



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **CUVCRS06B Make scale models**

**Release: 1**

## **CUVCRS06B Make scale models**

### **Modification History**

Not Applicable

### **Unit Descriptor**

#### **Unit descriptor**

This unit describes the skills and knowledge required to make 3-dimensional (3D) scale models in response to specifications, which may be part of a brief. The focus of this unit is on the technical skills required to make accurate scale models to designed specifications. Design skills are found in other units within the Visual Arts Craft and Design Training Package. People working in many industries require the skills and knowledge in this unit, and the unit is written to allow for contextualisation to a particular industry context. Within the cultural industries this unit is relevant for people working across multiple sectors.

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

### **Application of the Unit**

Not Applicable

### **Licensing/Regulatory Information**

Refer to Unit Descriptor

## Pre-Requisites

### Prerequisite units

This unit has linkages to a wide range of other units in various Training Packages and combined assessment and/or training with those units would be appropriate.

## Employability Skills Information

### Employability skills

This unit contains employability skills.

## 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.

## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 <b>Determine scale model requirements.</b>	1.1 Review relevant <i>specifications</i> and/or concept information or <i>brief</i> to determine requirements. 1.2 Liaise with relevant colleagues to confirm and clarify requirements.
2 <b>Organise resources for scale model making.</b>	2.1 Select <i>techniques</i> for model making consistent with project objectives and <i>parameters</i> . 2.2 Correctly identify <i>work space, equipment, tools</i> and <i>materials</i> for the specific project. 2.3 Set up work space and select equipment, tools and materials in accordance with operating instructions and organisational procedures. 2.4 Prepare and care for resources in accordance with <i>safety</i> and organisational requirements. 2.5 Follow storage and <i>inventory procedures</i> in accordance with organisational requirements.
3 <b>Make scale models.</b>	3.1 Establish core dimensions consistent with the specifications. 3.2 Safely make preliminary <i>models</i> representing core dimensions. 3.3 Review preliminary models against project objectives and specifications and in consultation with relevant colleagues. 3.4 Identify and make required adjustments to models based on review and consultation with relevant colleagues. 3.5 Make models consistent with project objectives and parameters.
4 <b>Present scale models.</b>	4.1 Identify appropriate means of presentation. 4.2 Identify relevant colleagues for presentation. 4.3 Present and store models, taking account of the need for professional presentation and organisational requirements, including future needs for the models.

## Required Skills and Knowledge

### Required Skills and knowledge

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

#### Required skills:

- literacy skills sufficient to interpret information including instructions/specifications/ the brief
- numeracy skills sufficient to interpret and correctly apply calculations and measurements required for the production of scale models.

#### Required knowledge:

- the ways in which scale model making is used with a specific industry context
- general knowledge/basic principles of model making
- detailed knowledge of physical properties and capabilities of the range of equipment, tools and materials used for scale model making
- work space requirements for the production of models, including set up of work space for particular types of scale model making work
- environmental issues associated with the equipment, tools and materials used in scale model making
- organisational and legislative occupational health and safety procedures in relation to scale model making
- awareness of copyright, moral rights and intellectual property issues and legislation associated with scale model making work.

## 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.

#### **Critical aspects for assessment and evidence required to demonstrate**

The following evidence is critical to the judgement of competence in this unit:

- application of selected techniques to make models

## EVIDENCE GUIDE

### competency in this unit

consistent with project objectives and parameters

- knowledge of the processes and techniques used for scale model making
- presentation techniques for models in a specific workplace context.

### Context of and specific resources for assessment

The assessment context must provide for:

- practical demonstration of skills using required materials, tools and equipment to make scale models for a specific workplace purpose.

### Method of assessment

Assessment may incorporate a range of methods to assess performance and the application of essential underpinning knowledge, and might include:

- direct observation of the production of models
- evaluation of scale models made by the candidate
- oral or written questioning to assess knowledge of scale model-making techniques
- review of portfolios of evidence
- third party workplace reports of performance by the candidate.

Assessment methods should closely reflect workplace demands and the needs of particular groups (e.g. people with disabilities, and people who may have literacy or numeracy difficulties e.g. speakers of languages other than English, remote communities and those with interrupted schooling).

Assessment of this unit requires access to the materials resources and equipment needed to make and present scale models.

## 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.

***Specifications*** would be articulated in the brief and may refer to:

- client needs
- dimensions
- purpose
- style.

In addition to measurements/***specifications***, other information required for the project may include:

- client's organisational background
- creative objectives including style considerations
- legal, contractual, ethical and copyright considerations
- relevant statutory requirements, e.g. health and safety considerations
- scope for making adjustments
- technical objectives.

The ***brief***:

- describes and specifies the work to be completed
- is usually prepared by a commissioning body or organisation, e.g. supervisor, client, community organisation
- is written diagrammatic, visual, verbal.

***Techniques*** would depend on the project's objectives and parameters and may involve specialised techniques used for:

- carpentry
- ceramics
- glass work
- lighting (laser, spot, ambient)
- modelling with flexible materials
- painting and other surface decoration
- projection
- the manufacture of form by:

## RANGE STATEMENT

- folding
- twisting
- hinging
- bending
- sculpture
- working with fibres/textiles.

*Parameters* may refer to:

- cost, budgeting
- legal; contractual, ethical and copyright considerations
- materials requirements and availability
- requirements for development or building consent
- sponsorship
- technology
- timeframe

*Work space* needs may include:

- drying space
- dust extraction
- lighting and power requirements
- location-specific requirements
- process-specific space needs
- ventilation
- wet and dry areas.

*Tools* and *equipment* may include:

- brushes, spatulas, scrapers
- buckets, containers
- clamps
- hand and power tools (saws, drills, sanders, compressor)
- lighting (to test shadows, spotlights etc)
- pliers
- protective clothing
- shaping tools (surform blades, planers, carving tools)
- specialised equipment for ceramic work
- specialised equipment for sculpture work
- spray gun.



## RANGE STATEMENT

**Materials** may include:

- clays
- coloured pencils, crayons, pastels, inks charcoal
- fibreglass
- foamcore, polystyrene
- found objects and/or materials
- glass
- laminates
- materials to represent a particular surfaces, e.g. rock, earth, water
- metals, e.g. sheet, wire
- nails, screws, hooks, bolts
- natural and/or synthetic fibres, tape, string
- paper, cardboard, paper pulp
- perspex
- recycled materials
- resins, latex, rubber
- turps, other solvents and cleaning materials
- water and oil based paints, specialised metal and wood primers, extenders and binders
- waterproof lacquers
- wood and timber products, e.g. balsa wood, MDF board, wooden skewers.

**Safety** issues may include:

- Federal, State and Territory legislation, regulations and standards
- personal protection
- recycling
- safe disposal of waste.

**Inventory procedures** may involve:

- files (including digital)
- product safety labels
- spreadsheet documentation
- written and visual documentation of manufacturers instructions.

Scale **models** may be required for a large range of work situations and may include:

- event design
- foyer design
- lighting plots

**RANGE STATEMENT**

- object or product design
- open space environment
- room/site/stage layouts
- stage and set design
- visual art works and/or projects, e.g. community installations, public art, performance.

**Unit Sector(s)**

Not Applicable