



# BLUEDOGTRAINING

MEM40119 Certificate IV in Engineering

## Co-Contribution Fee Sheet (Apprenticeship Program)

### 1 FULL FEE (Co-Contribution)

Fees are charged at \$1.60 per nominal hour for each unit of competency/module.

- Co-contribution fees are set by the Department.
- Co-contribution fees must be calculated at the commencement of each unit or module.
- The Co-contribution fee applies consistently across all Skills Assure Suppliers delivering apprenticeships and traineeships.

### 2 PARTIAL FEE EXEMPTION (Co-Contribution)

40 per cent of the fees are charged where the participant falls into one or more of the following exemption categories:

- The participant was or will be under 17 years of age at the end of February in the year in which the SAS provides training and is not at school and has not completed year 12.
- The participant holds a Health Care, Veteran or Pensioner Concession Card issued under Commonwealth law, or is the partner or a dependant of a person who holds such a card and is named on the card.
- Holds an official form issued under Commonwealth law confirming that the individual, their partner or the person of whom they are a dependant, is entitled to concessions under a Health Care, Veteran or Pensioner Concession Card.
- The participant identifies as Aboriginal or Torres Strait Islander.

### 3 FULL FEE EXEMPTION (Co-Contribution)

No fees are charged where the participant falls into one or more of the following categories:

- A credit transfer applies to a unit of competency/module.
- Transitional gap training applies when transitioning an apprentice/trainee from a superseded qualification or unit of competency where a previously completed unit of competency is identified as similar but not equivalent.
- The participant is a school-based apprentice or trainee.
- The participant is under 25 years of age at the commencement of their apprenticeship/traineeship.



## 4 PACKAGING RULES

To be awarded the **MEM40119 Certificate IV in Engineering**, units of competency to a value of 132 points must be achieved, chosen as outlined below:

- All Core units of competency totalling 33 points.
- Elective units of competency to a minimum value of 12 points from Group A.
- Elective units of competency to a maximum value of 87 points from Group B to bring the total value to 132 points.

**Imported Elective Unit:** Appropriate elective units to the value of 14 points may be chosen from this Training Package, other endorsed Training Packages and accredited courses and count towards Group B elective units where those units are available for inclusion at Certificate III and Certificate IV qualifications.

## 5 UNIT DETAILS

Unit Type	Unit Code	Unit Name	Points	Hours	Fees
Core	MEM09002	Interpret technical drawing [18] [19] [20] [22]	4	40	\$64.00
Core	MEM11011	Undertake manual handling [20] [22]	2	20	\$32.00
Core	MEM12023	Perform engineering measurements [20] [22]	5	30	\$48.00
Core	MEM12024	Perform computations [20] [22]	3	30	\$48.00
Core	MEM13015	Work safely and effectively in manufacturing and engineering	2	40	\$64.00
Core	MEM14006	Plan work activities [20] [22]	4	40	\$64.00
Core	MEM16006	Organise and communicate information [20]	2	20	\$32.00
Core	MEM16008	Interact with computing technology [20] [22]	2	20	\$32.00
Core	MEM17003	Assist in the provision of on-the-job training [20] [22]	2	20	\$32.00
Core	MEM18001	Use hand tools [16] [20] [22]	2	20	\$32.00
Core	MEM18002	Use power tools/hand held operations [16] [20] [22]	2	20	\$32.00
Core	MSMENV272	Participate in environmentally sustainable work practices	3	30	\$48.00
Unit Type	Unit Code	Unit Name	Points	Hours	Fees
Elective Group A	MEM12003	Perform precision mechanical measurement [16] [18] [20] [22]	2	20	\$32.00
Elective Group A	MEM14001	Schedule material deliveries [20] [22]	8	80	\$128.00
Elective Group A	MEM14002	Undertake basic process planning [20] [22]	8	20	\$32.00
Elective Group A	MEM14003	Undertake production scheduling [20] [22]	8	80	\$128.00
Elective Group A	MEM16001	Give formal presentations and take part in meetings [20] [22]	2	20	\$32.00
Elective Group A	MEM16011	Communicate with individuals and small groups [20] [22]	2	20	\$32.00
Elective Group A	MEM17001	Assist in development and deliver training in the workplace [20] [22]	2	20	\$32.00
Elective Group A	MEM17002	Conduct workplace assessment [16] [20] [22]	2	20	\$32.00
Elective Group A	MEM18011	Shut down and isolate machines/equipment [16] [20] [22]	2	20	\$32.00
Elective Group A	MEM18021	Maintain hydraulic systems [15] [16] [18] [19] [20] [21] [22] [23] [24] [25] [27] [31] [32]	4	40	\$64.00
Unit Type	Unit Code	Unit Name	Points	Hours	Fees
Elective Group B	MEM03003	Perform sheet and plate assembly [16] [20] [22] [23] [24]	4	40	\$64.00
Elective Group B	MEM05004	Perform routine oxy fuel gas welding [16] [20] [22]	2	19	\$30.40
Elective Group B	MEM05005	Carry out mechanical cutting [16] [18] [20] [22] [23]	2	20	\$32.00
Elective Group B	MEM05006	Perform brazing and/or silver soldering [16] [20] [22]	2	20	\$32.00
Elective Group B	MEM05007	Perform manual heating and thermal cutting [15] [16] [18] [20] [22]	2	20	\$32.00
Elective Group B	MEM05010	Apply fabrication, forming and shaping techniques [5] [15] [16] [18] [19] [20] [21] [22] [23] [24]	8	80	\$128.00
Elective Group B	MEM05089	Assemble fabricated components [1] [2] [8] [9] [15] [16] [18] [19] [20] [21] [22] [23] [24] [A]	8	80	\$128.00



Elective Group B	MEM05012	Perform routine manual metal arc welding [16] [20] [22]	2	20	\$32.00
Elective Group B	MEM05090	Weld using manual metal arc welding process [4] [8] [9] [15] [16] [18] [19] [20] [21] [22] [23] [24]	4	40	\$64.00
Elective Group B	MEM05091	Weld using gas metal arc welding process [7] [8] [9] [15] [16] [18] [19] [20] [21] [22] [23] [24]	4	40	\$64.00
Elective Group B	MEM05092	Weld using gas tungsten arc welding process [6] [8] [9] [15] [16] [18] [19] [20] [21] [22] [23] [24]	4	40	\$64.00
Elective Group B	MEM05094	Repair, replace and/or modify fabrications [1] [2] [3] [8] [9] [15] [16] [18] [19] [20] [21] [22] [23] [24] [B]	4	40	\$64.00
Elective Group B	MEM05037	Perform geometric development [15] [18] [19] [20] [21] [22]	6	60	\$96.00
Elective Group B	MEM05096	Weld using flux core arc welding process [8] [9] [10] [16] [18] [19] [20] [21] [22] [23] [24]	4	39	\$62.40
Elective Group B	MEM05049	Perform routine gas tungsten arc welding [16] [20] [22]	2	20	\$32.00
Elective Group B	MEM05050	Perform routine gas metal arc welding [16] [20] [22]	2	20	\$32.00
Elective Group B	MEM05085	Select welding processes [20] [22] [C]	2	20	\$32.00
Elective Group B	MEM05052	Apply safe welding practices [20] [22] [C]	4	40	\$64.00
Elective Group B	MEM05056	Perform routine flux core arc welding [16] [20] [22]	2	20	\$32.00
Elective Group B	MEM07003	Perform routine machine setting [14] [16] [18] [20] [22] [23]	4	40	\$64.00
Elective Group B	MEM07005	Perform general machining [15] [16] [18] [19] [20] [21] [22] [23]	8	80	\$128.00
Elective Group B	MEM07006	Perform lathe operations [11] [15] [16] [18] [19] [20] [21] [22] [23]	4	40	\$64.00
Elective Group B	MEM07007	Perform milling operations [11] [15] [16] [18] [19] [20] [21] [22] [23]	4	40	\$64.00
Elective Group B	MEM07008	Perform grinding operations [11] [15] [16] [18] [19] [20] [21] [22] [23]	4	40	\$64.00
Elective Group B	MEM07011	Perform complex milling operations [11] [13] [15] [16] [17] [18] [19] [20] [21] [22] [23]	4	40	\$64.00
Elective Group B	MEM07021	Perform complex lathe operations [11] [12] [15] [16] [17] [18] [19] [20] [21] [22] [23]	4	40	\$64.00
Elective Group B	MEM07024	Operate and monitor machine and process [16] [20] [22]	4	40	\$64.00
Elective Group B	MEM08010	Manually finish/polish materials [16] [20] [22] [23]	6	60	\$96.00
Elective Group B	MEM11016	Order materials [20] [22]	2	20	\$32.00
Elective Group B	MEM12006	Mark off/out (general engineering) [15] [16] [18] [19] [20] [21] [22]	4	40	\$64.00
Elective Group B	MEM12007	Mark off/out structural fabrications and shapes [15] [16] [18] [19] [20] [21] [22]	4	40	\$64.00
Elective Group B	MEM13003	Work safely with industrial chemicals and materials [16] [20] [22]	2	20	\$32.00
Elective General B	MEM16004	Perform internal/external customer service [20] [22]	2	20	\$32.00
Elective General B	MEM16005	Operate as a team member to conduct manufacturing, engineering or related activities [16] [20] [22]	2	20	\$32.00
Elective General B	MEM18003	Use tools for precision work [16] [18] [20] [22] [23] [24]	4	40	\$64.00
Elective Group B	MEM18004	Maintain and overhaul mechanical equipment [15] [16] [18] [19] [20] [21] [22] [23] [24] [25] [26] [27] [28] [29] [30] [32]	4	40	\$64.00
Elective Group B	MEM18005	Perform fault diagnosis, installation and removal of bearings [15] [16] [18] [19] [20] [21] [22] [23] [24] [25] [27] [32]	4	40	\$64.00
Elective Group B	MEM18006	Perform precision fitting of engineering components [15] [16] [18] [19] [20] [21] [22] [23] [24] [25] [32]	6	60	\$96.00
Elective Group B	MEM18007	Maintain and repair mechanical drives and mechanical transmission assemblies [15] [16] [18] [19] [20] [21] [22] [23] [24] [25] [27] [32]	4	40	\$64.00
Elective Group B	MEM18009	Perform precision levelling and alignment of machines and engineering components [15] [16] [18] [19] [20] [21] [22] [23] [24] [25] [27] [32]	4	40	\$64.00



Elective Group B	MEM18012	Perform installation and removal of mechanical seals [15] [16] [18] [19] [20] [21] [22] [23] [24] [25] [27] [32]	2	20	\$32.00
Elective Group B	MEM18013	Perform gland packing [16] [18] [20] [22] [23]	2	20	\$32.00
Elective Group B	MEM18020	Maintain hydraulic system components [15] [16] [18] [19] [20] [21] [22] [23] [24] [25] [27] [32]	4	40	\$64.00
Elective Group B	MEM18055	Dismantle, replace and assemble engineering components [15] [16] [18] [20] [22] [23] [24]	3	30	\$48.00
Elective Group B	MEM27001	Maintain and repair stationary and mobile plant engine cooling systems [15] [16] [18] [20] [22] [23] [24] [32]	2	20	\$32.00
Elective Group B	MEM27002	Test and repair compression ignition systems [16] [18] [20] [22] [23]	4	40	\$64.00
Elective Group B	MEM27005	Tune diesel engines [15] [16] [18] [20] [22] [23] [24] [32] [33]	4	40	\$64.00
Elective Group B	MEM27006	Diagnose and rectify batteries, low voltage sensors and circuits [15] [16] [18] [20] [22] [23] [24] [32]	8	40	\$64.00
Elective Group B	MEM27008	Maintain induction, exhaust and emission control systems [15] [16] [18] [20] [22] [23] [24] [32]	4	40	\$64.00
Elective Group B	MEM27009	Diagnose and rectify braking systems [15] [16] [18] [20] [22] [23] [24] [32]	6	40	\$64.00
Elective Group B	MEM27014	Diagnose and rectify automatic transmissions [15] [16] [18] [20] [22] [23] [24] [32]	8	80	\$128.00
Elective Group B	MEM27015	Diagnose and rectify drive line and final drives [15] [16] [18] [20] [22] [23] [24] [32]	4	40	\$64.00
Elective Group B	MEM27016	Diagnose and maintain electronic controlling systems on mobile and stationary plant [15] [16] [18] [20] [22] [23] [24] [32] [34] [35]	4	30	\$48.00
Elective Group B	MEM27017	Maintain, fault find and rectify hydraulic systems for mobile plant [15] [16] [18] [20] [22] [23] [24] [32]	4	60	\$96.00
Elective Group B	MEM27019	Diagnose, repair and replace diesel engines in stationary and mobile plant [15] [16] [18] [20] [22] [23] [24] [32]	5	50	\$80.00
Elective Group B	MEM27020	Apply knowledge of large combustion engine operations to service and maintenance tasks [15] [20] [22]	2	20	\$32.00
Elective Group B	MEM27023	Diagnose and rectify fieldbus circuits in mobile and stationary plant and equipment [15] [16] [18] [20] [22] [23] [24] [32] [34]	4	40	\$64.00
Elective Group B	MEM27030	Perform engine bottom-end overhaul [15] [16] [17] [18] [19] [20] [21] [22] [23] [24] [32]	4	40	\$64.00
Unit Type	Unit Code	Unit Name	Points	Hours	Fees
Imported Elective	MEM30012	Apply mathematical techniques in a manufacturing engineering or related environment	4	40	\$64.00

## 6 PREREQUISITES

- [1] Where this symbol is next to a unit name then "MEM05005 Carry out mechanical cutting" is a pre-requisite
- [2] Where this symbol is next to a unit name then "MEM05007 Perform manual heating and thermal cutting" is a pre-requisite
- [3] Where this symbol is next to a unit name then "MEM05089 Assemble fabricated components" is a pre-requisite
- [4] Where this symbol is next to a unit name then "MEM05012 Perform routine manual metal arc welding" is a pre-requisite
- [5] Where this symbol is next to a unit name then "MEM05037 Perform geometric development" is a pre-requisite
- [6] Where this symbol is next to a unit name then "MEM05049 Perform routine gas tungsten arc welding" is a pre-requisite
- [7] Where this symbol is next to a unit name then "MEM05050 Perform routine gas metal arc welding" is a pre-requisite
- [8] Where this symbol is next to a unit name then "MEM05085 Select welding processes" is a pre-requisite
- [9] Where this symbol is next to a unit name then "MEM05052 Apply safe welding practices" is a pre-requisite
- [10] Where this symbol is next to a unit name then "MEM05056 Perform routine flux core arc welding" is a pre-requisite
- [11] Where this symbol is next to a unit name then "MEM07005 Perform general machining" is a pre-requisite
- [12] Where this symbol is next to a unit name then "MEM07006 Perform lathe operations" is a pre-requisite
- [13] Where this symbol is next to a unit name then "MEM07007 Perform milling operations" is a pre-requisite
- [14] Where this symbol is next to a unit name then "MEM07024 Operate and monitor machine and process" is a pre-requisite
- [15] Where this symbol is next to a unit name then "MEM09002 Interpret technical drawing" is a pre-requisite



- [16] Where this symbol is next to a unit name then "MEM11011 Undertake manual handling" is a pre-requisite
- [17] Where this symbol is next to a unit name then "MEM12003 Perform precision mechanical measurement" is a pre-requisite
- [18] Where this symbol is next to a unit name then "MEM12023 Perform engineering measurements" is a pre-requisite
- [19] Where this symbol is next to a unit name then "MEM12024 Perform computations" is a pre-requisite
- [20] Where this symbol is next to a unit name then "MEM13015 Work safely and effectively in manufacturing and engineering" is a pre-requisite
- [21] Where this symbol is next to a unit name then "MEM14006 Plan work activities" is a pre-requisite
- [22] Where this symbol is next to a unit name then "MEM16006 Organise and communicate information" is a pre-requisite
- [23] Where this symbol is next to a unit name then "MEM18001 Use hand tools" is a pre-requisite
- [24] Where this symbol is next to a unit name then "MEM18002 Use power tools/handheld operations" is a pre-requisite
- [25] Where this symbol is next to a unit name then "MEM18003 Use tools for precision work" is a pre-requisite
- [26] Where this symbol is next to a unit name then "MEM18005 Perform fault diagnosis, installation and removal of bearings" is a pre-requisite
- [27] Where this symbol is next to a unit name then "MEM18006 Perform precision fitting of engineering components" is a pre-requisite
- [28] Where this symbol is next to a unit name then "MEM18007 Maintain and repair mechanical drives and mechanical transmission assemblies" is a pre-requisite
- [29] Where this symbol is next to a unit name then "MEM18009 Perform precision levelling and alignment of machines and engineering components" is a pre-requisite
- [30] Where this symbol is next to a unit name then "MEM18011 Shut down and isolate machines/equipment" is a pre-requisite
- [31] Where this symbol is next to a unit name then "MEM18020 Maintain hydraulic components" is a pre-requisite
- [32] Where this symbol is next to a unit name then "MEM18055 Dismantle, replace and assemble engineering components" is a pre-requisite
- [33] Where this symbol is next to a unit name then "MEM27002 Test and repair compression ignition systems" is a pre-requisite
- [34] Where this symbol is next to a unit name then "MEM27006 Diagnose and rectify batteries, low voltage sensors and circuits" is a pre-requisite
- [35] Where this symbol is next to a unit name then "MEM27023 Diagnose and rectify fieldbus circuits in mobile and stationary plant and equipment" is a pre-requisite

## 7 ADDITIONAL PREREQUISITE REQUIREMENT

- [A] Where this symbol is next to a unit name then at least one of the following, including their prerequisites, are pre-requisites:  
"MEM05090 Weld using manual metal arc welding process"  
"MEM05091 Weld using gas metal arc welding process"  
"MEM05092 Weld using gas tungsten arc welding process"  
"MEM05097 Weld using oxy fuel gas welding process"

- [B] Where this symbol is next to a unit name then at least one of the following, including their prerequisites, are pre-requisites:  
"MEM05090 Weld using manual metal arc welding process"  
"MEM05091 Weld using gas metal arc welding process"  
"MEM05092 Weld using gas tungsten arc welding process"  
"MEM05096 Weld using flux core arc welding process"  
"MEM05097 Weld using oxy fuel gas welding process"

## 8 ADDITIONAL COREQUISITE REQUIREMENT

- [C] Where this symbol is next to a unit name then this unit can only be selected in conjunction with one or more of the following units:  
"MEM05090 Weld using manual metal arc welding process"  
"MEM05091 Weld using gas metal arc welding process"  
"MEM05092 Weld using gas tungsten arc welding process"  
"MEM05023 Weld using submerged arc welding process"  
"MEM05096 Weld using flux core arc welding process"  
"MEM05097 Weld using oxy fuel gas welding process"