



MEM20105 Certificate II in Engineering (Heavy Fabrication Pre-Apprenticeship)

National ID: MEM20105 | State ID: AA50

About this course

Are you looking to apply new technologies to a traditional trade?

You will gain the skills and knowledge to be able to operate heavy fabrication equipment such as guillotines, metal rolls and brake presses. You will also be exposed to **different welding and thermal cutting processes**. You will receive instruction in the safely use of hand and power tools, be able to read measuring tools, read and interpret engineering drawings, and operate in an engineering workplace observing health and safety guidelines.

Graduates can continue their studies in a metal fabrication apprenticeship. Metal fabricators and welders work in a diverse trade, applying a broad range of fabrication and welding skills to industries including, rail transport infrastructure and maintenance, mechanical and civil engineering, mining resources sector, heavy haulage and road transport, agriculture machinery, construction, defence, refineries and materials bulk handling.

Pre-apprentices are exposed to the latest technological developments in the fabrication and welding trade, including computer controlled metal plate cutting equipment.

Gain these skills

- Cut, shape, join and finish metal to make, maintain or repair metal products and structures
- Measure, calculate, and use tools
- Draw and interpret sketches
- Mechanical and thermal cutting, gouging and arc welding
- Work health and safety requirements

Is this course right for me?

I have the following attributes:

- Physical strength and fitness

- An eye for detail
- Technical and mechanical aptitude
- Patience and accuracy
- Problem-solving skills

Details

In order to comply with COVID-19 Government directed social distancing guidelines, some courses may include a mix of online learning, virtual classrooms (live web conferencing with your lecturer and class) and classroom delivery, as well as practical and work experience placements.

Lecturers will provide specific instructions to their student groups on how training will be undertaken.

Semester 1, 2020

Clarkson - On Campus



Duration: **6 Months**



When: **Semester 1, 2020**



How: **On campus**

Units

Core

National ID	Unit Title
AW866	Module 1 (placement arranged)
AW867	Module 2 (commenced)
AW868	Module 3 (mid-point)
AW869	Module 4 (completed)
MEM13014A	Apply principles of occupational health and safety in the work environment
MEM14004A	Plan to undertake a routine task
MEM15002A	Apply quality systems
MEM15024A	Apply quality procedures
MEM16007A	Work with others in a manufacturing, engineering or related environment

National ID	Unit Title
AW866	Module 1 (placement arranged)
AW867	Module 2 (commenced)
AW868	Module 3 (mid-point)
AW869	Module 4 (completed)

Elective

National ID	Unit Title
MEM05005B	Carry out mechanical cutting
MEM05007C	Perform manual heating and thermal cutting
MEM05013C	Perform manual production welding
MEM05050B	Perform routine gas metal arc welding
MEM07032B	Use workshop machines for basic operations
MEM11011B	Undertake manual handling
MEM12001B	Use comparison and basic measuring devices
MEM12023A	Perform engineering measurements
MEM14005A	Plan a complete activity
MEM16006A	Organise and communicate information
MEM16008A	Interact with computing technology
MEM18001C	Use hand tools
MEM18002B	Use power tools/hand held operations

Entrance requirements

School Leaver	Non-School Leaver	AQF
OLNA or NAPLAN 9 Band 8	C Grades in Year 10 English and Maths or equivalent	Certificate I or Certificate II

Further study

The units covered will also transfer into Mechanical Fitting or Fitter and Machinist trades. You will need to be employed and registered as an apprentice or trainee before you can commence apprenticeship/traineeship training.

Job opportunities



[Apprentice Metal Fabricator | Boilermaker](#)

The successful completion of this qualification provides you with the skills and knowledge to apply for employment as an apprentice Heavy Fabricator (boilermaker) or Light Fabricator (sheet metal) in the metals and engineering sector. You may also seek employment as a trade's assistant in this sector. Many employers and Group Employer Schemes contact North Metropolitan TAFE throughout the year with a view to offering apprenticeships to students. Graduates of the Certificate II in Engineering have a greater chance of obtaining an apprenticeship than those without this qualification, because they have the knowledge, skills and competency that employers require.

Fees and charges

Local full time students

Course fees are made up of two components, tuition fees and resource fees.

Tuition fees are determined by multiplying the course fee rate by the nominal hours, which is the number of hours in which an average student could be expected to complete each unit. They are not the hours of training or instruction.

Resource fees are charges for material that are essential to a course or unit, and are purchased by NMT to be used by students during the course.

Fees may vary depending on the units you are enrolled in so an approximate amount has been shown. You will be given the exact amount of your fees at enrolment. Part time student fees will vary depending on the number of units you are enrolled in.

Please note, you may also need to buy textbooks or equipment for your course.

International Students

Check [TAFE International WA](#) to confirm this course is available to international students. You will pay your tuition fees to TIWA.

Please note, fees are subject to change.