



CATHOLIC SCHOOLS OFFICE, LISMORE DIOCESE 7054

THE INFORMATION PROVIDED IS CORRECT AT 6 APRIL 2017

# METAL & ENGINEERING

This VET course provides students with broad-based underpinning competencies in a range of engineering skills. Students undertaking this course will work on lathes and milling machines as well as learning about 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.

## COURSE DETAILS

<b>QUALIFICATION OUTCOMES</b>	Students who demonstrate competency in the required units of competency will be eligible for Certificate I in Engineering (MEM10105)
<b>HOURS</b>	240 hours
<b>DELIVERY</b>	Face-to-face by qualified staff
<b>TYPE</b>	Board Developed Course Category B
<b>DURATION</b>	2 years
<b>UNIT VALUE</b>	2 unit Preliminary 2 unit HSC
<b>SPECIALISATION</b>	Yes
<b>HSC EXAM</b>	Yes
<b>ATAR</b>	Yes
<b>WORKPLACEMENT</b>	Mandatory 70 hours
<b>RECOGNITION</b>	National AQF and HSC Qualification
<b>SBAT</b>	Opportunity to complete a School Based Apprenticeships or a Traineeship and gain credit towards the HSC - MEM20105 Certificate II in Engineering
<b>ENTRY REQUIREMENTS</b>	There are no formal entry requirements for this qualification
<b>COURSE FEES</b>	A course fee is generally charged by schools to cover consumable materials. Your school will provide further information.
<b>RESOURCES REQUIRED</b>	<ul style="list-style-type: none"> <li>Work boots or leather shoes as directed by the school</li> <li>PPE gear as directed by</li> </ul>
<b>RECOGNITION OF PRIOR LEARNING</b>	RPL is available for students who have previously gained the skills and knowledge required. Your school will provide further information.

## UNITS OF COMPETENCY

<ul style="list-style-type: none"> <li>Manufacturing, engineering and related services industries</li> </ul>	INDUCTION
<ul style="list-style-type: none"> <li>Apply principles of occupational health and safety in the work environment</li> </ul>	MEM13014A
<ul style="list-style-type: none"> <li>Use hand tools</li> </ul>	MEM18001C
<ul style="list-style-type: none"> <li>Plan to undertake a routine task</li> </ul>	MEM14004A
<ul style="list-style-type: none"> <li>Perform routine manual metal arc welding</li> </ul>	MEM05012C
<ul style="list-style-type: none"> <li>Perform routine oxy acetylene welding</li> </ul>	MEM05004C
<ul style="list-style-type: none"> <li>Work with others in a manufacturing, engineering or related environment</li> </ul>	MEM16007A
<ul style="list-style-type: none"> <li>Perform engineering measurements</li> </ul>	MEM12023A
<ul style="list-style-type: none"> <li>Carry out mechanical cutting</li> </ul>	MEM05005B
<ul style="list-style-type: none"> <li>Use power tools/hand held operations</li> </ul>	MEM18002B
<ul style="list-style-type: none"> <li>Interpret technical drawing</li> </ul>	MEM09002B
<ul style="list-style-type: none"> <li>Use workshop machines for basic operations</li> </ul>	MEM07032B
<ul style="list-style-type: none"> <li>Use comparison and basic measuring devices</li> </ul>	MEM12001B
<ul style="list-style-type: none"> <li>Apply quality systems</li> </ul>	MEM15002A
<ul style="list-style-type: none"> <li>Apply quality procedures</li> </ul>	MEM15024A
<ul style="list-style-type: none"> <li>Perform computations</li> </ul>	MEM12024A

## ASSESSMENT

This course is competency based and the student's performance is assessed against prescribed industry standards. Assessment methods may include:

- Observation
- Student Demonstration
- Questioning
- Written tasks
- Tests

## PERSONAL REQUIREMENTS

This course would suit students who...

- 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.

## CAREER PATHWAYS

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

## JOB ROLES

Trades' assistants related to this qualification include:

- Factory Worker
- Metal Production Assistant

## DUTIES & TASKS OF A METAL TRADES ASSISTANT

Metal trades assistants may perform the following tasks:

- Position and hold metal stock or products to enable work to be carried out
- Perform assembly and dismantling operations, such as screwing or bolting
- Solder or spot-weld components using electrical spot or butt welding machines
- Operate power hammers, presses or other cutting and shaping tools and machines
- Transport tools, materials and work pieces to and from sites or workbenches
- Hand tools to tradespersons and hold tools not immediately required
- Clean and prepare working surfaces.

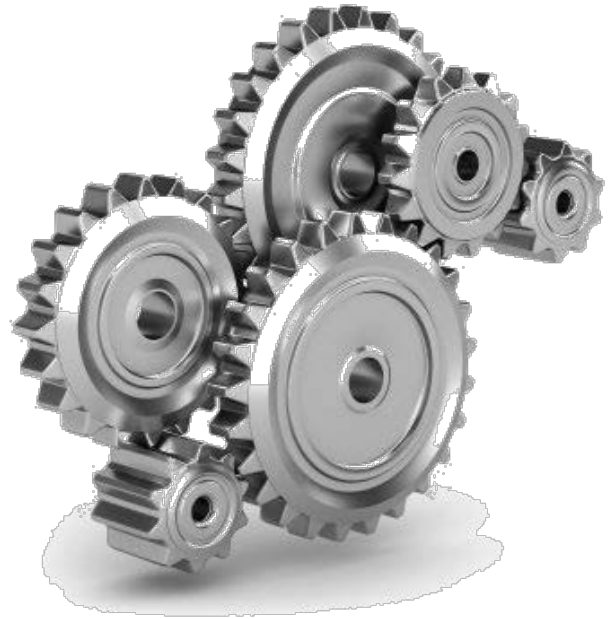
## FURTHER STUDY

- Engineering - Mechanical Trade
- Engineering - Electrical/Electronic Trade
- Engineering - Fabrication Trade
- Engineering – Technical
- Boating Services

For further information: <http://www.myskills.gov.au/>

Type the qualification code into the search bar, then click on the qualification title.

Explore Career Pathways and Student Outcomes including Employment, Salary, Occupations



# METAL & ENGINEERING



FOR MORE INFORMATION CONTACT:

REGISTERED TRAINING ORGANISATION - 7054

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