RTO CODE: 0022

MEM40119 - Certificate IV in Engineering

ATEC
Adelaide Training & Employment Centre

Overview
This qualification covers the skills and knowledge required for employment as a Higher Engineering Tradesperson or a Special Class Engineering Tradesperson Mechanical, Fabrication or Electrical/Electronic within the metal, engineering, manufacturing and associated industries or at equivalent levels in other industries where Engineering Tradespersons work. ***Note:*** *The qualification has been specifically developed to be delivered to people who are existing engineering tradespersons or delivered to apprentices in an Engineering Trade who choose to study at a higher level during their apprenticeship.*

Duration
This program is offered as a 48 Month (4year) training course.
Note: *usually completed in approx. 3.5 years*
You will be assigned an ATEC Case Manager who will work with you to develop a Training Plan that suits your needs.

Assessment
There are theory and practical training and assessment components to the course. Skills will be trained and assessed through a blend of off-the-job (trade school), self-paced study and on-the-job training. ***Note:*** *Some components may also be achieved through formal skills recognition assessment processes (RPL).*

Entry Requirements
Participants **MUST:**
- Be a qualified Engineering Tradesperson; or
- Be signed into an approved Training Contract with an employer through an Australian Apprenticeship Support Network
- Be an Australian/New Zealand Citizen or hold an eligible VISA.
- Have the ability to read, write and understand basic English and carry out basic mathematical calculations.
- Have the physical ability to perform practical fabrication skills.

Course Fees
Please contact ATEC on 1300 112 832 for further information on course fees.

Subsidised Training
Subsidised Fee
$5032.00 AUD (GST exempt)
This course may be subsidised by the Government of South Australia for eligible students. Please contact ATEC so we can assess your eligibility
https://www.skills.sa.gov.au/subsidised-eligibility

Learner Requirements
- Provide your Unique Student Identifier (USI). To apply for a USI go to https://www.usi.gov.au/your-usi/create-usi
- Provision of Australian legal photo identification for enrolment purposes
- Applicants will be required to attend an enrolment session and undertake a Literacy and Numeracy Assessment at a level required to successfully complete the qualification.
  Potential clients who are identified as not meeting course requirements will be assisted with referral to appropriate support services.

PPE (Personal Protective Equipment)
To be supplied by participant:
- Safety Boots (steel cap)
- Safety glasses
- Appropriate workshop attire (non-flammable). ***i.e. work trousers and a Long-sleeved work shirt (for WHS reasons please do not wear excessively loose clothing)***
- Drawing equipment
- Welding gloves and a welding helmet

Outcome
On successful completion of all requirements of this course, learners will be issued with:

1) A Record of Results; and a

2) Certificate for the MEM40119 - Certificate IV in Engineering.

Note: *Students who do not complete all the requirements of this course will receive a Statement of Attainment for the units of competency that have been successfully achieved.*

Delivery Locations
- Ottoway

Pre-enrolment information
Important information for prospective students in regard to ATEC Policies is available at http://www.atec.asn.au/pre-enrolment-information.html

How to apply
Applications and enquiries can be made:
- Online – www.atec.asn.au
- Email – bookings@atec.asn.au
- **Call ATEC on 1300 112 832**

Ottoway
275 Grand Junction Rd
Ottoway SA 5013

Lonsdale
5 Refinery Road
Lonsdale SA 5160

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Sample training plan - **Packaging rules**

12 core units and a number of electives to make a minimum of 109 points in total.

Core units	Unit Title	Nominal Hours	Points
MSMENV272	Participate in environmentally sustainable work practices	30	3
MEM12023	Perform engineering measurements	30	5
MEM12024	Perform computations	30	3
MEM13015	Work safely and effectively in manufacturing and engineering	40	2
MEM14006	Plan work activities	40	4
MEM18001	Use hand tools	20	2
MEM18002	Use power tools/hand held operations	20	2
MEM16006	Organise and communicate information	20	2
MEM16008	Interact with computing technology	20	2
MEM17003	Assist in the provision of on-the-job training	20	2
MEM11011	Undertake manual handling	20	2
MEM09002	Interpret technical drawing	40	4
Elective units	**Unit Title**	**Nominal Hours**	**Points**
MEM12003	Perform precision mechanical measurement	20	2
MEM18011	Shut down and isolate machines/equipment	20	2
MEM16012	Interpret technical specifications and manuals	40	4
MEM18019	Maintain pneumatic systems	40	4
MEM18021	Maintain hydraulic systems	40	4
MEM05005	Carry out mechanical cutting	20	2
MEM07005	Perform general machining	80	8
MEM07006	Perform lathe operations	40	4
MEM07007	Perform milling operations	40	4
MEM12006	Mark off/out (general engineering)	40	4
MEM18003	Use tools for precision work	40	4
MEM18004	Maintain and overhaul mechanical equipment	40	4
MEM18005	Perform fault diagnosis, installation and removal of bearings	40	4
MEM18006	Perform precision fitting of engineering components	60	6
MEM18007	Maintain and repair mechanical drives and mechanical transmission assemblies	40	4
MEM18009	Perform precision levelling and alignment of machines and engineering components	40	4
MEM18018	Maintain pneumatic system components	40	4
MEM18020	Maintain hydraulic system components	40	4
MEM18055	Dismantle, replace and assemble engineering components	30	3
MEM05012	Perform routine manual metal arc welding	20	2
MEM05050	Perform routine gas metal arc welding	20	2
MEM05085	Select welding processes	20	2
MEM05052	Apply safe welding practices	40	4
MEM05091	Weld using gas metal arc welding process	40	4
MEM07021	Perform complex lathe operations	40	4
MEM09003	Prepare basic engineering drawing	80	8
	Total Hours/Points	**1340**	**134**

SOUTH AUSTRALIA

Supported by Government of South Australia

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