



Australian Government

MEM31119 Certificate III in Engineering - Composites Trade

Release 3

MEM31119 Certificate III in Engineering - Composites Trade

Modification History

Release 3. Elective units updated. Supersedes and is equivalent to MEM31119 Certificate III in Engineering - Composites Trade (Release 2).

Release 2. Mandatory training contract pathway added.

Release 1. Supersedes and is equivalent to MEM31112 Certificate III in Engineering - Composites Trade.

Qualification Description

This qualification defines the skills and knowledge required of a composites tradesperson within the metal, engineering, manufacturing and associated industries, or other industries where composites tradespersons work. The qualification has been specifically developed to meet the needs of apprentices in the above trade.

This qualification must be undertaken through a Training Contract or through formal trade recognition assessment processes.

The skills associated with this qualification are intended to apply to a wide range of composites work, including laying up composites, selecting, handling, using and storing materials and components, undertaking repairs and modifications, adjusting resin chemicals and selecting and using joining techniques.

This qualification is designed to provide an industry recognised skills profile related to working as a composites tradesperson.

Assessment of some units of competency must, where indicated, include evidence of the candidate's performance in a functioning workplace where there is a sufficient range of appropriate tasks and materials to cover the scope of application of those units. All outcomes must reflect the standard of performance inherent in the job.

No licensing, legislative or certification requirements apply to this qualification at the time of publication. However, in some jurisdictions units in this qualification may relate to licensing or regulatory requirements. Local regulations should be checked.

Entry Requirements

There are no entry requirements for this qualification.

Packaging Rules

To be awarded the MEM31119 Certificate III in Engineering – Composites Trade, units of competency to the value of 96 points must be achieved, chosen as outlined below:

- core units of competency listed below (totalling 33 points)
- elective units of competency to a minimum value of 6 points from Group A
- elective units of competency to a minimum value of 34 points from Group B

- elective units of competency to a maximum value of 23 points from Group C to bring the total value to 96 points.

Appropriate Group C elective units to the value of 8 points may be chosen from other MEM qualifications and other endorsed Training Packages where those units are available for inclusion at Certificate III. Only select units that would be suitable for occupational outcomes in a composites trade environment.

Registered Training Organisations (RTOs) must seek a determination from the industry parties in respect of the allocation of points values for units of competency drawn from other Training Packages or accredited courses. Determination of points requests are to be submitted to the industry parties through Innovation and Business Skills Australia (IBSA) Manufacturing. Refer to the MEM Companion Volume Implementation Guide for information on determination of unit points values.

Prerequisites

Points associated with prerequisites count towards the total. Units with prerequisite requirements are marked with an asterisk (refer to the individual units for details). All prerequisites are included in the units listed.

Core units of competency

Unit code	Unit title	P	Pre req
MEM09002	Interpret technical drawing	4	*
MEM11011	Undertake manual handling	2	*
MEM12023	Perform engineering measurements	5	*
MEM12024	Perform computations	3	*
MEM13015	Work safely and effectively in manufacturing and engineering	2	
MEM14006	Plan work activities	4	*
MEM16006	Organise and communicate information	2	*
MEM16008	Interact with computing technology	2	*
MEM17003	Assist in the provision of on-the-job training	2	*
MEM18001	Use hand tools	2	*
MEM18002	Use power tools/hand held operations	2	*
MSMENV272	Participate in environmentally sustainable work practices	3	

Elective units of competency

Group A

Unit code	Unit title	P	Pre req
MEM26001	Lay up composites using open moulding techniques	6	*
MEM26002	Lay up composites using vacuum closed moulding techniques	6	*
MEM26003	Lay up composites using pressure closed moulding techniques	6	*

Group B

Unit code	Unit title	P	Pre req
MEM26004	Make basic plugs for composites fabrication	3	*
MEM26005	Make basic moulds for composites fabrication	3	*
MEM26006	Mark and cut out sheets for composite use	4	*
MEM26007	Select and use reinforcing appropriate for product	4	*
MEM26008	Select and use resin systems appropriate for product	4	*
MEM26009	Select and use cores and fillers appropriate for product	2	*
MEM26010	Store and handle composite materials	2	*
MEM26011	Determine materials and techniques for a composite component or product	6	*
MEM26012	Record and trial work processes for one-off composite products	4	*
MEM26013	Select and use composite processes or systems appropriate for product	4	*
MEM26014	Adjust resin chemicals for current conditions	4	*
MEM26015	Select and apply repair techniques	6	*
MEM26016	Select and use joining techniques	6	*
MEM26017	Prepare composite or other substrate surfaces	4	*

Unit code	Unit title	P	Pre req
MEM26018	Organise composite trials	4	*
MEM26019	Finish a composite product	4	*
MEM26020	Identify and interpret required standards for composites	2	*

Group C

Unit code	Unit title	P	Pre req
MEM11016	Order materials	2	*
MEM13001	Perform emergency first aid	1	*
MEM13003	Work safely with industrial chemicals and materials	2	*
MEM13019	Undertake work health and safety activities in the workplace	3	
MEM15004	Perform inspection	2	*
MEM16004	Perform internal/external customer service	2	*
MEM16005	Operate as a team member to conduct manufacturing, engineering or related activities	2	*
MSMENV472	Implement and monitor environmentally sustainable work practices	4	
TLILIC0003	Licence to operate a forklift truck	0	
TLILIC0024	Licence to operate a vehicle loading crane (capacity 10 metre tonnes and above)	1	

Qualification Mapping Information

Release 3. Supersedes and is equivalent to MEM31119 Certificate III in Engineering - Composites Trade (Release 2).

Release 2. Supersedes and is equivalent to MEM31119 Certificate III in Engineering - Composites Trade (Release 1).

Release 1. Supersedes and is equivalent to MEM31112 Certificate III in Engineering - Composites Trade.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2>