



**Australian Government**

# **FPI40411 Certificate IV in Timber Truss and Frame Design**

**Release 4**

# FPI40411 Certificate IV in Timber Truss and Frame Design

## Modification History

### Release 4

Two imported units of competency updated:

- Elective unit HLTAID006 replaces HLTFA412A
- Elective unit HLTAID008 replaces HLTFA403C

### Release 2

Imported units added to Group B elective bank:

- MSS015011A
- MSS405070A

Imported units updated to current versions:

- BSBPMG415A replaces BSBPMG407A – Not equivalent
- BSBPMG522A replaces BSBPMG510A – Equivalent
- CPCCCA3006B replaces CPCCCA3006A – Equivalent
- HLTFA412A replaces HLTFA402C – Not equivalent
- MSS404050A replaces MSACMT450A – Equivalent, new prerequisite unit
- MSS404060A replaces MSACMT460A – Not equivalent

### Release 1.1

**Ten imported units of competency updated:**

- BSBCUS401B replaces BSBCUS401A - Equivalent
- BSBITS401B replaces BSBITS401A - Equivalent
- CUVDES405A replaces CUVDSP15B - Equivalent
- HLTFA403C replaces HLTFA403A - Equivalent
- MSS403010A replaces MSACMC401A - Equivalent
- MSS403001A replaces MSACMS400A - Equivalent
- MSS402050A replaces MSACMT250A - Equivalent
- MSS404082A replaces MSACMT482A - Equivalent
- TAEASS401B replaces TAEASS401A - Equivalent
- TAEASS402B replaces TAEASS402A - Equivalent

## Description

This qualification is designed for job roles in the timber processing sector of the forest and forest products industry.

## Pathways Information

This qualification has one employment pathway for typical operational environments of timber truss and frame design. This is:

- Designer (Timber Truss & Frame)

### *Pathways advice*

There is an entry requirement into FPI50411 Diploma of Timber Truss and Frame Design. For those seeking a pathway to this qualification, recommended elective units are:

Forest	FPICOT4202B	Design timber structures
	FPITMM4201B	Construct prototypes and samples
Manufacturing	MSAPMSUP390A	Use structured problem solving tools
Construction	CPCCBC4001A	Apply building codes and standards to the construction process for low rise building projects
	CPCSUS4001A	Implement and monitor environmentally sustainable work practices

## Licensing/Regulatory Information

Native FPI units may be subject to state or territory licensing, legislative, regulatory or certification requirements.

Some imported units in the elective bank may be subject to state or territory codes, regulations, licences and/or permits. These units must be implemented in line with the licensing requirements outlined in the unit's parent Training Package.

## Entry Requirements

### *Entry Requirements*

The entry requirement for this qualification is the successful achievement of the following units contained in FPI30911 Certificate III Timber Truss and Frame Design and Manufacture:

FPICOT3204B Prepare and interpret sketches and drawings

FPICOT3214B Take off material quantities

FPICOT3218B Quote and interpret from manufactured timber product plans

FPICOT3220B Quote and interpret from computerised timber manufactured product plans

FPICOT3239B Create drawings using computer aided design systems

*Plus at least one of the following units:*

PITMM3204A Interpret designs to prepare timber roof truss drawings and documents using computers

FPITMM3205A Interpret designs to prepare timber floor system drawings and documents using computers

FPITMM3206A Interpret designs to prepare timber wall frame drawings and documents using computers

*or demonstration of equivalent competence*

*Note: The design unit selected will be determined by the industry sector and type of product being manufactured*

## Employability Skills Summary

### EMPLOYABILITY SKILLS QUALIFICATION SUMMARY

The following table contains a summary of the employability skills for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that may vary depending on the packaging options.

Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	<ul style="list-style-type: none"> <li>Record and report quality and product care procedures</li> <li>Interact appropriately with colleagues and others in the workplace</li> <li>Use culturally appropriate communication skills</li> </ul>
Teamwork	<ul style="list-style-type: none"> <li>Facilitate the development of the workgroup</li> <li>Determine team development needs</li> </ul>
Problem-solving	<ul style="list-style-type: none"> <li>Identify problems, environmental issues and equipment faults and demonstrate appropriate response procedures</li> <li>Assess and rectify problems to avoid loss of product</li> <li>Identify and implement improvements in learning arrangements</li> </ul>
Initiative and enterprise	<ul style="list-style-type: none"> <li>Identify resources and timelines required for learning activities</li> <li>Conduct progress reviews</li> <li>Monitor material grading for best end use</li> </ul>
Planning and organising	<ul style="list-style-type: none"> <li>Monitor and record organisational environmental goals</li> <li>Plan product recovery to optimise resource value and minimise waste</li> <li>Coordinate and monitor quality of output</li> </ul>
Self-management	<ul style="list-style-type: none"> <li>Monitor tasks in accordance with legislative requirements</li> <li>Organise duties, equipment and materials in accordance with SHE requirements</li> </ul>
Learning	<ul style="list-style-type: none"> <li>Identify and implement learning and development needs</li> <li>Provide workplace learning opportunities</li> <li>Provide coaching and mentoring assistance</li> </ul>
Technology	<ul style="list-style-type: none"> <li>Monitor machinery and equipment maintenance</li> <li>Identify and verify design inputs</li> <li>Review and test design options</li> <li>Prepare truss drawings, production documents and installation instructions and test designs and specifications using custom software</li> </ul>

## Packaging Rules

Total number of units = 17

- 3 core units plus
- 14 elective units, consisting of:
  - 1 unit from Group A
  - 5 units from Group A and/or Group B
  - up to 8 units from Group A, B or C
  - up to 3 units recommended for packaging at Certificate III, IV or Diploma level from this or any other endorsed Training Package or state/territory accredited course.

Elective units must be relevant to work undertaken in the truss and frame industry.

### CORE UNITS

Field	Unit Code	Unit Title
Core	BSBLED401A	Develop teams and individuals
	FPICOR4201B	Monitor safety, health and environment policies and procedures
	FPICOR4203B	Monitor quality and product care procedures

### GROUP A ELECTIVE UNITS

Field	Unit Code	Unit Title
Forest	FPITMM4205A	Prepare and advise on a broad range of timber roof truss details using computers
	FPITMM4206A	Prepare and advise on a broad range of timber floor system details using computers
	FPITMM4207A	Prepare and advise on a broad range of timber wall frame details using computers

### GROUP B ELECTIVE UNITS

Field	Unit Code	Unit Title
Forest	FPICOT4202B	Design timber structures
	FPITMM4201B	Construct prototypes and samples

<b>Business</b>	BSBLED501A	Develop a workplace learning environment
<b>Manufacturing</b>	MSAPMSUP390A	Use structured problem solving tools
	MSS015011A	Conduct a sustainability energy audit
	MSS405070A	Develop and manage sustainable energy practices
<b>Construction</b>	CPCCBC4001A	Apply building codes and standards to the construction process for low rise building projects
	CPCSUS4001A	Implement and monitor environmentally sustainable work practices

### GROUP C ELECTIVE UNITS

<b>Field</b>	<b>Unit Code</b>	<b>Unit Title</b>
<b>Forest</b>	FPICOT4203B	Plan and coordinate product assembly
	FPITMM4202B	Diagnose and calculate production costs
	FPITMM4203B	Install and commission CNC software
<b>Business</b>	BSBCMM401A	Make a presentation
	BSBCUS401B	Coordinate implementation of customer service strategies
	BSBINM401A	Implement workplace information system
	BSBITS401B	Maintain business technology
	BSBMGT402A	Implement operational plan
	BSBPMG415A	Apply project risk-management techniques
	BSBPMG522A	Undertake project work

<b>Construction</b>	CPCCBC4004A	Identify and produce estimated costs for building and construction projects
	CPCCBC4005A	Produce labour and material schedules for ordering
	CPCCBC4024A	Resolve business disputes
	CPCCCA3006B	Erect roof trusses
	CPCCSV5010A	Interact with clients in a regulated environment
	CPCCOHS2001A	Apply OHS requirements, policies and procedures in the construction industry
<b>Visual Arts, Crafts and Design</b>	CUVDES405A	Research and apply techniques in spatial design
<b>Health and Safety</b>	HLTAID008	Manage first aid services and resources
	HLTAID006	Provide advanced first aid
<b>Manufacturing</b>	MSS403010A	Facilitate change in an organisation implementing competitive systems and practices
	MSS403001A	Implement competitive systems and practices
	MSS402050A	Monitor process capability
	MSS404050A	Undertake process capability improvements (*Prerequisite <i>MSS404052A Apply statistics to operational processes</i> )
	MSS404060A	Facilitate the use of planning software systems in a work area or team
	MSS404082A	Assist in implementing a proactive maintenance strategy
	MSAPMOPS404A	Co-ordinate maintenance



<b>Training</b>	TAEASS401B	Plan assessment activities and processes
	TAEASS402B	Assess competence
	TAEDEL401A	Plan, organise and deliver group-based learning
	TAEDEL402A	Plan, organise and facilitate learning in the workplace