

# ENGINEERING DRAFTSPERSON

ALSO KNOWN AS:

ENGINEERING DESIGNER

DESIGN DRAFTSPERSON

CAD TECHNICIAN

## BRING ENGINEERING VISIONS TO LIFE.

As an Engineering Draftsperson, you'll harness your talent for converting theoretical concepts into precise technical drawings. Using cutting-edge software and your technical expertise, you'll play a crucial role in shaping innovative designs and solutions, bridging the gap between imagination and real-world application.

### KEY SKILLS

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

- ✔ Analytical skills
- ✔ Attention to detail
- ✔ Communication
- ✔ Creativity
- ✔ Technical comprehension

### CAREER PROGRESSION

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

- Team Leader
- Industrial Designer
- Chief Engineering Officer
- Business Manager

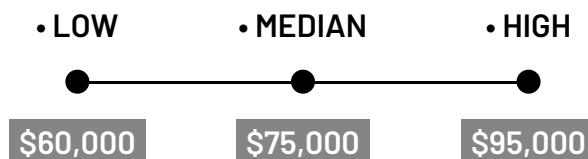
### VALUES & ATTRIBUTES

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

- ✔ Precision
- ✔ Resilient
- ✔ Integrity
- ✔ Adaptable
- ✔ Proactive
- ✔ Artistic – "Creator"

### SALARY EXPECTATION

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



## RELATED INDUSTRIES

- ▶ Aerospace and Defence ▶ Chemicals, Hydrocarbons and Refining ▶ Food and Beverage ▶ Furniture and Other Products
- ▶ General Manufacturing and Engineering ▶ Laboratory Operations ▶ Meat and Seafood Processing ▶ Pharmaceutical and Medical Technology
- ▶ 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

- Engineering
- Engineering Skills
- Mathematical Methods

## CORE SCHOOL SUBJECTS

- General Mathematics
- Essential English
- Design
- Industrial Graphics Skills



## JOB OVERVIEW

Engineering Draftspeople are the vital link between a technical idea and a practical, solutions-focused engineering outcome. Working closely with engineers, you'll craft comprehensive and exact blueprints using sophisticated computer-aided design (CAD) software.

A typical day might start with a briefing from an engineer about a new project, followed by hours of meticulous work on CAD software, creating detailed technical drawings. You could spend your afternoon collaborating with the engineering team to refine designs, ensure compliance with industry standards, and incorporate feedback from stakeholders.

Your primary tools will be advanced CAD software such as AutoCAD, SolidWorks, or Revit. You'll also use 3D modelling software, document management systems, and potentially virtual reality (VR) or augmented reality (AR) tools for visualisation. Proficiency in these technologies, combined with your technical knowledge and attention to detail, will be crucial in translating complex engineering concepts into clear, actionable plans.

As an Engineering Draftsperson, you're responsible for transforming technical concepts into interpretable design plans for subsequent real-world manufacture and application. Your work is fundamental to the engineering process, ensuring that designs are accurately represented and ready for implementation.

## WHAT WILL YOU DO?

Your role may include duties as follows:

1. Work closely with engineers to understand briefs, receive specifications, and ensure design accuracy.
2. Use CAD software to create detailed technical drawings and plans.
3. Cross-check outcomes with industry standards and regulations to ensure all designs meet required specifications.
4. Develop skills in receiving and implementing stakeholder feedback to refine and improve designs.
5. Maintain comprehensive and orderly records for easy reference and project tracking.
6. Create three-dimensional models to provide more detailed visualisations of designs.
7. Assist in interpreting drawings for manufacturing or construction teams.

## HOW TO BECOME A ENGINEERING DRAFTSPERSON

Becoming an Engineering Draftsperson 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 drawing during secondary school.
2. Choose your educational path (see VET or Higher Education sections below).
3. Gain proficiency in CAD software and other relevant technologies.
4. Seek internships or work placements to gain practical experience in drafting and design.
5. Build a portfolio showcasing your technical drawing and 3D modelling skills.
6. Stay updated with the latest CAD technologies and industry standards.
7. Apply for Engineering Draftsperson positions, highlighting both your technical skills and attention to detail.
8. Research potential employers in your area via a search engine, social media or job site. Even if there are no jobs advertised with the employer you're interested in, it can be a good idea to send a cover letter with your resume expressing your interest.

## VOCATIONAL EDUCATION & TRAINING

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

- Certificate III in Engineering – Technical (MEM30522)
- Certificate IV in Engineering Drafting (MEM40422)
- Diploma of Engineering – Technical (MEM50222)

These courses provide practical skills in technical drawing, CAD software use, and engineering principles, 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 up more advanced career opportunities:

- Bachelor of Engineering Technology
- Bachelor of Engineering (with a focus on design)
- Bachelor of Industrial Design

These programs provide in-depth knowledge of engineering principles, design processes, and advanced CAD techniques, often including major projects and sometimes industry placements.