

MANUFACTURING AND ENGINEERING – Stage 6

MEM10119 Certificate I in Engineering

Statement of Attainment towards MEM20422 Certificate II in Engineering Pathways

The Certificate I in Engineering and SOA towards Certificate II in Engineering Pathways will equip students with knowledge and skills which will enhance their prospects of employment in an engineering or related working environment. Students undertaking this program will learn to use engineering workshop machines and equipment as well as hand and power tools and precision measurement tools. Students will have the opportunity to learn welding skills using manual metal arc and gas metal arc process as well as the oxy acetylene welding.

This course is competency based and the student's performance is assessed against prescribed industry standards.

Unit Value	2 unit Preliminary 2 unit HSC	240 hrs	Work Placement	Mandatory 35 hours
Specialisation	No		SBAT	Opportunity to complete a School Based Apprenticeship or a Traineeship and gain credit towards the HSC
HSC Exam	No	ATAR	No	Recognition
				National AQF and HSC Qualification

Example of Competencies.

Unit Code	Unit Title	Unit Code	Unit Title
MEM13015	Work safely and effectively in manufacturing and engineering	MEMPE005	Develop a career plan for the engineering and manufacturing industries
MEM16006	Organise and communicate information	MEMPE004	Use fabrication equipment
MEM11011	Undertake manual handling	MEM07032	Use workshop machines for basic operations
MEM18001	Use hand tools	MEMPE001	Use engineering workshop machines
MEM18002	Use power tools/hand held operations	MEMPE006	Undertake a basic engineering project
MEMPE002	Use electric welding machines	MEM16008	Interact with computing technology
MEM12024	Perform computations		

PERSONAL ATTRIBUTES

- Enjoy technical and engineering activities
- Good with hands
- Enjoy practical and manual activities
- Able to work efficiently
- Able to work as part of a team
- Safety-conscious
- Able to cope with the physical demands of the job.

LEARNING OUTCOMES

- Work safely in a manufacturing and engineering environment
- Work with hand and power tools
- Perform engineering measurements
- Perform manual metal arc welding tasks
- Use workshop machines

STUDY PATHWAYS

- Further training options in specific fields include:
- Engineering - Fabrication Trade
- Engineering - Mechanical Trade
- Engineering - Electrical/Electronic Trade
- Engineering - Technical

CAREER PATHWAYS

- Sheet Metal Worker
- Machinist
- Equipment Maintainer and Repairer
- Plant Mechanic
- Mechanical Fitter
- Tool and Die Maker
- Design Engineer
- CNC Operator
- Mechanical and Maintenance Engineer

SKILLS FOR SUCCESS

