

Course Outline

MEM30305 Certificate III in Engineering – Fabrication Trade

Course Description



This qualification covers the skills and knowledge required for employment as an Engineering Tradesperson - Fabrication within the metal, engineering, manufacturing and associated industries or other industries where Engineering Tradespersons - Fabrication work. The duration of the MEM30305 Certificate III in Engineering is 9 hours per day, 1 day per week over 192 weeks.

Job Roles and Career Pathways

The qualification is designed for students wishing to enter the Metal and engineering industry for roles including Boilermaker, Welder, Sheet Metal Worker and Fabrication Engineer. This course covers relevant employability skills. Full details can be found at www.training.gov.au

Entry Requirements

Course entry

There are no formal course entry requirements into this qualification.

RTO entry

This course should be undertaken under an Australian apprenticeship arrangement which includes a mix of on and off the job training. Students must be able to undertake an Australian apprenticeship. Students are required to have a limited knowledge and skill base in a variety of Metal and Engineering contexts including making judgements, completing routine activities and taking limited responsibility in the Metal and Engineering workplace.

Students are required to have language, literacy and numeracy skills as required to undertake these workplace functions.

Intake

Course start dates are as listed on the RTO training schedule.

Further Learning

The MEM30305 Certificate III in Engineering – Fabrication Trade is a prerequisite for several specialised courses in the Metal and Engineering Industry that will help you to further your career.

Students who complete the MEM30305 Certificate III in Engineering – Fabrication Trade can continue their studies by advancing to the MEM40105 Certificate IV in Engineering or any other relevant Certificate IV level qualification.



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Course Structure

This course covers all the required 12 Core competency units and 42 elective units totalling 150 elective points.

The following units of competency will be delivered for this qualification

Unit Code	Unit Title	Core/Elective
MEM13014A	Apply principles of occupational health and safety in the work environment	Core
MEM16006A	Organise and communicate information	Core
MEM16007A	Work with others in a manufacturing, engineering or related environment	Core
MSAENV272B	Participate in environmentally sustainable work practices	Core
MEM14004A* MEM14005A*	Plan to undertake a routine task* Plan a complete activity*	Core* Core*
MEM16008A	Interact with computing technology	Core
MEM12024A	Perform computations	Core
MEM11011B	Undertake manual handling	Elective
MEM18011C	Shut down and isolate machines/equipment	Elective
MEM12023A	Perform engineering measurements	Core
MEM09002B	Interpret technical drawing	Elective
MEM18001C* MEM18002B*	Use hand tools* Use power tools/hand held operations*	Elective* Elective*
MEM05052A	Apply safe welding practises	Elective
MEM05051A	Select welding processes	Elective
MEM05026C	Apply welding principals	Elective
MEM05004C	Perform routine oxy acetylene welding	Elective
MEM05006C	Perform brazing and/or silver soldering	Elective
MEM05001B	Perform manual soldering/desoldering - electrical/electronic components	Elective
MEM05002B	Perform high reliability soldering and desoldering	Elective
MEM05050B	Perform routine gas metal arc welding	Elective
MEM05017D	Weld using gas metal arc welding process	Elective
MEM05049B	Perform routine gas tungsten arc welding	Elective
MEM05019D	Weld using gas tungsten arc welding process	Elective
MEM05012C	Perform routine manual metal arc welding	Elective
MEM05015D	Weld using manual metal arc welding process	Elective
MEM05023C	Weld using submerged arc welding process	Elective
MEM05047B	Weld using flux core arc welding process	Elective

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MEM05005B	Carry out mechanical cutting	Elective
MEM05007C	Perform manual heating and thermal cutting	Elective
MEM05009C	Perform automated thermal cutting	Elective
MEM05008C	Perform advanced manual thermal cutting, gouging and shaping	Elective
MEM11001C	Erect/dismantle scaffolding and equipment	Elective
MEM08010B	Manually finish/polish materials	Elective
MEM12007D	Mark off/out structural fabrications and shapes	Elective
MEM05037C	Perform geometric development	Elective
MEM05010C	Apply fabrication, forming and shaping techniques	Elective
MEM05011D	Assemble fabricated components	Elective
MEM03003B	Perform sheet and plate assembly	Elective
MEM03001B	Perform manual production assembly	Elective
MEM10010B	Install pipework and pipework assemblies	Elective
MEM10001C	Erect structures	Elective
MEM05036C	Repair/replace/modify fabrications	Elective
MEM04019B	Perform refractory installation and repair	Elective
MEM15024A	Apply quality procedures	Core
MEM15002A	Apply quality systems	Core
MEM05022C	Perform advanced welding using oxy acetylene welding process	Elective
MEM05018C	Perform advanced welding using gas metal arc welding process	Elective
MEM05020C	Perform advanced welding using gas tungsten arc welding process	Elective
MEM05016C	Perform advanced welding using manual metal arc welding process	Elective
MEM05048B	Perform advanced welding using flux core arc welding process	Elective
MEM17003A	Assist in the provision of on the job training	Core

**Clustered Units*

Delivery

The 53 units of competency in this course will be delivered over a period of 192 academic weeks involving a blend of classroom based, simulated and supervised workplace based training to ensure full competency.

The delivery of competency units has been sequenced to take into account required unit prerequisites.

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Volume of Learning

The volume of learning allocated to a qualification will vary depending on the level of the qualification and the experience and competency of the student. Students must complete the allocated hours for the qualification they are undertaking in order to achieve competency. If the student applies for RPL or Credit Transfer, the volume of learning may be reduced. The hours that make up the volume of learning for MEM30305 Certificate III in Engineering are:

Category	Hours
Classroom Based Learning	865
Simulated/Practical Assessments	865
Workplace Learning	0
Total	1730*

*The total volume of learning for a Certificate III level qualification must be at least 1200 hours

Assessment Methods

Assessment is structured throughout the course. If students are unable to achieve competency, additional support is provided through mentoring and access to re-assessment as outlined in our policies and procedures. Assessment requires achievement across all tasks to demonstrate competence and includes:

- Written Assessment
- Portfolio of Evidence including Third party Report
- Simulated/Practical Assessment (demonstration of skills)
- Workplace observation and demonstration

Recognition of Prior Learning (RPL)

Students with prior learning and work experience can apply for RPL. Students who have completed corresponding units of competency and/or units contained within the packaging rules can apply for Credit Transfer. RPL evidence must include some of the following:

- Work Experience
- Life Experience
- Previous Study e.g. qualifications, industry training
- Professional Development Programs and/or Courses

Resources

Students will be provided with the following resource handouts required to complete the MEM30305 Certificate III in Engineering – Fabrication Trade upon enrolment:

- Marking-Off Techniques for Metal Fabrication by CEC Cox and Graham Myer
- Welding and Metal Fabrication by Larry Jeffus

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Relevant Industry Standards

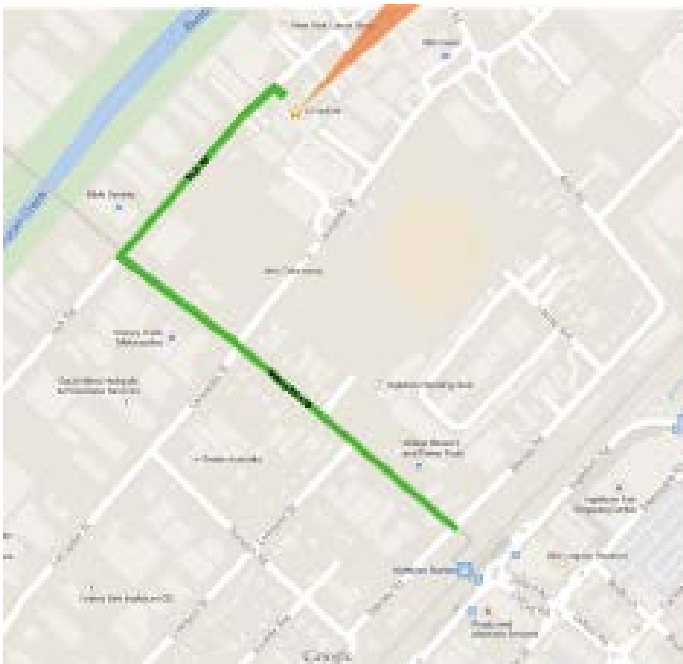
Superior Training Centre's delivery and assessment of the MEM30305 Certificate III in Engineering complies with the following Australian standards:

- AS1100 Claus 101, 201, 301, 401 and 501
- AS1250
- AS1554-2004

Total Course Fees

\$500 Deposit (non-refundable)
\$14,000 Course Fees (Paid by Payment Plan)
\$8,500 RPL Course Fee (Paid by Payment Plan)
\$2,000 - \$3,900 (government Subsidised (STS))
\$500.00 Resource Fee for all books and resources

Campus Details and Facilities



Superior Training Centre is located at 1/13 York Road, Ingleburn NSW 2565.

The campus at Ingleburn provides quality teaching and learning facilities for students. The training facilities have been set up to run classroom based training sessions, to support the learning and assessment programs we offer.

The campus includes well appointed facilities that offer a comfortable learning environment.

Library Services

Ingleburn Library is available to students to assist them with their study. The library is located at 76 Oxford Rd, Ingleburn NSW 2565 and is just a 15 minute walk from the campus. 02 46454060

How to Apply

Please contact Superior Training Centre by:

☎ 02 9618 6809

✉ info@stc.nsw.edu.au

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Important Information – Student Handbook, Policies and Procedures, Fees and Charges

Information about our training and assessment policies and procedures are included on our website www.stc.nsw.edu.au and should be read by you, prior to enrolment in addition to the Student Handbook which is also located on our website. These documents contain important information about your training course, fees and charges including our refund policy.

Identification of Student Needs and Student Support

Student needs are declared by the applicant at the time of enrolment: the application form allows the applicant to self declare where they have learning disabilities.

Every student is interviewed either face to face or over the telephone to attempt to establish the applicant skill and knowledge levels, their current employment and how that relates to the course content and interaction.

Where language literacy and numeracy are in question, Superior Training Centre has a language literacy and numeracy assessment they may undertake to confirm their level of language, literacy and numeracy skills.

Reasonable adjustments to training and assessment will be made and additional support (e.g. LLN, assistive technology, additional training, alternative delivery and assessment modes and methods) provided where students with physical attributes or specific learning needs are identified as requiring these changes to complete their training and assessment.