



Australian Government

MSFID6010 Design commercial interior lighting

Release: 1

MSFID6010 Design commercial interior lighting

Modification History

Release 1. Supersedes and is not equivalent to MSFID5006 Design interior lighting.

Application

This unit describes the skills and knowledge required to assess natural light and determine supplementary lighting requirements in both existing and potential commercial interior spaces, and design lighting as part of an integrated interior solution.

This unit applies to interior decorators and designers. They analyse and compare information from diverse sources to inform a design solution.

Licensing, legislative or certification requirements may apply to this unit and relevant state/territory and local government agencies should be consulted to determine any necessary certification or licensing for undertaking interior decoration and design work. Access to construction sites requires certification of general induction training specified by the National Code of Practice for Induction for Construction Work (ASCC 2007).

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. Interpret lighting requirements	1.1 Evaluate project specifications, parameters and constraints, and confirm with client 1.2 Determine intended facility and space functions and the associated tasks and processes 1.3 Select work resources based on the needs of the project 1.4 Identify key project stakeholders and establish required communication protocols
2. Assess existing orientation and natural	2.1 Determine natural light and ultraviolet (UV) penetration from site analysis

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
light	2.2 Determine aspect and orientation from project brief and building plans 2.3 Examine window treatments and placement for their efficiency in controlling light 2.4 Review selection of colours for walls, ceilings, furnishings and fittings for their effect on raising or lowering the effect of light into the space 2.5 Assess methods of site light control and light control devices for their effect on natural light
3. Determine supplementary lighting requirements	3.1 Identify and assess supplementary lighting sources and their potential to achieve the desired lighting effects 3.2 Assess the practicality and safety requirements for supplementary lighting in the facility 3.3 Research and assess the ongoing maintenance and environmental impact and energy efficiency of potential supplementary lighting 3.4 Identify actual and potential location for supplementary lighting and determine required changes to achieve desired outcomes 3.5 Analyse effect of supplementary lighting on the existing or proposed colour spectrum
4. Generate lighting concepts	4.1 Use creative methodologies to generate lighting concepts and themes 4.2 Assess concepts against the project brief to select most viable solution 4.3 Present concept to client using support documentation suited to the scope of the project 4.4 Discuss ideas with client and modify concept according to feedback 4.5 Select lighting options that meet industry standards and accurately document specifications
5. Revise and refine solution	5.1 Revise and refine lighting concepts through a process of reflection and testing 5.2 Examine environmental aspects of lighting solution and identify and integrate options for improved sustainability 5.3 Research and select appropriate lighting options that meet industry

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	standards 5.4 Select the final lighting design that best meets the requirements of the brief
6. Present lighting solution	6.1 Document lighting solution using industry symbols and conventions for all fittings and components 6.2 Create three dimensional (3D) visualisations of lighting effects using appropriate software 6.3 Develop and document comprehensive schedule for lighting design 6.4 Present lighting solution and clearly explain key features and benefits 6.5 Analyse client feedback and response to determine success in achieving client satisfaction 6.6 Evaluate work through feedback and own reflection, and identify potential improvements for use in future projects

Foundation Skills

The Foundation Skills describe those required skills (such as, language, literacy, numeracy and employment skills) that are essential to performance:

- technology skills to research and present design information and drawings using digital media.

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

Unit Mapping Information

No equivalent unit.

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 MSFID6010 Design commercial interior lighting

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Performance Evidence

There must be evidence the candidate has completed the tasks outlined in the elements and:

- designed and documented lighting solutions with 3D visualisations for 3 different commercial spaces:
 - each space must be different in terms of activities, tasks and processes undertaken in the space
 - 1 must be an existing space requiring a new lighting design
 - 1 must be a potential space, yet to be constructed.
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Knowledge Evidence

There must be evidence the candidate has knowledge of:

- type and scope of client and/or project brief information needed to inform research and recommendation:
 - budget
 - client preferences
 - aesthetic and functional requirements
 - site characteristics – size, shape, services, structural considerations
 - timeline
- types and features of resources that support the provision of design advice, and how they are used, including:
 - research tools and techniques
 - product tools
 - communication tools
- mathematical procedures for estimation, measurement and calculation of costings
- basic light characteristics:
 - natural
 - UV
 - interaction between colour and light
- how aspect and orientation impact light and lighting selection
- artificial light:
 - effects on the colour spectrum

- energy efficiency
- special effects that can be achieved
- technical terminology
- lighting design options and trends in the context of commercial spaces:
 - hospitality
 - multi-residential
 - retail
 - workplace
- sources of information on commercial lighting products and devices
- features and effects of different types of commercial lighting products
- methods of light control and their uses in different situations
- how furnishing selections impact light in an interior space
- the relationship between lighting and key parameters for:
 - atmosphere and mood
 - activities undertaken in the space
- Australian Standard AS1680 – its purpose and key provisions
- drawing conventions for lighting formats.
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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 briefs
 - sites for lighting
 - measuring equipment
 - information technology for research and design presentation.

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

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