



Australian Government

MSFFDM5010 Investigate ergonomic, anthropometric and proxemic considerations for design

Release: 1

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Modification History

Release 1. Unit code and title changed. Application changed. Elements and Performance Criteria changed. Range of Conditions removed and relevant information moved to Assessment Requirements. Assessment Requirements changed and volume/frequency of evidence clarified. Supersedes and is not equivalent to MSFFDT5001 Apply ergonomics, anthropometrics and proxemic considerations to a product.

Application

This unit describes the skills and knowledge required to confirm design requirements, research potential ergonomic, anthropometric and proxemic considerations for a design and apply findings to the design process.

This unit applies to individuals working in a manufacturing or design studio environment who use specialised knowledge and critical thinking to evaluate and use diverse and potentially complex information.

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

Competency Field

Design practice

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. Confirm design requirements	1.1 Review, confirm and clarify design brief with product owner or briefer 1.2 Identify potential issues relating to ergonomic, anthropometric and proxemic factors
2. Research ergonomic, anthropometric and proxemic considerations	2.1 Identify credible sources of information about ergonomics, anthropometrics and proxemics 2.2 Source and analyse information for its application to design solution 2.3 Assess how ergonomic, anthropometric and proxemic factors impact functionality of design for different types of people 2.4 Determine potential impacts of ergonomic, anthropometric and

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	proxemic issues on how solution meets elements and principles of design 2.5 Identify, distil and document key information that applies to design
3. Use information in the design process	3.1 Explore different solutions based on research outcomes to satisfy the requirements of the design brief through testing and experimentation 3.2 Make accurate calculations for product adjustments that arise from ergonomic, anthropometric and proxemic considerations 3.3 Integrate outcomes into work on overall design solution and associated documentation, drawings and models

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

- Reading skills to interpret research information.
- Writing skills to document ergonomic, anthropometric and proxemic consideration outcomes.

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

Unit Mapping Information

Release 1. Supersedes and is not equivalent to MSFFDT5001 Apply ergonomics, anthropometrics and proxemic considerations to a product.

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 MSFFDM5010 Investigate ergonomic, anthropometric and proxemic considerations for design

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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 demonstrated the ability to:

- research and use information about ergonomics, anthropometrics and proxemics in the design of three different products, drawn from any of one major and two minor design projects), and in doing so:
 - balance ergonomic, anthropometric and proxemic considerations with aesthetic and functional requirements
 - follow industry best-practice in understanding and application of ergonomics, anthropometrics and proxemics
 - seek subject-matter expertise to guide design, solutioning and assessment of results.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- elements and principles of design, and their interrelationship with ergonomic, anthropometric and proxemic values
- current market segment products, and suitable online and offline sources of inspiration and possible design elements that will meet client needs and demonstrate ergonomic, anthropometric and proxemic values:
 - brochures
 - magazines
 - websites such as online galleries and retail sites
 - design forums
 - reference books
 - other existing enterprise design information
 - transferable technological ideas or concepts
 - natural or man-made structures and objects
- key aspects of the following and how they may impact the design of different products:

- ergonomics:
 - safety
 - comfort
 - ease of use
 - productivity and performance
 - aesthetics
- anthropometrics:
 - physical requirements and attributes of product end user
- proxemics:
 - spacing requirements of product end user and location of product
- all aspects of the product design, including but not limited to:
 - shape and dimension
 - materials
 - colour
 - texture, patterns and relief
 - the site and positioning of the end product
 - ability to produce in batches or limited production runs
 - ability to adapt the design to different production methods or volumes
- Australian Standards and government recommendations for product design concerning ergonomics, anthropometrics and proxemics
- materials, finishes and production methods, and how these interact with achievement of ergonomic, anthropometric and proxemic requirements.

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
 - information technology for research

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

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