RTO CODE: 0022

MEM40105 – 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 (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
www.skills.sa.gov.au

JobTrainer Subsidised Fee
$1632.00 (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/jobtrainer

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 MEM40105 Certificate IV 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 regards to ATEC Policies is available at Certificate IV in Engineering | ATEC

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

Port Adelaide
12 Todd Street
Port Adelaide SA 5015

www.atec.asn.au
T 1300 112 832
E bookings@atec.asn.au

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
MEM13014A	Apply principles of occupational health and safety in the work environment	10	0
MEM12023A	Perform engineering measurements	30	0
MEM12024A	Perform computations	30	0
MEM14004A	Plan to undertake a routine task	10	0
MEM14005A	Plan a complete activity	20	0
MEM15002A	Apply quality systems	20	0
MEM15024A	Apply quality procedures	10	0
MEM16006A	Organise and communicate information	20	0
MEM16007A	Work with others in a manufacturing, engineering or related environment	10	0
MEM16008A	Interact with computing technology	20	0
MEM17003A	Assist in the provision of on the job training	20	0
MSAENV272B	Participate in environmentally sustainable work practices	30	0
Group A - Specialisation Units			
MEM05005B	Carry out mechanical cutting	20	2
MEM05026C	Apply welding principles	40	4
MEM05043B	Perform welds to code standards using gas metal arc welding process	60	6
MEM18011C	Shut down and isolate machines/equipment	20	2
Group B - Elective Units			
MEM03003B	Perform sheet and plate assembly	40	4
MEM05006C	Perform brazing and/or silver soldering	20	2
MEM05007C	Perform manual heating and thermal cutting	20	2
MEM05010C	Apply fabrication, forming and shaping techniques	80	8
MEM05011D	Assemble fabricated components	80	8
MEM05012C	Perform routine manual metal arc welding	20	2
MEM05015D	Weld using manual metal arc welding process	40	4
MEM05017D	Weld using gas metal arc welding process	40	4
MEM05018C	Perform advanced welding using gas metal arc welding process	40	4
MEM05019D	Weld using gas tungsten arc welding process	40	4
MEM05020C	Perform advanced welding using gas tungsten arc welding process	40	4
MEM05037C	Perform geometric development	60	6
MEM05049B	Perform routine gas tungsten arc welding	20	2
MEM05050B	Perform routine gas metal arc welding	20	2
MEM05051A	Select welding processes	20	2
MEM05052A	Apply safe welding practices	40	4
MEM07005C	Perform general machining	80	8
MEM09002B	Interpret technical drawing	40	4
MEM12007D	Mark off/out structural fabrications and shapes	40	4
MEM18001C	Use hand tools	20	2
MEM18002B	Use power tools/hand held operations	20	2
MEM18003C	Use tools for precision work	40	4
MEM18006C	Repair and fit engineering components	60	6
MEM18020B	Maintain hydraulic system components	40	4
MEM18055B	Dismantle, replace and assemble engineering components	30	3
	Total Hours/Points	**1360**	**113**

Please note: All enrolments in this qualification will be required to transition to the updated qualification MEM40119 - Certificate IV in Engineering prior to 31 December 2022

SOUTH AUSTRALIA

Supported by Government of South Australia

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