

### Description

This qualification may apply to employees of civil aviation maintenance organisations or to members of the Australian Defence Force who are engaged in the repair and modification of aircraft structures. The qualification defines the exit from apprenticeship and may apply to work performed in hangars on the structure of complete aircraft and to work performed in workshops on structural components.

The training pathways provide for work on both metal and composite structure. In some cases, primarily in the General Aviation sector, individuals may be also required to work on aircraft with wooden structure and/or fabric covering. The applicable competencies are covered in units and MEA357A Inspect, test and repair aircraft fabric surfaces, MEA358A Recover aircraft fabric surfaces and MEA359A Inspect and repair aircraft wooden structures

### The qualification consists of:

- Common and imported units that apply to all Aeroskills specialist streams at Certificate III and IV levels
- Mandatory and elective mechanical technical stream units that provide a required degree of multi-skilling
- Mandatory structures technical stream units

### Pathways Information

A limited number of credits are also provided towards the MEA50210 Diploma of Aeroskills (Mechanical).

#### Qantas

Qantas has minimum entry level requirements before making your application to join the Qantas Engineering Apprenticeship program.

Brisbane Based - Mechanical and Structures Trades are available to candidates who are currently completing or have completed an Aero-Skills Pre-Vocational Course with QIAE.

For more information on Qantas's Engineering Apprenticeship Program visit:

<http://careers.qantas.com.au/Apprentices/Requirements.aspx>

### Licensing/Regulatory Information

Not applicable.

### Entry Requirements

The minimum entry requirements is a recognized education program equivalent to 'Year 11' of a Australian secondary education program, with passes in Mathematics, English & General Sciences.

### Employability Skills Summary

Employability Skills Qualification Summary	
Employability Skill	Industry/enterprise requirements for this qualification include:
Communication	<ul style="list-style-type: none"> <li>Understanding work and organisational instructions</li> <li>Seeking guidance and describing clearly faults, problems and spares requirements</li> <li>Negotiating with team members regarding timing and progress of work activities</li> <li>Understanding and interpreting procedures, instructions and maintenance publications</li> <li>Completing maintenance documentation and component tags</li> <li>Reading drawings relating to maintenance activities</li> <li>Using computers to obtain maintenance data and complete documentation</li> <li>Networking with other team members regarding work planning and execution</li> </ul>
Teamwork	<ul style="list-style-type: none"> <li>Performing tasks as an individual while being responsive to supervisors and allowing for relevant human factors</li> <li>Working effectively with supervisors, qualified persons providing guidance and other team members who may be of different ages, gender, race, religion and political persuasion</li> <li>Working effectively as a member of a team and gaining the trust and support of other team members</li> </ul>
Problem-solving	<ul style="list-style-type: none"> <li>With qualified person guidance identifying problems and developing practical solutions to maintenance problems not fully covered by maintenance data</li> <li>Proposing solutions to problems as modifications or a amendments to specified maintenance processes</li> <li>Responding to emergencies or accidents in accordance with regulatory and organisational requirements</li> <li>Using mathematical techniques to obtain and apply dimensional and tolerance data and to convert values between systems of measurement</li> </ul>
Initiative and enterprise	<ul style="list-style-type: none"> <li>Adapting to new situations that arise as a consequence of revised maintenance data, practices and procedures</li> <li>Varying work practices and behavior as a result of performance feedback during competency development and job performance</li> <li>Evaluating under guidance ideas that may result in modifications or changes to work processes</li> <li>Applying human factors to avoid maintenance errors and maintain quality standards and adapting competencies to the performance of a range of maintenance tasks</li> <li>Contributing to a process of continuous improvement and a willingness to support and participate in the effective introduction of new work practices</li> </ul>
Planning and organising	<ul style="list-style-type: none"> <li>Clarifying task objectives and required outcomes with supervisors and with qualified persons providing guidance</li> </ul>

Employability Skills Qualification Summary	
Self-management	<ul style="list-style-type: none"> <li>• Accepting responsibility for managing individual workload to meet target completion times or fit in with team milestones</li> <li>• Actively seeking opportunities to develop competencies and to apply them across a range of tasks and monitoring performance using indicators such as the extent of guidance required and the level of supervision exercised by supervisors</li> <li>• Identifying career paths beyond Certificate II, especially with regard to on-aircraft as an aircraft maintenance engineer or component repair and overhaul in workshops</li> </ul>
Learning	<ul style="list-style-type: none"> <li>• Taking advantage of learning opportunities that arise through expansion of the range of tasks and through organisational continuation training</li> <li>• Adapting competencies to accommodate new ideas and techniques</li> <li>• Using feedback from qualified persons and supervisors to identify ways in which competence can be improved</li> </ul>
Technology	<ul style="list-style-type: none"> <li>• Maintaining components and component parts that are within the scope of competencies and selecting applicable tools and equipment</li> <li>• Storing and caring for components, component parts, tools and support equipment</li> <li>• Using test equipment that is within the scope of competencies held</li> <li>• Amending print-based maintenance publications</li> <li>• Using computers and microfiche to obtain maintenance data and using computers to complete documentation</li> </ul>

### Packaging Rules

To be awarded Certificate IV in Aeroskills (Structures), competency must be demonstrated in 18 units of competency. These units must be chosen as follows:

- 16 Core units consisting of common, imported and technical stream units
- 2 Elective technical stream units from Group A

### Core Units

Unit Code	Unit Title	Prerequisite
MEA101B	Interpret occupational health and safety practices in aviation maintenance	Nil
MEA103B	Plan and organise aviation maintenance work activities	MEA101B, 105B, 107B, 108B
MEA105B	Apply quality standards applicable to aviation maintenance processes	MEA101B, 107B
MEA107B	Interpret and use aviation maintenance industry manuals and specifications	Nil
MEA108B	Complete aviation maintenance industry documentation	MEA105B
MEA109B	Perform basic hand skills, standard trade practices and fundamentals in aviation maintenance	MEA105B, 108B
MEA118A	Conduct self in the aviation maintenance environment	Nil
MEA302C	Remove and install aircraft hydro-mechanical and landing gear system components	MEA101B, 103B, 105B, 107B, 108B, 109B
MEA303C	Remove and install aircraft pneumatic system components	MEA101B, 103B, 105B, 107B, 108B, 109B
MEA327B	Fabricate and/or repair aircraft mechanical components or parts	MEA101B, 103B, 105B, 107B, 108B, 109B
MEA401B	Inspect aircraft structures	MEA101B, 103B, 105B, 107B, 108B, 109B
MEA402B	Fabricate aircraft structural components	MEA101B, 103B, 105B, 107B, 108B, 109B
MEA403B	Repair/modify aircraft structure	MEA401B, 402B
MEA404B	Disassemble and reassemble aircraft structure for major repair or modification	MEA403B
MEA405B	Repair/modify aircraft composite material structure/components	MEA401B
MSAENV272B	Participate in environmentally sustainable work practices	Nil

### Elective Units Group A

Select two units while observing the unit selection guidelines in Column 4

Unit Code	Unit Title	Prerequisite	Unit Selection Guidelines
MEA304C	Remove and install non-pressurised aircraft structural and non-structural components	MEA302C	Take this unit or MEA317C
MEA305C	Remove and install aircraft fixed wing flight control system components	MEA302C	Take this unit or MEA308C
MEA308C	Remove and install rotary wing rotor and flight control system components	MEA302C	Alternate to MEA305C
MEA317C	Remove and install pressurised aircraft structural and non-structural components	MEA302C, 303C	Alternate to MEA304C

### Unit Grid

- MEA101B Interpret occupational health and safety practices in aviation maintenance
- MEA103B Plan and organise aviation maintenance work activities
- MEA105B Apply quality standards applicable to aviation maintenance processes
- MEA107B Interpret and use aviation maintenance industry manuals and specifications
- MEA108B Complete aviation maintenance industry documentation
- MEA109B Perform basic hand skills, standard trade practices and fundamentals in aviation maintenance
- MEA118A Conduct self in the aviation maintenance environment
- MEA302C Remove and install aircraft hydro-mechanical and landing gear system components
- MEA303C Remove and install aircraft pneumatic system components
- MEA304C Remove and install non-pressurised aircraft structural and non-structural components
- MEA305C Remove and install aircraft fixed wing flight control system components
- MEA308C Remove and install rotary wing rotor and flight control system components
- MEA317C Remove and install pressurised aircraft structural and non-structural components
- MEA327B Fabricate and/or repair aircraft mechanical components or parts
- MEA401B Inspect aircraft structures
- MEA402B Fabricate aircraft structural components
- MEA403B Repair/modify aircraft structure
- MEA404B Disassemble and reassemble aircraft structure for major repair or modification
- MEA405B Repair/modify aircraft composite material structure/components
- MSAENV272B Participate in environmentally sustainable work practices