Australian Government
Department of Education, Employment and Workplace Relations

MEM19033A Create silversmithing objects

Release: 1

INDUSTRY SKILLS COUNCILS
Creating Australia's Future

MEM19033A Create silversmithing objects

Modification History

Not applicable.

Unit Descriptor

This unit of competency covers the skills and knowledge required to design and create objects applying a range of silversmithing techniques. It includes assessing the application of the design brief in the final outcome.

Application of the Unit

This unit applies to enterprises where functional tableware, flatware or large sculptural forms are produced.

Band A
Unit Weight 4

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Not applicable.

Elements and Performance Criteria

1 Design and develop a concept from a design brief	1.1 Identify and implement occupational health and safety (OHS) and environmental requirements for carrying out the work and for the work area
	1.2 Determine requirements from the design brief, research and discussions with appropriate personnel, if required
	1.3 Evaluate relevant research information, references and resources to the design process are evaluated
	1.4 Record concept development through a range of drawings, notations and design options
	1.5 Prepare production plans for selected design solutions and refine design, as appropriate
	1.6 Produce a model or maquette of the selected design
	1.7 Determine and obtain resources and equipment to undertake the task
2 Produce objects using silversmithing techniques	2.1 Implement OHS requirements for carrying out the work
	2.2 Determine appropriate silversmithing techniques and equipment through testing and experimenting, if required
	2.3 Select and apply silversmithing techniques and processes to produce objects
	2.4 Apply relevant surface finishing techniques to objects
	2.5 Consult appropriate personnel to ensure that work is coordinated effectively with others, if required
	2.6 Make decisions on dealing with unexpected situations based on discussions with appropriate personnel
3 Evaluate object for meeting the design brief	3.1 Implement OHS requirements for finishing the work
	3.2 Test object for function against the design brief, if required
	3.3 Evaluate and document design processes
	3.4 Clean up and maintain production environment
	3.5 Apply appropriate control measures to hazardous substances according to environmental requirements

Required Skills and Knowledge

Required knowledge includes:

- concept development techniques
- purpose, function and maintenance of silversmithing equipment
- techniques/manufacturing methods for silversmithing production
- soldering techniques for silversmithing
- binding and locating techniques

Required skills include:

- researching information
- sketching and interpreting drawings
- generating ideas and concepts
- working with a wide range of materials and techniques
- using relevant tools and equipment for producing objects
- preparing and maintaining silversmithing tools and equipment (e.g. hammers, stakes, files and vices)
- working effectively with others
- communicating effectively

Evidence Guide

Overview of assessment	A person who demonstrates competency in this unit must be able to apply silversmithing techniques to the design and creation of objects.

Critical aspects for assessment and evidence required to demonstrate competency in this unit	Assessors must be satisfied that the candidate can competently and consistently:
	• implement OHS workplace procedures and practices, including the use of risk control measures
	• demonstrate the creation and production of silversmithing objects on more than one occasion and in different contexts. This includes:
	  • development of a sketchbook of drawings and notations that record:
	  • ideas and design options generated
	  • concept development
	  • relevant research
	  • plans for production solutions
	• production of tests and experiments, where appropriate
	• production of 3D objects to specification.

Context of and specific resources for assessment	• Assessment may occur on the job or in an appropriately simulated environment. Access is required to real or appropriately simulated situations, including work areas, materials and equipment, and to information on workplace practices and OHS practices. • Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability. • Access must be provided to appropriate learning and/or assessment support when required. Where applicable, physical resources should include equipment modified for people with disabilities.
Method of assessment	• Assessment must satisfy the endorsed Assessment Guidelines of the MEM05 Metal and Engineering Training Package. • Assessment methods must confirm consistency and accuracy of performance (over time and in a range of workplace relevant contexts) together with application of underpinning knowledge. • Assessment methods must be by direct observation of tasks and include questioning on underpinning

	knowledge to ensure its correct interpretation and application. • Assessment may be applied under project-related conditions (real or simulated) and require evidence of process. • Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances. • Assessment may be in conjunction with assessment of other units of competency where required.
Guidance information for assessment	Assessment processes and techniques must be culturally appropriate and appropriate to the language and literacy capacity of the candidate and the work being performed.

Range Statement

Appropriate personnel	Appropriate personnel may include: • supervisor • manager • trainer • mentor • teacher • team member • client
Silversmithing	Silversmithing may include: • maquette production • sinking • crimping • raising • spinning • planishing • forging • hinge making • fabricating • forming
Surface finishing techniques	Surface finishing techniques may include: • electroplating • planishing • patination • polishing • burnishing • heat treating
OHS requirements	OHS requirements may include: • legislation • protective equipment • material safety management systems • hazardous substances and dangerous goods code • local safe operation procedures • awards provisions
Environmental requirements	Environmental requirements may relate to: • liquid waste • solid waste • gas, fumes, vapour, smoke emissions, including

	fugitive emissions, and dust • excessive energy and water use • excessive noise
Enterprise procedures	Enterprise procedures may include: • the use of tools and equipment • instructions, including job sheets, cutting lists, plans, drawings and designs • reporting and communication • manufacturer specifications • operational procedures

Unit Sector(s)

Jewellery and horological

Custom Content Section

Not applicable.