



Australian Government

Department of Education, Employment and Workplace Relations

MEM19008B Prepare jewellery designs

Release: 1

MEM19008B Prepare jewellery designs

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers preparing jewellery designs and associated documentation with a view to producing the designed item/s.
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Application of the Unit

Application of the unit	This unit applies to jewellery designs developed with view to producing the designed item/s using current commercial procedures, including traditional hand-fabrication techniques and/or in combination with a range of manufacturing technologies. Procedures may include CNC and mass finishing activities. Preparation of designs may include 2D and 3D CAD applications. Where CAD is used, the appropriate units should also be selected. Where jewellery illustrations only are prepared, Unit MEM19002B (Prepare jewellery illustrations) should be selected. Band: A Unit Weight: 6
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Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units		
Path 1	MEM13003B	Work safely with industrial chemicals and materials
	MEM13004B	Work safely with molten metals/glass
	MEM16006A	Organise and communicate information
	MEM18001C	Use hand tools
	MEM18002B	Use power tools/hand held operations
	MEM18003C	Use tools for precision work
	MEM19002B	Prepare jewellery illustrations
Path 2	MEM08010B	Manually finish/polish materials
	MEM13004B	Work safely with molten metals/glass
	MEM16006A	Organise and communicate information
	MEM18001C	Use hand tools
	MEM18002B	Use power tools/hand held operations
	MEM19001B	Prepare jewellery metal casting
	MEM19002B	Prepare jewellery illustrations
Path 3	MEM16006A	Organise and communicate information
	MEM18001C	Use hand tools
	MEM18002B	Use power tools/hand held operations
	MEM18003C	Use tools for precision work

Prerequisite units		
	MEM19003B	Handle gem materials
	MEM19007B	Perform gemstone setting
	MEM19014B	Perform hand engraving

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify design requirements	1.1.Design requirements, purpose and needs are determined from a variety of applicable sources and reference documents. 1.2.Where necessary, further research/idea development is undertaken. 1.3.Information is consolidated and analysed. 1.4.Where applicable, customer is advised on design considerations and limitations and further clarification is gained as necessary.
2. Develop design concept	2.1.Concept is developed, employing design principles. 2.2.Design process is documented. 2.3.Basic forms and proportions are established. 2.4.Where applicable, decorative aesthetics are applied. 2.5.Design concept is confirmed as necessary.
3. Produce drawings for item manufacture	3.1.Appropriate manufacturing technologies are selected. 3.2.Working technical and finished drawings are developed. 3.3.Production requirements/instructions are specified and communicated to appropriate persons.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Look for evidence that confirms skills in:

- reading and interpreting information on specifications, design documentation, illustrations, design drawings and other applicable source documents
- identifying purpose and needs, including design restraints, budget considerations, item end-use, proportions and desired features, available materials
- checking and clarifying information
- developing research/idea to sufficient level in order to determine customer expectations and/or design outcomes
- evaluating abstract and applied concepts/data for use in a commercial environment

REQUIRED SKILLS AND KNOWLEDGE

- interpreting design concepts/drafts as appropriate for client/industry technician
- collecting and collating data relevant to design
- communicating concepts in terms suitable to relevant customer or other contacts e.g. engineer, master pattern maker
- documenting and maintaining design process, features and design development notes
- producing basic form drawings that accurately reflect design concept
- using balance, proportion, highlights, shadowing, texturing effects appropriately
- selecting technologies suitable for manufacture of item(s)
- undertake numerical operations, geometry and calculations within the scope of the unit

Required knowledge

Look for evidence that confirms knowledge of:

- design resources and where to locate them
- research techniques and available resources
- social trends, cultural/environmental/social context
- relevant industry literature
- existing designs, ethical and competitive considerations
- applicable industry standards or regulations
- brainstorming techniques for research/idea development
- design principles including form, function, harmony, line definition (interpretive/actual)
- drawing media and their functions/applications including paper, watercolour, pastel/ink/pencil
- drawing tools and their functions/applications including stencils, rubbers etc.
- design documentation
- form drawing development
- geometric forms and drawing techniques e.g. cones, cylinders, cube, rectangle, sphere etc. 3D concept, axis lines, conversion of 2D to 3D concepts, depth, perspective and scale (1,2,3 point)
- enhancement techniques
- available manufacturing technologies and their suitability for jewellery manufacture
- types of working drawings and their uses
- the inter-relation between technical and design drawings
- industry requirements and availability of industry expertise
- hazard and control measures associated with preparing jewellery designs
- safe work practices

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

A person who demonstrates competency in this unit must be able to prepare jewellery designs. Competency in this unit cannot be claimed until all prerequisites have been satisfied.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge, and be capable of applying the competency in new and different situations and contexts.

Context of and specific resources for assessment

This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.

This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with preparing jewellery designs or other units requiring the exercise of the skills and knowledge covered by this unit.

Method of assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence can be gathered through a variety of ways including direct observation, supervisor's reports, project work, samples and questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

EVIDENCE GUIDE**Guidance information for assessment****Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Design requirements

- Materials
- Stone specifications
- Special requirements
- Size restrictions
- Budgetary range

Design principles

- Correct construction techniques employed
- Construction limitations of materials
- Drawing to scale for designs
- Form, function, harmony, line definition (interpretive/actual)

Decorative aesthetics

Surface finishing such as sandblasting, polishing, electroplating

Unit Sector(s)**Unit sector****Co-requisite units****Co-requisite units**

Co-requisite units		

Competency field

Competency field	Jewellery and horological
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