



Australian Government

MEM19033 Create silversmithing objects

Release: 1

MEM19033 Create silversmithing objects

Modification History

Release 1. Supersedes and is equivalent to MEM19033A Create silversmithing objects.

Application

This unit of competency defines the skills and knowledge required to design and create objects such as functional tableware, flatware or large sculptural forms applying a range of silversmithing techniques. It includes assessing the application of the design brief in the final outcome.

This unit applies to individuals involved in jewellery design or manufacture in a small or large-scale production context. They use and adapt creative and technical skills and knowledge to produce work.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Band: A

Unit Weight: 4

Pre-requisite Unit

MEM13015 Work safely and effectively in manufacturing and engineering

MEM16006 Organise and communicate information

Competency Field

Jewellery

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Determine job requirements	1.1 Follow standard operating procedures (SOPs) 1.2 Comply with work health and safety (WHS) requirements at all times 1.3 Use personal protective equipment (PPE) in accordance with SOPs 1.4 Identify job requirements from specifications

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
2. Design and develop a concept from a design brief	2.1 Identify and evaluate research information, references and resources relevant to the design process 2.2 Record concept development through drawings, notations and design options 2.3 Prepare production plans for selected design solutions and make any required refinements 2.4 Produce a model or maquette of the selected design 2.5 Determine and obtain resources and equipment to undertake the task
3. Produce objects using silversmithing techniques	3.1 Determine appropriate silversmithing techniques and equipment through testing and experimenting 3.2 Select and apply silversmithing techniques and processes to produce objects 3.3 Apply surface finishing techniques to objects based on design requirements 3.4 Identify and consult appropriate personnel to ensure that work is coordinated effectively with others 3.5 Make decisions on dealing with unexpected situations based on discussions with appropriate personnel
4. Evaluate object for meeting the design brief	4.1 Test object for function against the design brief and take required remedial action 4.2 Evaluate and document design processes from concept to production 4.3 Clean up and maintain production environment in accordance with workplace procedures 4.4 Apply control measures to hazardous substances according to environmental requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.	
Specifications include one or more of the following:	• job sheets • sketches • work instructions.
Silversmithing includes one or more of the following:	• maquette production • sinking • crimping • raising • spinning • planishing • forging • hinge making • fabricating • forming.
Surface finishing techniques include one or more of the following:	• electroplating • planishing • patination • polishing • burnishing • heat treating.
Appropriate personnel include one or more of the following:	• supervisor • manager • trainer • mentor • team member • client.
Environmental requirements include one or more of the following:	• liquid waste • solid waste • emissions (gas, fumes, vapour, smoke, fugitive emissions or dust) • excessive energy and water use • excessive noise.

Unit Mapping Information

Release 1. Supersedes and is equivalent to MEM19033A Create silversmithing objects.

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for MEM19033 Create silversmithing objects

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include:

- following work instructions, standard operating procedures (SOPs) and safe work practices
- demonstrating the creation and production of silversmithing objects in accordance with SOPs and job specifications, including the use of tools and equipment
- determining requirements from design brief and associated documents and work instructions
- preparing production plans and model or maquette of the selected design
- selecting and using appropriate silversmithing techniques and equipment on at least two occasions
- applying relevant surface finishing techniques to objects on at least two occasions
- testing object for function against the design brief and taking required remedial action.

Note: Where a volume and/or frequency is not specified, demonstration must be provided at least once.

Knowledge Evidence

Evidence required to demonstrate the required knowledge for this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include knowledge of:

- safe work practices and procedures and use of personal protective equipment (PPE)
- appropriate personnel to consult to ensure that work is coordinated effectively
- concept development techniques
- purpose, function and maintenance of silversmithing equipment
- techniques and manufacturing methods for silversmithing production
- silversmithing surface finishing techniques
- soldering techniques for silversmithing
- binding and locating techniques
- testing procedures to determine object function against the design brief and remedial actions where required
- environmental considerations related to silversmithing.
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Assessment Conditions

- Assessors must:
 - have vocational competency in creating silversmithing objects at least to the level being assessed with relevant industry knowledge and experience
 - satisfy the assessor requirements in the *Standards for Registered Training Organisations 2015* or its replacement and comply with the *National Vocational Education and Training Regulator Act 2011*, its replacement or equivalent legislation covering VET regulation in a non-referring state/territory as the case requires.
- Where possible, assessment must occur in operational workplace situations. Where this is not possible or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment that reflects realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task
- skills, task management skills, contingency management skills and job role environment skills.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications.
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
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