



Australian Government

MEA50215 Diploma of Aeroskills (Mechanical)

Release 2

MEA50215 Diploma of Aeroskills (Mechanical)

Modification History

Release 2 - Total number of core Certificate IV units required for B1 Licence sub-categories corrected from 18 to 17.

Release 1 - New qualification

Qualification Description

The qualification applies to individuals seeking the grant of a Civil Aviation Safety Authority (CASA) B1 Aircraft Maintenance Engineer Licence covering the supervision, performance and certification of airframe, engine, electrical and structural maintenance on aircraft that are type-rated by CASA for maintenance purposes.

The requirement for the awarding of MEA50215 Diploma of Aeroskills (Mechanical) is demonstrated competency in listed units of competency under the conditions set out below. The listed units also satisfy CASA requirements for the grant, under Civil Aviation Regulation (CASR) Part 66, of Aircraft Maintenance Engineer B1 Licences in sub-categories B1.1 and B1.3 when the skills and knowledge requirements align with CASA syllabus requirements in the Companion Volume and CASA Interface and training has been delivered in accordance with the requirements of CASR Part 147.

The qualification consists of:

- common and technical stream units required at Certificate IV level in the aircraft maintenance stream with electives determined by the desired licence sub-category
- additional Diploma level common units that cover supervisor level work health and safety (WHS) competency plus competencies required by CASA for the exercise of licence privileges
- Diploma level mechanical technical stream units covering advanced fault diagnosis and aircraft weighing and weight and balance calculation.

The qualification also provides credits towards the MEA50415 Diploma of Aviation Maintenance Management (Mechanical) and the MEA60215 Advanced Diploma of Aviation Maintenance Management (Mechanical).

Entry Requirements

Not applicable

Packaging Rules

To be awarded the MEA50215 Diploma of Aeroskills (Mechanical) competency must be demonstrated in **thirty-six (36) to forty-three (43)** units, chosen as described below.

All B1 Licence sub-categories require the following twenty-eight (28) units:

- **eleven (11)** core Diploma level (CASA licensing) common, technical stream and imported units
- **seventeen (17)** core Certificate IV common and technical stream units.

Depending on the CASA B1 Licence sub-category being sought, an additional **eight (8) to fifteen (15)** units are required, up to a maximum of **forty-three (43)** units for the qualification. All units must be chosen as specified under the conditions set out below:

- Group A elective technical stream units required by CASA for a B1.1 Licence – **thirteen (13) or fifteen (15)** units
- Group B elective technical stream units required by CASA for a B1.3 Licence – **eight (8)** units.

Core units of competency

- Complete the **eleven (11)** Diploma level common and mechanical technical stream units listed below.

Unit code	Unit title	Prerequisites
MEA111	Perform administrative processes to prepare for the certification of civil aircraft maintenance	All Cert IV units listed below for applicable licence (see Note 1)
MEA112	Plan and implement civil aircraft maintenance activities	All Cert IV units listed below for applicable licence (see Note 1)
MEA113	Supervise civil aircraft maintenance activities and manage human resources in the workplace	All Cert IV units listed below for applicable licence (see Note 1)
MEA116	Apply work health and safety procedures at supervisor level in aviation maintenance	
MEA142	Manage self in the aviation maintenance environment	

Unit code	Unit title	Prerequisites
MEA148	Apply mathematics and physics in aviation maintenance	
MEA323	Perform advanced troubleshooting in aircraft mechanical maintenance	All Cert IV units listed below for applicable licence (see Note 1)
MEA325	Weigh aircraft and perform aircraft weight and balance calculations as a result of modifications	All Cert IV units listed below for applicable licence (see Note 1)
MEA343	Remove and install avionic system components	MEA211 or MEA227
MEA365	Assess structural repair/modification requirements and evaluate structural repairs and modifications	All Cert IV units listed below for applicable licence (see Note 1)
MSAENV472B	Implement and monitor environmentally sustainable work practices	

Note 1: While the units do not have specific prerequisite units it is a CASA licensing requirement that competency not be sought until all of the Certificate IV units listed below for the applicable licence have been attained.

- Plus the following **seventeen (17)** core Certificate IV common and avionic/mechanical technical stream units listed below which are mandatory for both B1.1 and B1.3 Licence sub-categories.

Unit code	Unit title	Prerequisites
MEA101	Interpret work health and safety practices in aviation maintenance	
MEA103	Plan and organise aviation maintenance work activities	MEA101, MEA105 MEA107, MEA108
MEA105	Apply quality standards applicable to aviation maintenance processes	MEA101, MEA107
MEA107	Interpret and use aviation maintenance industry	

Unit code	Unit title	Prerequisites
	manuals and specifications	
MEA108	Complete aviation maintenance industry documentation	MEA105
MEA109	Perform basic hand skills, standard trade practices and fundamentals in aviation maintenance	MEA105, MEA108
MEA118	Conduct self in the aviation maintenance environment	
MEA201	Remove and install miscellaneous aircraft electrical hardware/components	MEA101, MEA103 MEA105, MEA107 MEA108, MEA109
MEA203	Remove and install advanced aircraft electrical system components	MEA201
MEA246	Fabricate and/or repair aircraft electrical hardware or parts	MEA201, MEA260
MEA260	Use electrical test equipment	MEA101, MEA103 MEA105, MEA107 MEA108, MEA109
MEA301	Perform aircraft flight servicing	MEA101, MEA103 MEA105, MEA107 MEA108, MEA109
MEA302	Remove and install aircraft hydro-mechanical and landing gear system components	MEA101, MEA103 MEA105, MEA107 MEA108, MEA109
MEA303	Remove and install aircraft pneumatic system components	MEA101, MEA103 MEA105, MEA107 MEA108, MEA109
MEA306	Remove and install engines and engine system components	MEA302
MEA328	Maintain and/or repair aircraft mechanical components or parts	MEA302, MEA303
MEA339	Inspect, repair and maintain aircraft structures	MEA304 or MEA317

Elective units of competency

Group A

- To meet the criteria for the grant of a B1.1 Licence complete **thirteen (13)** or **fifteen (15)** units listed below as specified in the unit selection guidelines in column 4.

Unit code	Unit title	Prerequisites	Unit selection guidance
MEA208	Remove and install pressurisation control system components	MEA201	
MEA209	Remove and install aircraft oxygen system components	MEA101, MEA103 MEA105, MEA107 MEA108, MEA109	
MEA219	Inspect, test and troubleshoot pressurisation control systems and components	MEA208 MEA246	
MEA222	Inspect, test and troubleshoot aircraft oxygen systems and components	MEA209	
MEA223	Inspect aircraft electrical systems and components	MEA203, MEA246	
MEA227	Test and troubleshoot aircraft electrical systems and components	MEA223	
MEA305	Remove and install aircraft fixed wing flight control system components	MEA302	
MEA307	Remove and install propeller systems and components	MEA101, MEA103 MEA105, MEA107 MEA108, MEA109	Mandatory for B1.1 where the rating sought includes propellers
MEA315	Inspect, test and troubleshoot propeller systems and components	MEA307	Mandatory unit for B1.1 where the rating sought includes propellers
MEA317	Remove and install pressurised aircraft structural and	MEA302, MEA303	

Unit code	Unit title	Prerequisites	Unit selection guidance
	non-structural components		
MEA318	Inspect aircraft hydro-mechanical, mechanical, gaseous and landing gear systems and components	MEA302, MEA303 MEA305	
MEA319	Inspect gas turbine engine systems and components	MEA306	
MEA320	Test and troubleshoot aircraft hydro-mechanical, mechanical, gaseous and landing gear systems and components	MEA318	
MEA321	Test and troubleshoot aircraft fixed wing flight control systems and components	MEA318	
MEA322	Test and troubleshoot gas turbine engine systems and components	MEA319	

Group B

- To meet the criteria for the grant of a B1.3 Licence complete **eight (8)** units listed below.

Unit code	Unit title	Prerequisites
MEA211	Inspect, test and troubleshoot advanced aircraft electrical systems and components	MEA203, MEA246
MEA304	Remove and install non-pressurised aircraft structural and non-structural components	MEA302
MEA308	Remove and install rotary wing rotor and flight control system components	MEA302
MEA309	Inspect, test and troubleshoot aircraft hydro-mechanical and landing gear systems and components	MEA302
MEA310	Inspect, test and troubleshoot aircraft pneumatic systems and components	MEA303

Unit code	Unit title	Prerequisites
MEA316	Inspect, test and troubleshoot rotary wing rotor and control systems and components	MEA308
MEA319	Inspect gas turbine engine systems and components	MEA306
MEA322	Test and troubleshoot gas turbine engine systems and components	MEA319

Qualification Mapping Information

This qualification supersedes and is equivalent to MEA50211 with regard to eligibility for the grant of B1.1 and B1.3 Licences.

Links

MSA Training Package Implementation Guides - <http://mskills.org.au/training-packages/info/>