Australian Government

Department of Education, Employment and Workplace Relations

CUVDES405A Research and apply techniques in spatial design

Release: 1

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Modification History

Version	Comments
CUVDES405A	This version first released with *CUV11 Visual Arts, Craft and Design Training Package version 1.0*

Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to research and apply techniques for application to spatial design. It involves interpreting work briefs, organising resources, testing ideas, and refining approaches to a range of design challenges. The unit covers the design process to the point of producing models or maquettes for spatial designs.

Application of the Unit

Individuals who generate ideas and solutions for the layout of spaces apply the skills and knowledge in this unit. Spatial design solutions are required for exhibitions, fit-outs for exterior spaces or environments, fit-outs for building foyers and offices, special events and theatre sets.
Skills associated with producing final designs can be found in units related to specific disciplines, such as set and exhibition design which are contained in Training Packages, such as CUE03 Entertainment and CUL04 Museum and Library/Information Services.
At this level, research, experimentation and ongoing refinement are used to produce a range of design work where individuals are beginning the process of finding their individual style. Work is undertaken independently with supervision and guidance as required.

Licensing/Regulatory Information

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

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Element	Performance Criteria
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

1. Interpret spatial design briefs	1.1 Interpret the ***specifications*** of design ***briefs*** 1.2 Take user or client requirements into account when making decisions about ***spatial design work*** 1.3 Clarify issues about specifications, ***parameters and constraints*** with relevant people as required 1.4 Source and evaluate information pertinent to briefs
2. Organise resources for spatial design	2.1 Identify resources required to develop spatial design models, including ***work space, tools and equipment*** 2.2 Prepare and care for resources according to requirements 2.3 Follow storage and inventory procedures
3. Test spatial design approaches	3.1 Produce ***preliminary visual representations*** 3.2 ***Identify possible approaches*** and establish ***criteria*** for selecting final approach 3.3 Select appropriate ***materials***, tools and equipment and ***test*** approaches and ***techniques*** 3.4 Evaluate testing processes against criteria and select the approach that best meets the requirements of briefs 3.5 Critique own work and seek feedback as required 3.6 ***Refine*** and ***document the approach*** to spatial design work based on testing and evaluation
4. Fabricate spatial design models or maquettes	4.1 Evaluate the need for fabrication and the scope of work required 4.2 Select and organise materials, tools and equipment for fabrication according to design approach 4.3 Safely make models or maquettes ensuring consistency with design concepts and briefs 4.4 Respond positively to feedback and refine work as required 4.5 Present models or maquettes within agreed timeframes

Required Skills and Knowledge

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

Required skills

- communication skills to engage with others about approaches to spatial design
- initiative and enterprise skills to experiment with techniques to produce effects that enhance the design of spaces
- learning skills to refine and improve a range of spatial design techniques
- literacy skills to interpret design briefs and research information about spatial design
- numeracy skills to calculate proportions, measurements and costs
- self-management and planning skills to plan work tasks
- technical skills to evaluate, adapt and integrate a range of techniques into the design and fabrication of models and maquettes.

Required knowledge

- role of experimentation in designing spaces
- formal elements and principles of design and their application to spatial design
- techniques, materials, tools and equipment and their application to different areas of spatial design
- common formats and features of spatial design briefs
- work and ideas of other designers specialising in spatial design
- history and theory of design in relation to spatial design
- intellectual property issues and legislation and their relevance to spatial design
- sustainability considerations for spatial design
- OHS requirements relevant to the design of spaces.

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	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Evidence of the ability to: • test and use a range of approaches and techniques for the design of spaces in response to a brief • produce a model or maquette for at least one spatial design • apply knowledge of the processes and techniques used for spatial design in different contexts.
Context of and specific resources for assessment	Assessment must ensure access to: • briefs on which to base the design of spaces • equipment and tools used to produce models or maquettes of spatial designs.
Method of assessment	A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit: • direct observation of design or model making work in progress, including exploration of, and experimentation with, techniques • evaluation of visual documentation of spatial designs • evaluation of plans and models produced by the candidate • questioning and discussion about the candidate's intentions and the work outcome • review of portfolios of evidence • review of third-party reports from experienced practitioners. Assessment methods should closely reflect workplace demands (e.g. literacy) and the needs of particular groups (e.g. people with disabilities, and people who may have literacy or numeracy difficulties, such as speakers of languages other than English, remote communities and those with interrupted schooling).
Guidance information for assessment	Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended, for example: • BSBDES401A Generate design solutions • BSBDES402A Interpret and respond to a design brief.

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 may refer to:	• client needs • dimensions • purpose • style.
Briefs are usually prepared by a commissioning body or organisation and may be:	• diagrammatic • verbal • visual • written.
Spatial design work may include:	• exhibition design • fit-outs for exterior spaces or environments • foyer design • installation for specific event • office fit-outs • set design.

Parameters and constraints may refer to:	• considerations, such as:
	  • client's organisational background
	  • contractual
	  • copyright
	  • ethical
	  • health and safety
	  • legal
	  • subject matter
	• cost
	• material characteristics
	• technology
	• timeframe.

Relevant people may include:	• clients • colleagues • industry practitioners • managers • mentors • supervisors.
Work space needs may	• drafting table

include:	• electronic equipment • lighting and power requirements • process-specific space needs.
Tools and equipment may include:	• brushes • camera • computer • hand tools • ladders • lighting equipment • power tools • printer • relevant software • scanner.
Preliminary visual representations may include:	• computer-aided design and drafting (CADD) • colour boards • photography and digital imaging • plan drawing • sample boards • sketching.

Identifying possible approaches includes:	• identifying possible design solutions
	• identifying possible realisation options, such as by:
	  • fabricating an aspect of the design
	  • means of a model or maquette.

Approaches may encompass:	• aesthetic considerations • choice of fabrication options • design solutions • parameters of the brief.
Criteria may include:	• access to materials, tools and equipment required to realise designs • consistency with spatial design briefs • ease of manufacture • personal affinity with medium and materials.

Materials may include:	• cardboards
	• clays
	• fibres
	• glass
	• manufactured materials:
	  • tiles
	  • panels
	  • carpeting
	  • textiles

	• metals
	• modelling pastes
	• natural elements:
	  • water
	  • light
	  • wind
	  • plants
	• glazes
	• paints
	• paper
	• plastics
	• stains
	• wood and/or wood products.

Strategies to ***test*** techniques may involve:	• exploring techniques by making practice pieces, test pieces, mock-ups or samples • testing materials by applying stress and colour tests.
Techniques would depend on design solutions and realisation options and may include:	• carpentry • digital work • glasswork • lighting • modelling • painting and decoration • photography • projection • surface decoration • textile work.
Process followed to ***refine*** the design approach may involve:	• adjustment to design solution • adjustment to take account of elements and principles of design • adjustment to use the extended capabilities of techniques.
Process used to ***document the approach*** may involve:	• elevations • final drawings • illustrations • models • photographs • plans • specifications for fabrication.

Unit Sector(s)

Design – design process