



Australian Government

MSFID4014 Produce digital models and documentation for interior design projects

Release: 1

MSFID4014 Produce digital models and documentation for interior design projects

Modification History

Release 1. Supersedes and is equivalent to MSFID5014 Use CAD applications to complete models and documentation for interior design projects.

Application

This unit describes the skills and knowledge required to review information about the design brief and proposed solution, and then use the features of computer-aided design (CAD) applications to produce models and extract two dimensional (2D) and three dimensional (3D) drawings and documentation in accordance with all standard practice notations and drawing protocols.

This unit applies to interior designers, including kitchen and bathroom designers.

No licensing or certification requirements exist at the time of publication. Relevant legislation, industry standards and codes of practice within Australia must be applied.

Pre-requisite Unit

N/A

Unit Sector

Interior Decoration and Design

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Determine project requirements	1.1 Review and confirm project brief and its parameters 1.2 Identify drawing and documentation requirements based on examination of design concepts and proposed solutions 1.3 Confirm and check calculations and measurements for accuracy and cohesion 1.4 Select and prepare computing equipment and suitable software for use based on the project needs 1.5 Create customised template in accordance with individual workplace requirements

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
2. Produce 3D model and documentation	2.1 Design, create and apply layering strategy for project 2.2 Develop architectural library for relevant design components 2.3 Create custom designed library parts in accordance with operating system 2.4 Apply text, line, font and dimension styles 2.5 Use pan, zoom and orbit tools to navigate in the 2D and 3D windows within the model 2.6 Add text and notations to the drawing in accordance with drawing protocols 2.7 Add dimensions to the drawing in accordance with drawing protocols 2.8 Produce 3D detailed suite of rooms, complete with fenestration and doors on appropriate layers 2.9 Use advanced features of drawing tools to generate 3D form
3. Create 2D drawings and edit components	3.1 Create drawings from the model created 3.2 Use editing tools correctly to modify drawing elements and text 3.3 Modify, change or transfer object properties to a different layer
4. Render surfaces	4.1 Use CAD library to assign materials to surfaces and objects of the model 4.2 Explore and create new material surfaces that supplement library of materials 4.3 Edit texture, transparency, luminescence and patterns to achieve desired surface effects using shade settings 4.4 Include light fixtures in model and adjust parameters to achieve desired effects
5. Create and edit 3D views of the model	5.1 Create isometric, two and three point perspective views using a range of camera settings and rendering techniques 5.2 Reposition camera or target to provide alternate views using a variety of camera techniques 5.3 Create effect of natural and artificial lighting in 3D space to achieve photo realistic awareness of the 3D model and the effect of light on surfaces 5.4 Examine rendering time considerations to achieve specific output.

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
6. Plot and print for final presentations	6.1 Save perspective views and make appropriate for final media presentation 6.2 Save appropriate views to meet requirements of brief 6.3 Create page layout for plotting and printing 6.4 Prepare page layout using saved views and documentation 6.5 Plot 2D documentation with appropriate line weights 6.6 Prepare slide show presentation using saved views and documentation
7. Save and back up files	7.1 Create folders and files in logical structure to store drawing projects 7.2 Save and file drawings to allow easy access according to workplace documentation system 7.3 Identify and compare appropriate techniques for reducing file size 7.4 Back-up copies of files in accordance with organisation procedures

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Unit Mapping Information

Supersedes and is equivalent to MSFID5014 Use CAD applications to complete models and documentation for interior design projects.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0601ab95-583a-4e93-b2d4-cfb27b03ed73>

Assessment Requirements for MSFID4014 Produce digital models and documentation for interior design projects

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Performance Evidence

There must be evidence the candidate has completed the tasks outlined in the elements and performance criteria of this unit, and:

- designed and produced the following in accordance with the design concept and/or solution and the drafting and drawing protocols required by Australian Standards and the National Construction Code (NCC)
 - 2 sets of orthographic drawings comprising:
 - plans
 - elevations
 - sections
 - services
 - 2 3D perspective drawings.
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Knowledge Evidence

There must be evidence the candidate has knowledge of:

- mathematical procedures for working with scale
- types of CAD equipment and procedures for their safe use, operation and maintenance
- CAD applications and their features, uses and limitations including those related to:
 - different views
 - layering
 - editing
 - rendering
- drafting and drawing codes and practices relevant to interiors including those for abbreviations
- 2D and 3D drawing techniques
- documentation control procedures
- types of challenges that occur using CAD, and how to avoid and respond.
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Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including:
 - design information for documentation
 - information technology hardware
 - CAD software.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

Links

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