



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **FPI40410 Certificate IV in Timber Truss and Frame Design**

**Release: 1**

## **FPI40410 Certificate IV in Timber Truss and Frame Design**

### **Modification History**

Not Applicable

### **Description**

Not Applicable

### **Pathways Information**

#### *Pathways advice*

There is an entry requirement into FPI50410 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  | CPCCBBC4001A | 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**

Not Applicable

## Entry Requirements

### *Entry Requirements*

The entry requirement for this qualification is the successful achievement of the following units contained in FPI30910 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:

|             |   |
|-------------|---|
| FPITMM3204A | 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> </ul>  |

| <b>EMPLOYABILITY SKILLS QUALIFICATION SUMMARY</b> |  |
|---|--|
|   | <ul style="list-style-type: none"> <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

### Packaging Rules

Total number of units = 17

3 Core units *plus*

1 Elective unit from Group A *plus*

5 Elective units from Group A or B *plus*

5 Elective units from Group A, B or C *plus*

3 Elective units from Group A, B or C or up to 3 relevant units may be selected from units recommended for packaging at Certificate III, Certificate IV or Diploma in any endorsed Training Package or State/Territory accredited course

### CORE UNITS

| <b>Field</b> | <b>Unit Code</b> | <b>Unit Name</b>   |
|--------------|------------------|--|
| Core         | FPICOR4201B      | Monitor safety, health and environment policies and procedures |
|              | FPICOR4203B      | Monitor quality and product care procedures                    |
|              | BSBLED401A       | Develop teams and individuals                                  |

**CORE UNITS****GROUP A ELECTIVE UNITS**

| <b>Field</b> | <b>Unit Code</b> | <b>Unit Name</b>   |
|--------------|------------------|--|
| 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**

| <b>Field</b>  | <b>Unit Code</b> | <b>Unit Name</b>  |
|---------------|------------------|---|
| Forest        | FPICOT4202B      | Design timber structures  |
|               | FPITMM4201B      | Construct prototypes and samples  |
| Business      | BSBLED501A       | Develop a workplace learning environment  |
| Manufacturing | MSAPMSUP390A     | Use structured problem solving tools  |
| Construction  | CPCCBBC4001A     | 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 Name</b>   |
|--------------|------------------|--|
| Forest       | FPICOT4203B      | Plan and coordinate product assembly                     |
|              | FPITMM4202B      | Diagnose and calculate production costs                  |
|              | FPITMM4203B      | Install and commission CNC software                      |
| Business     | BSBCMM401A       | Make a presentation                                      |
|              | BSBCUS401A       | Coordinate implementation of customer service strategies |
|              | BSBINM401A       | Implement workplace information system                   |

**CORE UNITS**

|                                   |              |   |
|-----------------------------------|--------------|---|
|                                   | BSBITS401A   | Maintain business technology  |
|                                   | BSBMGT402A   | Implement operational plan  |
|                                   | BSBPMG407A   | Apply risk management techniques  |
|                                   | BSBPMG510A   | Manage projects   |
| Construction                      | CPCCBBC4004A | Identify and produce estimated costs for building and construction projects               |
|                                   | CPCCBBC4005A | Produce labour and material schedules for ordering  |
|                                   | CPCCBBC4024A | Resolve business disputes   |
|                                   | CPCCCA3006A  | Erect roof trusses  |
|                                   | CPCCSV5010A  | Interact with clients in a regulated environment  |
|                                   | CPCCOHS2001A | Apply OHS requirements, policies and procedures in the construction industry              |
| Visual Arts,<br>Crafts and Design | CUVDSP15B    | Research and apply techniques for application to spatial design                           |
| Health and Safety                 | HLTFA402B    | Apply advanced first aid ( <i>unit has HLTFA301B Apply first aid as a pre-requisite</i> ) |
|                                   | HLTFA403A    | Manage first aid in the workplace   |
| Manufacturing                     | MSACMC410A   | Lead change in a manufacturing environment  |
|                                   | MSACMS400A   | Implement a competitive manufacturing system  |
|                                   | MSACMT250A   | Monitor process capability  |
|                                   | MSACMT450A   | Undertake process capability improvements   |
|                                   | MSACMT460A   | Facilitate the use of planning software systems in manufacturing                          |
|                                   | MSACMT482A   | Assist in implementing a proactive maintenance strategy                                   |
|                                   | MSAPMOPS404A | Co-ordinate maintenance   |

**CORE UNITS**

|          |            |   |
|----------|------------|---|
| Training | TAEASS401A | Plan assessment activities and processes                |
|          | TAEASS402A | Assess competence                                       |
|          | TAEDEL401A | Plan, organise and deliver group-based learning         |
|          | TAEDEL402A | Plan, organise and facilitate learning in the workplace |