance with safety and environmental regulations. Their expertise is essential in maximising production output while minimising operational costs and risks.

WHAT WILL YOU DO?

Your role may include duties as follows:

1. Perform routine maintenance and repairs on industrial equipment
2. Troubleshoot and diagnose mechanical, electrical, and process-related issues
3. Install and calibrate new machinery and control systems
4. Conduct preventive maintenance to minimise equipment downtime
5. Maintain accurate records of maintenance activities and equipment performance

HOW TO BECOME A PLANT TECHNICIAN

Becoming a Plant Technician typically involves a combination of education and hands-on experience. Here are the steps to pursue this career:

1. Complete Year 12 with a focus on maths, physics, and technical subjects
2. Obtain a relevant vocational qualification or apprenticeship in engineering or maintenance
3. Gain experience through entry-level positions or apprenticeships in industrial settings
4. Develop skills in specific areas such as electrical systems, hydraulics, or automation
5. Pursue additional certifications relevant to your industry (e.g., confined space entry, forklift operation)

VOCATIONAL EDUCATION & TRAINING

Vocational education and training (VET) is a common pathway for Plant Technicians. These qualifications provide hands-on skills and theoretical knowledge essential for the role. Plant technicians will often complete a trade qualification via an apprenticeship. The following qualifications may be useful for the role and can be completed as an apprenticeship:

- Certificate III in Engineering – Mechanical Trade (MEM30219)
- Certificate IV in Engineering (MEM40119)

As an apprentice you will combine work with formal training, allowing you to gain practical skills and knowledge in a specific trade while earning a salary.

Duration: Apprenticeships typically last between 3 to 4 years for full-time participants. Part-time apprenticeships may take longer, depending on the individual's work schedule and training progress.

Work and study combination: As an apprentice you will work either full-time or part-time while receiving formal training from a Registered Training Organisation (RTO). School-based apprenticeships may be available.

Eligibility: Generally, apprenticeships do not require any formal qualifications to enter, making them accessible to a wide range of individuals, including if you are a school leaver or someone looking to change careers. There are minimum age requirements and there may be other eligibility criteria.

Completion: On completion you will receive a nationally recognised trade qualification, showcasing your skill and experience.

Other relevant VET qualifications that can help career advancement include:

- Diploma of Engineering – Advanced Trade (MEM50119)
- Advanced Diploma of Engineering (MEM60122)

UNIVERSITY & HIGHER EDUCATION

While not always required, higher education can enhance career prospects and lead to more advanced roles. Relevant bachelor's degrees include Mechanical Engineering, Electrical Engineering, or Industrial Engineering. Some universities offer specialised programs in maintenance engineering or industrial technology.

These programs typically cover advanced topics such as predictive maintenance techniques, reliability engineering, and industrial automation. Graduates develop analytical and management skills that can lead to roles in maintenance management or plant engineering. Some universities also offer postgraduate courses that can further specialise knowledge in areas such as asset management or industrial digitisation, enhancing career prospects in specific industries or more senior roles.