CNC MACHINIST

ALSO KNOWN AS: FITTER AND MACHINIST | CNC PRESS OPERATOR | CNC BRAKE PRESS OPERATOR

TRANSFORM BLUEPRINTS INTO PRECISION-MADE COMPONENTS.

Harness your passion for precision and technical expertise to transform complex blueprints into vital manufactured components as a CNC Machinist. In this dynamic role, you'll program, operate, and monitor Computer Numerical Control (CNC) machines, contributing to the creation of essential products across various industries while meeting critical deadlines and quality standards.

KEY SKILLS

Skills which may benefit anyone considering a job as a cnc machinist include:

- Market awareness
- Persuasive communication
- Problem solving
- Relationship-building
- Technical comprehension

VALUES & ATTRIBUTES

Values and attributes of anyone considering a job as a cnc machinist include:

- Safety-conscious
- Patience
- Adaptable
- Quality-focused
- Innovative
- Investigative – "Thinker"

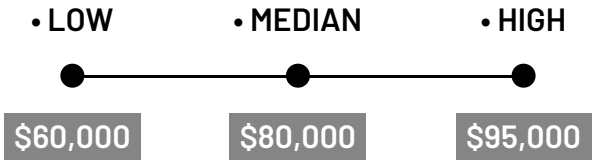
CAREER PROGRESSION

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

- Mechanical Engineering Supervisor
- Engineering Technician
- Business Manager
- Operations Manager

SALARY EXPECTATION

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



RELATED INDUSTRIES

▸ Aerospace and Defence ▸ Furniture and Other Products ▸ General Manufacturing and Engineering ▸ Polymers, Plastic and Rubber ▸ Pulp, Paper and Packaging ▸ Timber and Wood ▸ Transport Equipment and Machinery

RECOMMENDED SCHOOL SUBJECTS

- Engineering
- Industrial Graphics Skills

CORE SCHOOL SUBJECTS

- General Mathematics
- Essential English
- Engineering Skills

JOB OVERVIEW

CNC Machinists are highly skilled professionals who expertly interpret technical data and translate it into precisely crafted products. They possess an in-depth understanding of various CNC machines, including those used for milling, cutting, and grinding, and work with a wide range of raw materials to produce components or finished products with exceptional accuracy.

CNC machinists will combine their love of mechanics, mathematics and technology within this ever-evolving innovative career path. In this role you will work with a diverse range of materials, including metals like aluminium, steel, and titanium, as well as plastics, composites, and even exotic alloys.

CNC machinists craft a diverse array of products, from aerospace components like turbine blades and aircraft wing parts to medical devices such as orthopaedic implants and surgical instruments. Their expertise extends to automotive engine components, precision electronics parts, industrial equipment, consumer goods like high-end watch components, energy sector components, defence industry parts, robotics elements, and intricate moulds for manufacturing processes.

WHAT WILL YOU DO?

As a CNC machinist you'll operate and program CNC machines to craft high-quality parts and components from materials, reflecting technical drawings and specifications.

Your role may include duties as follows:

1. Analysing and interpreting technical drawings for production
2. Inputting and programming CNC machines as per requirements
3. Oversee machine operations, including raw material loading and output quality control
4. Conduct rigorous inspections and measurements to ensure products meet exact specifications
5. Maintaining, updating and repairing machines.

Your work as a CNC machinist will guide a product through from material selection to manufacture to quality testing – significant responsibilities with tangible rewards.

HOW TO BECOME A CNC MACHINIST

You can become a CNC machinist through an apprenticeship. You may find it useful to undertake a Certificate II in Engineering Pathways (MEM20422) while you are at school or before commencing an apprenticeship. This course will give you a good introduction to manufacturing concepts and equipment used.

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

An apprenticeship with a manufacturer is the best pathway to gain employment as a CNC Machinist. You can undertake the following qualifications as apprenticeships:

- Certificate III in Engineering – Mechanical Trade (MEM30219)
- Certificate III in Engineering – Mechanical Trade (Machining)(MEM30219)
- Certificate III in Engineering – Mechanical Trade (Fitting)(MEM30219)
- Certificate III in Engineering – Mechanical Trade (Fitting/machining)(MEM30219)

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 up 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.

Skills, qualifications, accreditations and licences

A CNC Machinist may choose to pursue other training or certifications, licences and tickets. Qualifications and skills may be required to progress to supervisor or team leader positions.

Specialist vocational education and training qualifications that may help you progress in this role include:

- Certificate IV in Engineering (MEM40119)

UNIVERSITY & HIGHER EDUCATION

Holding a degree in manufacturing, human resources, finance, economics, marketing or management can be helpful if you are considering taking a step into leadership or a business ownership position.