ENGINEERING

DOMESTIC STUDENTS

MEM40119 | Certificate IV in Engineering

This qualification defines the skills and knowledge required for a higher engineering tradesperson within metal, engineering, manufacturing and associated industries.

The skills associated with this qualification are intended to apply to a wide range of engineering work undertaken in the fields of refrigeration and air conditioning, casting and moulding, computer numerically controlled (CNC) programming, fluid power, heavy fabrication, instrumentation, maintenance, plant mechanics, marine electronics, mechatronics, patternmaking, robotics, toolmaking, welding and watch and clock services and repair, including post-trade work.

It provides the skills and knowledge for a person to understand and implement quality control techniques, exercise good interpersonal and communications skills, work from complex instructions and procedures, exercise discretion within the scope of responsibility, perform work under limited supervision either individually or in a team environment, be responsible for assuring the quality of their own work, provide trade guidance and assistance as part of a work team, perform non-trade tasks which are incidental or peripheral to the primary tasks and facilitate the completion of the whole task, inspect products and/or materials for conformity with established operational standards, operate lifting equipment incidental to their work and assists in the provision of training in conjunction with supervisors and trainers.

No licensing, legislative or certification requirements apply to this qualification at the time of publication. However, in some jurisdictions units in this qualification may require a license. Licensing information is included in the relevant units of competence.

Location Subject to change at the time of enrolment	• 201 Arden St, North Melbourne, VIC 3051
Duration	80 weeks including holidays
Tution Weeks	68 weeks
Delivery and Assessment mode	Face-to-face, combination of theory, practical and/or project assessments
Prerequisite / Entry requirements	• Completion of year 11 or equivalent. (Subject to the assessment and approval of Baxter Admission team.) • Applicants must be 18 years of age and above • Successful completion of Pre-training review (PTR) • English Language, Literacy, and Numeracy (LLN) skills appropriate to the course requirements. Visit www.baxter.vic.edu.au/lln-english-requirements/ for details
Third party arrangement	NIL
Possible pathways for further study	MEM50212 Diploma of Engineering–Technical MEM50105 Diploma of Engineering Advanced Trade or other relevant qualifications (Qualifications not offered at Baxter)
Possible occupational outcomes	Higher Engineering Tradesperson or a Special Class Enigerring Tradesperson-level II

Fees & Charges*	Skills First Funding	Full Fee for service
Tuition fee	$0	$15,400
Gov Contribution	$16,320	$0
Administration fee	$0	$200
Materials fee	$750	$750

*Tuition fees and other course related fees are not subject to change once a student has enrolled.

This training is delivered with Victorian and Commonwealth Government funding. Individuals with disabilities are encouraged to apply to access government subsidised training. Individuals must meet the eligibility criteria to access government funding.

Government funded concessions applies to Skills First Funding Tuition Fee only.

All equipment & resources are at student's expense

Units of Competency

CORE:

MEM13015	Work safely and effectively in manufacturing and engineering
MSMENV272	Participate in environmentally sustainable work practices
MEM16006	Organise and communicate information#
MEM12023	Perform engineering measurements#
MEM12024	Perform computations#
MEM11011	Undertake manual handling#
MEM14006	Plan work activities#
MEM16008	Interact with computing technology#
MEM17003	Assist in the provision of on-the-job training#
MEM18001	Use hand tools#
MEM18002	Use power tools/hand held operations#
MEM09002	Interpret technical drawing#

ELECTIVE:

MEM05052	Apply safe welding practices #
MEM24001B	Perform basic penetrant testing#
MEM07032	Use workshop machines for basic operations#
MEM05005	Carry out mechanical cutting#
MEM05051	Select welding processes #
MEM05004	Perform routine oxy acetylene welding#
MEM05006	Perform brazing and/or silver soldering#
MEM05007	Perform manual heating and thermal cutting#
MEM05008	Perform advanced manual thermal cutting, gouging and shaping#
MEM05014	Monitor quality of production welding/fabrications#
MEM05012	Perform routine manual metal arc welding#
MEM05015	Weld using manual metal arc welding process#
MEM05016	Perform advanced welding using manual metal arc welding process#
MEM05050	Perform routine gas metal arc welding#
MEM05017	Weld using gas metal arc welding process#
MEM05018	Perform advanced welding using gas metal arc welding process #
MEM05056	Perform routine flux core arc welding#
MEM05047	Weld using flux core arc welding process#
MEM05048	Perform advanced welding using flux core arc welding process#
MEM12007	Mark off/out structural fabrications and shapes#
MEM11016	Order materials#
MEM05049	Perform routine gas tungsten arc welding#
MEM05019	Weld using gas tungsten arc welding process#
MEM05037	Perform geometric development#
MEM05020	Perform advanced welding using gas tungsten arc welding process#
MEM16012	Interpret technical specifications and manuals#
MEM09009	Create 2D drawings using computer aided design system#
MEM09010	Create 3D models using computer aided design system#
MEM05026^	Apply welding principles#
MEM05043^	Perform welds to code standards using gas metal arc welding process#

^ These two units are co-assessed

\# Units that have prerequisite. All the prerequisite units have been included in the unit list above.

Quality Indicator Surveys

During studies, students may receive surveys. This helps Baxter towards continuously improving our training services and reporting our quality to the regulators. For students who enrol under the Skills First Program, please be advised that you may receive an invitation to participate in an NCVER survey, the Department's Annual Student Outcome Survey, Department endorsed project and or being contacted by the Department (or persons authorised by the Department) for audit or review purposes.