



Australian Government

CUAACD511 Make moulds and casts

Release: 1

CUAACD511 Make moulds and casts

Modification History

Release	Comments
Release 1	This version first released with CUA Creative Arts and Culture Training Package version 2.0.

Application

This unit describes the skills and knowledge required to create moulds and casts for a range of artistic and other purposes.

It applies to individuals who work independently in industrial and creative contexts and use well-developed technical skills for the chosen methods of casting or moulding. Individuals typically work as ceramic artists, glass artists, sculptors or prop makers, but the unit is relevant to others working with the design and production of any three-dimensional object.

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

Unit Sector

Visual communication – art, craft and design

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Evaluate mould-making and casting approaches	1.1 Research historical and contemporary theories and practices of mould-making and casting in the context of own work 1.2 Evaluate the ways in which casting and moulding may be used in different contexts and for different purposes 1.3 Investigate current materials, technologies and options for mould making and casting
2. Design and make models for the mould-making and casting process	2.1 Evaluate the design and production limitations of a variety of models 2.2 Design a variety of forms suitable for the mould-making and

ELEMENT	PERFORMANCE CRITERIA
	casting process 2.3 Make a variety of forms based on own designs 2.4 Evaluate forms to assess aesthetic, functional and technical issues 2.5 Make patterns or models suitable for reproduction by mould making and casting 2.6 Prepare patterns or models for mould making and casting
3. Select mould-making and casting resources	3.1 Establish the mould-making and casting needs of specific work projects, including technical specifications, in consultation with relevant people 3.2 Select appropriate materials, tools and equipment for the project 3.3 Consider the particular safety issues that affect mould-making and casting work 3.4 Calculate correct quantities of materials, avoiding wastage where possible
4. Complete construction process	4.1 Use mould-making and casting materials to meet specific work needs 4.2 Select and use different techniques and equipment to achieve desired outcomes 4.3 Fabricate one-piece and multi-piece moulds that meet technical specifications 4.4 Achieve different outcomes and effects through experimentation with various materials 4.5 Determine and allow required curing and drying time 4.6 Recognise and resolve technical and design issues in the mould-making and casting process 4.7 Apply safe strategies for the use, maintenance and storage of mould-making and casting materials, tools and equipment
5. Evaluate work	5.1 Review items produced in terms of durability and quality of finish 5.2 Assess the work in terms of its creative and aesthetic objectives 5.3 Identify and act on the potential for adjustment and refinement in future work

Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 1.3	Evaluates and integrates facts and ideas from a range of sources to inform work practice
Writing	1.1, 1.3, 3.1	Records facts, information, project requirements and specifications accurately using industry terminology and simple vocabulary
Oral communication	3.1	Participates in exchanges with others to elicit required information and establish understanding
Numeracy	3.4, 4.5	Calculates resource and material requirements and production time requirements
Navigate the world of work	3.3, 4.7	- Meets obligations to follow safe practices for mould-making and casting work - Follows required safety practice for the use, maintenance and storage of tools and equipment
Get the work done	1.1, 1.2, 2.1- 2.6, 3.2, 4.1- 4.6, 5.1, 5.2, 5.3	- Plans and organises work in a logical sequence in response to needs of specific projects - Makes a series of analytical decisions in relatively complex situations considering design options for moulds, appropriate casting processes and required resources for projects - Applies systematic, intuitive and experimental approaches to mould construction tasks and recognises and resolves problems encountered in the process - Evaluates the technical properties of products from mould and cast production processes, and their visual and creative qualities and identifies future improvement opportunities

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
CUAACD511 Make moulds and casts	CUVACD511A Make moulds and casts	Updated to meet Standards for Training Packages	Equivalent unit

Code and title current version	Code and title previous version	Comments	Equivalence status
		and clarify intent.	

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1db201d9-4006-4430-839f-382ef6b803d5>

Assessment Requirements for CUAACD511 Make moulds and casts

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Performance Evidence

Evidence of the ability to:

- assess and use information about mould-making and casting in own work
- develop a range of design models suited to reproduction
- produce multiple items using mould-making and casting techniques that meet specified technical and design requirements
- apply safe work practices to the preparation and completion of moulding and casting construction processes
- assess the quality of final work and document future improvement opportunities.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- briefly outline historical and contemporary theories and practices of mould-making and casting, relevant to own area of work
- describe in detail how mould-making and casting are used in own area of work
- identify current technologies and equipment used for mould-making and casting and outline their application to different purposes
- list the properties and applications of materials commonly used for mould-making and casting in the relevant work context
- explain reasons for the use of particular materials and techniques to achieve particular effects
- identify common technical problems that arise in the creation of moulds and casts
- detail the workplace health and safety requirements for making moulds or casts in the relevant work context.

Assessment Conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in creative arts industry environments. The assessment environment must include access to:

- casting and mould-making materials, tools and equipment
- a work space in which items can be made safely.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational educational and training legislation, frameworks and/or standards.

Links

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