



Australian Government

MEM40322 Certificate IV in Advanced Jewellery Manufacture

Release 1

MEM40322 Certificate IV in Advanced Jewellery Manufacture

Modification History

Release 1. Supersedes and is equivalent to MEM40311 Certificate IV in Advanced Jewellery Manufacture.

Qualification Description

This qualification defines advanced jewellery manufacturing skills and knowledge required by a tradesperson within a jewellery industry, applying to a wide range of jewellery manufacture work including undertaking designing and making jewellery and small objects using a wide range of materials including metals, stones, woods, plastics and fibres.

While there is no qualification entry requirement, it is assumed that the learner is either already a tradesperson with access to structured on and off-the-job training or is an apprentice under an Australian Apprenticeship arrangement.

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 MEM40322 Certificate IV in Advanced Jewellery Manufacture units of competency to a minimum value of 132 points must be achieved, chosen as outlined below:

- all core units of competency listed below (totalling 33 points) and
- select units to a minimum value of twelve (12) points from Group A electives and
- select units to a minimum value of twenty-three (23) points be taken from Group B electives and
- select units from Group C to bring the total value for Groups A, B and C to at least ninety-nine (99) points.

Group C elective units to the value of twenty-two (22) points, that are relevant to work in an advanced jewellery manufacture environment or associated industries 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 in Certificate III and Certificate IV qualifications.

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.

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	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	*
MSMENV272	Participate in environmentally sustainable work practices	3	

Elective units of competency

Group A

Unit code	Unit title	P	Prereq
MEM16010	Write reports	2	*
MEM16011	Communicate with individuals and small groups	2	*
MEM16013	Operate in a self-directed team	2	*
MEM17001	Assist in development and deliver training in the workplace	2	*
MEM17002	Conduct workplace assessment	2	*
MEM19018	Repair jewellery items	6	*
MEM19033	Create silversmithing objects	4	*
MEM19044	Repair and restore antique jewellery	4	*
MEM19045	Set gems in channel style settings	4	*
MEM19046	Apply grain setting techniques	4	*
MEM19047	Set gems in claw and bezel style settings	4	*
MEM19048	Develop and apply complex borders and decorations for hand engraving	4	*
MEM19049	Develop and apply heraldic designs for hand engraving	2	*
MEM19050	Hand carve engraving work	4	*
MEM19051	Construct multiple stone settings	4	*
MEM19052	Produce complex objects using silversmithing techniques	4	*
MEM19053	Create complex findings and mechanisms for jewellery items	4	*
MEM19054	Fabricate platinum jewellery items	4	*
MEM19061	Carve and polish gemstones	8	*
MEM19063	Use a faceting machine	4	*
MEM19064	Cut gemstone spheres and beads	3	*
MEM19066	Identify the requirements for establishing a gemstone-cutting	2	*

Unit code	Unit title	P	Prereq
	workshop		
MEM19067	Apply advanced pre-cutting processes to complex gemstones	4	*

Group B

Unit code	Unit title	P	Prereq
MEM05006	Perform brazing and/or silver soldering	2	*
MEM06007	Perform basic incidental heat/quenching, tempering and annealing	2	*
MEM08010	Manually finish/polish materials	6	*
MEM13003	Work safely with industrial chemicals and materials	2	*
MEM13004	Work safely with molten metals/glass	2	*
MEM15004	Perform inspection	2	*
MEM18003	Use tools for precision work	4	*
MEM19001	Perform jewellery metal casting	6	*
MEM19002	Prepare jewellery illustrations	4	*
MEM19003	Handle gem materials	6	*
MEM19005	Produce three-dimensional precision items	8	*
MEM19007	Perform gemstone setting	6	*
MEM19012	Produce jewellery wax model	4	*
MEM19013	Produce jewellery metal masters	4	*
MEM19014	Perform hand engraving	4	*
MEM19015	Perform jewellery enamelling	4	*
MEM19016	Construct jewellery components	4	*
MEM19017	Fabricate jewellery items	6	*
MEM19057	Research the gemstone market and complete pre-cutting processes	3	*

Unit code	Unit title	P	Prereq
MEM19058	Cut and polish solid gemstones	8	*
MEM19059	Complete pre-cutting processes for gemstone assemblies	3	*
MEM19060	Cut and polish gemstone assemblies	8	*
MEM19062	Production cut and polish gemstones	4	*

Group C

Unit code	Unit title	P	Prereq
MEM03001	Perform manual production assembly	4	*
MEM03002	Perform precision assembly	4	*
MEM03006	Set assembly stations	2	*
MEM07001	Perform operational maintenance of machines/equipment	2	*
MEM07005	Perform general machining	8	*
MEM07024	Operate and monitor machine and process	4	*
MEM07032	Use workshop machines for basic operations	2	*
MEM07040	Set multistage integrated processes	6	*
MEM08001	Perform wire, jig and barrel load/unload work	4	*
MEM08002	Pre-treat work for subsequent surface coating	4	*
MEM08003	Perform electroplating operations	6	*
MEM08011	Prepare surfaces using solvents and/or mechanical means	2	*
MEM09009	Create 2-D drawings using computer-aided design system	8	*
MEM09010	Create 3-D models using computer-aided design system	4	*
MEM11012	Purchase materials	6	*
MEM11016	Order materials	2	*
MEM12001	Use comparison and basic measuring devices	2	*

Unit code	Unit title	P	Prereq
MEM12003	Perform precision mechanical measurement	2	*
MEM13001	Perform emergency first aid	1	*
MEM13019	Undertake work health and safety activities in the workplace	3	
MEM15003	Use improvement processes in team activities	4	*
MEM16004	Perform internal/external customer service	2	*
MEM16005	Operate as a team member to conduct manufacturing, engineering or related activities	2	*
MEM18055	Dismantle, replace and assemble engineering components	3	*
MEM19004	Handle and examine gemstone materials	6	*
MEM19008	Prepare jewellery designs	6	*
MEM19009	Perform investment procedures for lost wax casting process	1	*
MEM19010	Produce rubber moulds for lost wax casting process	2	*
MEM19011	Perform wax injection of moulds for lost wax casting process	2	*
MEM19020	Fault find and maintain micro-mechanisms	4	*
MEM19021	Diagnose and service micro-mechanisms	6	*
MEM19022	Perform precision micro-mechanism diagnosis and servicing	6	*
MEM19065	Obtain rough and polished gemstones	1	*

Qualification Mapping Information

Release 1. Supersedes and is equivalent to MEM40311 Certificate IV in Advanced Jewellery Manufacture.

Links

Companion Volume implementation guides are found in VETNet -

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