



Australian Government

CPPBDN5101 Produce digital 3-D models of building designs

Release: 1

CPPBDN5101 Produce digital 3-D models of building designs

Modification History

Release 1 This version first released with CPP Property Services Training Package Release 11.0.

Supersedes and is equivalent to CPPBDN5012A Produce and present 3-D models of small-scale building designs. Updated to meet the Standards for Training Packages 2012.

Application

This unit specifies the skills and knowledge required to produce three-dimensional (3-D) models for small-scale building design projects involving residential projects and commercial or industrial projects up to 2,000m² floor area and buildings of Type B and C construction, as defined in the National Construction Code (NCC).

This unit is suitable for drafters and building designers who apply technical and theoretical knowledge and skills to building design work tasks.

This unit forms part of the licensing requirements for people engaged in building design in some states and territories. For further information, check with the relevant regulatory authority.

Pre-requisite Unit

Nil.

Unit Sector

Building Design

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe what needs to be done to demonstrate achievement of the element.

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|------------------------------------|--|
| 1 Set up and manage digital files. | 1.1 Create, name, save and retrieve files for digital 3-D models of small-scale building design project. |
| | 1.2 Import digital drawing files using appropriate file transfer protocols. |
| | 1.3 Use appropriate file transfer protocols to export and transfer files in required formats for client and consultant |

use.

2	Create digital 3-D models of building design.	2.1	Access sources of customised architectural objects for digital 3-D models.
		2.2	Operate 3-D modelling functions of design software to create 3-D model and additional objects.
		2.3	Apply architectural objects to 3-D models to meet project requirements.
3	Produce 3-D model presentation.	3.1	Manipulate 3-D models to create a range of views.
		3.2	Apply dimensions and notations to views as required.
		3.3	Check 3-D models for accuracy, completeness, quality and compliance.
		3.4	Select and apply presentation styles and display controls according to project and workplace requirements.
		3.5	Save and file 3-D models according to workplace requirements.

Foundation Skills

As well as the foundation skills explicit in the performance criteria of this unit, candidates require:

- reading skills to interpret:
 - complex technical information and instructions in software manuals
 - and apply compliance requirements and drawing standards to 3-D models
- numeracy skills to calculate dimensions and scales for models.

Unit Mapping Information

Supersedes and equivalent to CPPBDN5012A Produce and present 3-D models of small-scale building designs.

Links

Companion volumes to this training package are available at the VETNet website - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6f3f9672-30e8-4835-b348-205dfcf13d9b>

Assessment Requirements for CPPBDN5101 Produce digital 3-D models of building designs

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Performance Evidence

To demonstrate competency, a candidate must meet the performance criteria of this unit by producing digital 3-D models of two different building designs. Designs must include:

- one residential project
- one commercial or industrial project of up to 2,000m² floor area.

Knowledge Evidence

To be competent in this unit, a candidate must demonstrate knowledge of:

- relevant legislation, codes and standards
- workplace and building design project requirements
- client requirements for building design
- architectural styles:
 - terminology
 - objects
 - views
 - notation
- building design data
- contextual and site constraints
- design drawing and representation methods
- functions and operation of 3-D modelling software programs including display controls.

Assessment Conditions

Assessors must meet the requirements for assessors contained in the Standards for Registered Training Organisations. Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting where these skills and knowledge would be performed. This includes access to:

- technical references and software manuals
- computer with internet access, 3-D modelling and portable document format software.

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