ENGINEERING ASSISTANT

ALSO KNOWN AS:

ENGINEERING TECHNOLOGIST

TECHNICAL ASSISTANT

ENGINEERING SUPPORT SPECIALIST

ENGINEERING PROJECT SUPPORT OFFICER

DRIVE ENGINEERING EXCELLENCE FORWARD.

As an Engineering Assistant, you'll play a vital role in bringing innovative projects to life. Your keen eye for detail, technical know-how, and ability to collaborate will ensure efficient workflows, helping to transform cutting-edge designs from concept to reality.

KEY SKILLS

Skills which may benefit anyone considering a job as a engineering assistant include:

○ Communication

○ Organisation

○ Technical comprehension

CAREER PROGRESSION

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

- Team Leader
- Mechanical Engineer
- Electrical Engineer
- Aerospace Engineer

VALUES & ATTRIBUTES

Values and attributes of anyone considering a job as a engineering assistant include:

Supportive

SALARY EXPECTATION

The expected salary for an Engineering Assistant can vary across different areas of manufacturing and may vary as you become more experienced.



RELATED INDUSTRIES

▶ Aerospace and Defence ▶ General Manufacturing and Engineering ▶ Process Plant Operations

RECOMMENDED SCHOOL SUBJECTS

• Engineering Skills • Mathematical Methods • Physics • Specialist Mathematics

CORE SCHOOL SUBJECTS

• General Mathematics • Essential English • Engineering



JOB OVERVIEW

Engineering Assistants are integral members of engineering teams, providing crucial support across various project stages. You'll work closely with engineers, acting as their trusted support by conducting data analyses, managing documentation, and performing basic design work.

A typical day might begin with collating data for a project report, followed by updating technical drawings using computer-aided design (CAD) software. You could spend your afternoon in a team meeting, presenting your findings on a recent quality control check, before ending your day by organising the documentation for an upcoming client presentation.

Your toolkit will include a range of software applications, such as CAD programs like AutoCAD or SolidWorks, project management tools like Microsoft Project or Trello, and data analysis software such as Excel or MATLAB. You'll also become proficient with document management systems and communication platforms to ensure smooth information flow within the team and with external stakeholders.

As an Engineering Assistant, you'll need to balance attention to detail with the ability to see the bigger picture of how your work contributes to the overall project goals. Your role is vital in ensuring projects are delivered on time, within budget, and to the highest quality standards, making you an essential part of the engineering team.

WHAT WILL YOU DO?

Your role may include duties as follows:

- 1. Conduct data analyses and prepare reports to validate strategies and approaches.
- 2. Oversee technical documentation, files, correspondence, sketches, and modelling.
- 3. Monitor schedules and timelines, advising on necessary changes to project milestones.
- 4. Perform basic design tasks and quality control checks as required by the engineering team.
- 5. Liaise with clients and stakeholders to facilitate swift progress and activity.
- ${\bf 6. \ \ Assist\ in\ setting\ up\ and\ maintaining\ laboratory\ or\ workshop\ equipment.}$
- 7. Conduct literature reviews and gather information to support engineering projects.

HOW TO BECOME A ENGINEERING ASSISTANT

Becoming an Engineering Assistant typically involves a combination of education and practical experience. Here's a step-by-step guide:

- 1. Develop a strong foundation in mathematics, physics, and technical subjects during secondary school.
- 2. Gain practical experience through internships, work placements, or entry-level positions in engineering firms.
- 3. Develop proficiency in relevant software applications, such as CAD programs and project management tools.
- 4. Build your communication and teamwork skills through group projects or extracurricular activities.
- 5. Stay updated with the latest technologies and trends in your chosen engineering field.
- 6. Apply for Engineering Assistant positions, highlighting both your technical skills and your ability to support project teams effectively.



VOCATIONAL EDUCATION & TRAINING

For those seeking a practical, hands-on approach to becoming an Engineering Assistant, Vocational Education and Training (VET) offers valuable pathways:

- Certificate IV in Engineering (MEM40119)
- Diploma of Engineering Technical (MEM50212)
- Advanced Diploma of Engineering (MEM60122)

These courses provide practical skills in engineering support, technical drawing, and project assistance, often including industry placements for real-world experience.

UNIVERSITY & HIGHER EDUCATION

While not always required, pursuing a university degree can provide a broader theoretical foundation and potentially open advanced career opportunities:

- Graduate Diploma of Engineering (MEM80122),
- Associate Degree in Engineering
- Bachelor of Engineering Technology
- Bachelor of Engineering (with a focus on your preferred engineering discipline)

These programs provide in-depth knowledge of engineering principles and practices, often including internship opportunities and major projects.

