

Australian Government

MEM31822 Certificate III in Engineering -Textile Mechanic

Release 1

MEM31822 Certificate III in Engineering - Textile Mechanic

Modification History

Release 1. Supersedes and is equivalent to LMT31909 Certificate III in Engineering - TCF Mechanic.

Qualification Description

This qualification defines the skills and knowledge required of an Engineering Tradesperson – Textile Mechanic within textile related industries.

The skills associated with this qualification are intended to apply to a wide range of textile mechanic trade work, including setting up, adjusting and maintaining carding, footwear manufacture, knitting, sewing, spinning, tufting, or weaving machinery.

This qualification is designed to provide an industry recognised skills profile related to work as a textile mechanic. Skills development should be undertaken through an Australian Apprenticeship arrangement where the mix of on and off-the-job training would be specified in the Training Plan associated with the Contract of Training between the employer and apprentice.

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.

In some jurisdictions, units in this qualification may relate to licensing or regulatory requirements. Licensing and regulatory information is included in the relevant units of competency.

No licensing, legislative or certification requirements apply to this qualification at the time of publication. Local regulations should be checked.

Entry Requirements

There are no entry requirements for this qualification.

Packaging Rules

To be awarded the MEM31822 Certificate III in Engineering - Textile Mechanic units of competency to a minimum value of 96 points must be achieved, chosen as outlined below:

- all core units of competency listed below (totalling 33 points) and
- units to a minimum value of 12 points from Group A electives as described below and
- units from Group B electives to bring the total value of Groups A and B to a minimum value of 40 points as described below and
- units to a maximum value of 23 points may be taken from Group C electives to bring the total value to at least 96 points.

Group C elective units to the value of eight (8) points, that are relevant to work as a textile mechanic and do not duplicate skills and knowledge already available in units within this qualification, may be chosen from this Training Package, other endorsed Training Packages and accredited courses where those units are available for inclusion at Certificate III.

Registered Training Organisations (RTOs) must seek a determination from the industry parties in respect of the allocations of point 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 point values.

No other descriptor can be used.

Prerequisites

Prerequisite units count towards the total number of units. Units with prerequisite requirements are marked with an asterisk (refer to the individual units for details). All prerequisites are included in the qualification.

Core units of competency

Unit code	Unit title	Р	Prereq
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	*
MSMENV27 2	Participate in environmentally sustainable work practices	3	

Elective units of competency

Group A

Unit code	Unit title	Р	Prereq
MEM18003	Use tools for precision work	4	*
MEM18055	Dismantle, replace and assemble engineering components	3	*
MSTTX3002	Contribute to textile production process improvements	4	
MSTTX3014	Set up, adjust and maintain industrial sewing machines	5	
MSTTX3011	Set up, adjust and monitor a machine for TCF production	5	

Group B

Unit code	Unit title	Р	Prereq
MEM07005	Perform general machining	8	*
MEM07015	Set computer controlled machines and processes	2	*
MEM07024	Operate and monitor machine and process	4	*
MEM07028	Operate computer controlled machines and processes	2	*
MEM10006	Install machine/plant	4	*
MEM12006	Mark off/out (general engineering)	4	*
MEM18005	Perform fault diagnosis, installation and removal of bearings	4	*
MEM18006	Perform precision fitting of engineering components	6	*
MEM18007	Maintain and repair mechanical drives and mechanical transmission assemblies	4	*
MEM18008	Balance equipment	2	*
MEM18009	Perform precision levelling and alignment of machines and engineering components	4	*
MEM18010	Perform equipment condition monitoring and recording	4	*
MEM18011	Shut down and isolate machines/equipment	2	*
MEM18012	Perform installation and removal of mechanical seals	2	*

Unit code	Unit title	Р	Prereq
MEM18018	Maintain pneumatic system components	4	*
MEM18020	Maintain hydraulic system components	4	*
MEM18071	Connect and disconnect fluid conveying system components	2	*
MEM18072	Manufacture fluid conveying conductor assemblies	4	*
MEM27006	Diagnose and rectify batteries, low voltage sensors and circuits	8	*

Group C

Unit code	Unit title	Р	Prereq
MEM05004	Perform routine oxy fuel gas welding	2	*
MEM05005	Carry out mechanical cutting	2	*
MEM05006	Perform brazing and/or silver soldering	2	*
MEM05007	Perform manual heating and thermal cutting	2	*
MEM05012	Perform routine manual metal arc welding	2	*
MEM05049	Perform routine gas tungsten arc welding	2	*
MEM05050	Perform routine gas metal arc welding	2	*
MEM05052	Apply safe welding practices	4	*
MEM05085	Select welding processes	2	*
MEM05095	Weld using flame powder spraying	4	*
MEM05097	Weld using oxy fuel gas welding process	4	*
MEM06003	Carry out heat treatment	6	*
MEM06007	Perform basic incidental heat/quenching, tempering and annealing	2	*
MEM07006	Perform lathe operations	4	*
MEM07007	Perform milling operations	4	*
MEM07008	Perform grinding operations	4	*

Unit code	Unit title	Р	Prereq
MEM07016	Set and edit computer controlled machines and processes	4	*
MEM09003	Prepare basic engineering drawing	8	*
MEM09011	Apply basic engineering design concepts	6	*
MEM10002	Terminate and connect electrical wiring	3	*
MEM10004	Enter and change programmable controller operational parameters	2	*
MEM11010	Operate mobile load shifting equipment	4	*
MEM11016	Order materials	2	*
MEM11022	Operate fixed/moveable load shifting equipment	4	*
MEM12002	Perform electrical/electronic measurement	2	*
MEM12003	Perform precision mechanical measurement	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	
MEM15003	Use improvement processes in team activities	4	*
MEM16005	Operate as a team member to conduct manufacturing, engineering or related activities	2	*

Qualification Mapping Information

Release 1. Supersedes and is equivalent to LMT31909 Certificate III in Engineering - TCF Mechanic.

Links

Companion Volume implementation guides are found in VETNet https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2