



Australian Government

Department of Education, Employment and Workplace Relations

LMF50508 Diploma of Furniture Design and Technology

Revision Number: 1

LMF50508 Diploma of Furniture Design and Technology

Modification History

Not applicable.

Description

This qualification describes the skills and knowledge required where the design of furniture and the application of the design into a finished furniture product is the central focus. This qualification is structured to reflect two primary occupational outcomes in the areas of fine furniture making - with a focus on skills required to design and produce individual fine furniture for display or custom production and furniture design - with a focus on skills required to design furniture for volume production.

Job roles/employment outcomes

The LMF50508 Diploma of Furniture Design and Technology reflects vocational outcomes for those performing design of furniture and has two streams that should be selected on the basis of required occupational outcome.

- Stream 1: Fine Furniture Making - units for this stream are included in Groups A and C
- Stream 2: Furniture Design - units for this stream are included in Groups A and D

The selection of units for each of each stream is determined by the packaging rules below. Work involves self-directed application of knowledge and skills, with substantial depth in some areas where judgement is required in planning and selecting appropriate equipment, services and techniques for self and others.

Application

This qualification is typically used to develop a breadth, depth and complexity of skills and knowledge covering furnishing design and technology plus initiation of alternative approaches to skills or knowledge application across a broad range of technical and/or management requirements, evaluation and co-ordination. Work would involve participation in development of strategic initiatives, as well as personal responsibility and autonomy in performing complex technical operations or organising others. It may include participation in teams, including teams concerned with planning and evaluation functions and could involve group or team coordination.

Pathways into the qualification

This qualification may be accessed by direct entry. Credit can be granted towards this qualification by those who have completed the LMF40508 Certificate IV in Furniture Design and Technology or achieved equivalent industry experience.

Pathways from the qualification

Further training pathways from this qualification may include LMF60308 Advanced Diploma of Furniture Design and Technology and relevant management or competitive manufacturing qualifications.

Licensing considerations

There are no specific licences that relate to this qualification. However, depending on the jurisdiction, licensing or regulatory requirements may apply to the use of some units in this qualification. Local regulations should be checked for details.

Pathways Information

Not applicable.

Licensing/Regulatory Information

Not applicable.

Entry Requirements

Not applicable.

Employability Skills Summary

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	<ul style="list-style-type: none"> • communicate effectively and efficiently with colleagues, suppliers, clients and others involved in the design project, using a variety of communication methods • interpret design briefs • interpret technical and conceptual information • conduct research to inform project outcomes • communicate and sell design ideas and concepts using a variety of presentation methods • produce detailed technical drawings to industry standard • complete documentation relating to the project • undertake measurements and calculations and document in specification schedule • interpret client needs and documentation such as client briefs, quotations, fee schedules, proposal documents, product finishes, schedules and drawings • discuss design ideas
Teamwork	<ul style="list-style-type: none"> • collaborate on design concepts and ideas with others • demonstrate and encourage others in working cooperatively with people of different ages, gender, race or religion • undertake appropriate and effective communication with others in the design or manufacturing process • provide constructive and meaningful feedback on design work to colleagues • provide practical support to team members • work within a multi-disciplined project team
Problem-solving	<ul style="list-style-type: none"> • interpret and resolve design ideas • analyse and apply research findings into design solutions • recognise and address quality issues and problems relating to designs • solve problems in relation to the realisation of outcomes that are environmentally, economically and socially sustainable • use expertise to provide problem solving advice • identify and address unexpected problems, hazards, time delays and structural implications as they arise • evaluate design solutions for best fit
Initiative and enterprise	<ul style="list-style-type: none"> • anticipate and address problems, hazards, time delays and structural implications

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

	<ul style="list-style-type: none"> • initiate design direction and options • provide leadership in design and manage changes to brief or solution • identify and address non-conformances • identify effective ways to achieve outcomes • rectify problems promptly and appropriately • develop original design concepts
Planning and organising	<ul style="list-style-type: none"> • prepare business correspondence, purchase orders and invoices in a timely manner • collect, analyse and organise client information • prepare project proposals with all information to enable clients to make efficient and informed choices • arrange and oversee trades people in the undertaking of work according to project requirements • plan work requirements for self and others as required • monitor quality outcomes
Self-management	<ul style="list-style-type: none"> • evaluate and monitor work outcomes against work schedule and quality standards • manage own time and work load priorities effectively • monitor information in work area • keep the work area clean and tidy at all times • locate, interpret and apply relevant information • take responsibility for project work
Learning	<ul style="list-style-type: none"> • conduct ongoing professional research in design and technology knowledge • maintain professional skills and industry contacts • manage own learning and professional development activities • accept and respond to feedback, and use feedback as an opportunity to improve professional knowledge and skills • identify shortfalls in knowledge and undertake research or training to fill gaps • assess competencies in meeting job requirements • ask questions to expand own knowledge • experiment with design ideas and review outcomes
Technology	<ul style="list-style-type: none"> • observe OHS principles when using technology • research technological developments relevant to design and technology work • use computers and appropriate software to develop design solutions • use technology to organise and maintain client and business data

EMPLOYABILITY SKILLS QUALIFICATION SUMMARY	
	<ul style="list-style-type: none"> work with technology safely and according to workplace standards

Packaging Rules

Packaging Rules

To be awarded the LMF50508 Diploma of Furniture Design and Technology, competency must be achieved in **twenty-six (26)** units of competency.

- eight (8)** core units of competency
- eighteen (18)** elective units of competency.

Note: Where prerequisite units apply, these have been listed, and must be considered in the total number of units.

CORE UNITS

Complete all **eight (8)** units from this list.

Unit code	Unit title	Prerequisites
BSBDES401A	Generate design solutions	
LMFFDT4007A	Establish design brief	
LMFFDT4012A	Produce ideation drawings	
LMFFDT4014A	Research and select furniture materials and technology	
LMFFDT4015A	Research furniture styles and movements	
LMFFDT5004A	Develop self as a furniture designer	
LMFFDT5013A	Evaluate furniture design proposals	

Unit code	Unit title	Prerequisites
	and concepts	
MSAENV272B	Participate in environmentally sustainable work practices	

ELECTIVE UNITS

Select **eighteen (18)** units from Groups A, B, C and D as specified below.

Group A

Select **one (1)** unit from Group A

Unit code	Unit title	Prerequisites
Stream 1: Fine Furniture Making		
LMFFDT4006A	Establish and maintain a safe furniture making work environment	
Stream 2: Furniture Design		
LMFFDT4008A	Determine occupational health and safety implications of designs	

Group B

Select a minimum of **four (4)** units from Group B, including at least **two (2)** units coded LMF*****

Unit code	Unit title	Prerequisites
BSBDES502A	Establish, negotiate and refine a design brief	

Unit code	Unit title	Prerequisites
BSBMKG501B	Evaluate marketing opportunities	
CUFANM303A	Create digital 3D models	
LMFDN5001B	Generate and transfer complex computer-aided drawings and specifications	
LMFDN5006A	Manage furniture design	
LMFFDT5001A	Apply ergonomics, anthropometrics and proxemic considerations to a product	
LMFFDT5002A	Apply resources sustainably	
LMFFDT5003A	Assess and resolve technical integrity of a design	
LMFFDT5005A	Construct custom furniture using advanced techniques	
LMFFDT5007A	Design a batch or limited production item of furniture	
LMFFDT5008A	Design a furniture product using high volume technology services (HVTS) in production	
LMFFDT5009A	Design a one-off item of furniture	
LMFFDT5010A	Research and recommend alternative manufacturing processes	
LMFFDT5011A	Research and recommend machine technology	
LMFFT5001B	Evaluate and select production materials and equipment for furniture	

Unit code	Unit title	Prerequisites
	production	
LMFFT5004B	Develop and document procedures and specifications	
LMFFT5011B	Develop, trial and evaluate prototypes	
LMFFT5012B	Determine production feasibility of designs	
MSACMT230A	Apply cost factors to work practices	
MSACMT450A	Undertake process capability improvements	MSACMT452A
MSACMT452A	Apply statistics to processes in manufacturing	
MSACMT631A	Undertake value analysis of product costs in terms of customer requirements	MSACMT230A

Group C

Select a minimum of **eight (8)** units from Group C **OR** Group D. A minimum of **five (5)** units in each group must be units coded LMF*****

Unit code	Unit title	Prerequisites
Stream 1: Fine Furniture Making		
BSBDES301A	Explore the use of colour	
BSBPMG510A	Manage projects	
BSBSMB403A	Market the small business	
BSBSMB404A	Undertake small business planning	

Unit code	Unit title	Prerequisites
CUFDIG303A	Produce and prepare photo images	
CUVCOR09B	Select and apply drawing techniques and media to represent and communicate the concept	
CUVCRS03B	Produce computer-aided drawings	
CUVCRS04B	Produce technical drawings	
LMFFDT4001A	Apply finishing techniques to custom furniture	
LMFFDT4002A	Assemble custom furniture	
LMFFDT4005A	Construct and evaluate furniture prototypes and samples	
LMFFDT4009A	Prepare and present furniture design information	
LMFFDT4010A	Produce and evaluate developmental furniture models to scale	
LMFFDT4011A	Set up, operate and maintain basic static woodworking machines	
LMFFDT4015A	Research furniture styles and	

Unit code	Unit title	Prerequisites
	movements	
LMFFDT4016A	Select, use and maintain hand tools for the creation of custom furniture	
LMFFDT4017A	Set up and operate a wood turning lathe to produce off-centre work	
LMFFDT4018A	Produce templates and jigs for custom made furniture	
LMFFM4005A	Hand carve wood to custom design	
LMFFM4006A	Construct joints for custom furniture	
LMFFM4007A	Produce curved and shaped components for custom furniture	
LMFFM4008A	Produce timber veneered components for custom furniture	
LMFFT4010B	Identify and calculate production costs	
LMFFT4011A	Purchase materials and consumables for furniture production	

Group D

Unit code	Unit title	Prerequisites
Stream 2: Furniture design		

Unit code	Unit title	Prerequisites
BSBCRT401A	Articulate, present and debate ideas	
BSBCRT402A	Collaborate in a creative process	
BSBCRT403A	Explore the history and social impact of creativity	
BSBCRT501A	Originate and develop concepts	
BSBDES301A	Explore the use of colour	
BSBDES303A	Explore and apply the creative design process to 3D forms	
BSBDES305A	Source and apply information on the history and theory of design	
BSBDES403A	Develop and extend design skills and practice	
BSBPMG510A	Manage projects	
BSBSMB403A	Market the small business	
BSBSMB404A	Undertake small business planning	
BSBSMB407A	Manage a small team	
CUFDIG303A	Produce and prepare photo images	
CUFDIG304A	Create visual design components	
CUVCOR09B	Select and apply drawing techniques and media to represent and communicate the concept	
CUVCRS03B	Produce computer-aided	

Unit code	Unit title	Prerequisites
	drawings	
CUVCRS04B	Produce technical drawings	
LMFFDT4003A	Assess and record the lifecycle of a product	
LMFFDT4004A	Assess environmental impact of a design	
LMFFDT4005A	Construct and evaluate furniture prototypes and samples	
LMFFDT4009A	Prepare and present furniture design information	
LMFFDT4013A	Research and select furniture finishes	
LMFFT4010B	Identify and calculate production costs	
MEM15001B	Perform basic statistical quality control	
MEM16006A	Organise and communicate information	
MEM16007A	Work with others in a manufacturing, engineering or related environment	
MEM16008A	Interact with computing technology	
MEM16013A	Operate in a self directed team	MEM16007A
MEM30001A	Use computer aided drafting systems to produce basic engineering drawings	MEM16006A MEM16008A
MEM30004A	Use CAD to create and display 3D models	MEM16008A MEM30001A

Unit code	Unit title	Prerequisites
MEM30024A	Participate in quality assurance techniques	MEM15001B
MSACMT230A	Apply cost factors to work practices	
MSACMT430A	Improve cost factors in work practices	
MSAENV472B	Implement and monitor environmentally sustainable work practices	

Group E

Up to **five (5)** relevant units can be chosen from other units not already selected from Groups B, C and D, or units available in this Training Package, other endorsed Training Packages and accredited courses. Those units must be aligned at Certificate IV level (maximum 2 units), Diploma level or Advanced Diploma level (maximum 2 units).

Units selected from other Training Packages and accredited courses via Group E must be relevant to the qualification outcome and not duplicate units available within this qualification.

If Competitive Manufacturing units are chosen (identified as MSACM in the code), these should only be selected on the basis of work requirements.