



Australian Government

**MEA50219 Diploma of Aeroskills
(Mechanical)**

Release 2

MEA50219 Diploma of Aeroskills (Mechanical)

Modification History

Release 2. Qualification description updated. Supersedes and equivalent to MEA50219 Diploma of Aeroskills (Mechanical) (Release 1).

Release 1. MEA50219 Diploma of Aeroskills (Mechanical) supersedes and is not equivalent to MEA50218 Diploma of Aeroskills (Mechanical) Release 1.

Non-equivalent qualification due to addition of two elective unit groups to meet the requirements of Civil Aviation Safety Authority (CASA) licence subcategories B1.2 and B1.4.

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 qualification satisfies CASA requirements under Civil Aviation Safety Regulations (CASR) 1998, for the grant of Aircraft Maintenance Engineer Licences in sub-categories B1.1, B1.2, B1.3 and B1.4 when the knowledge and skills requirements align with CASA syllabus requirements in the Companion Volume Implementation Guide Interface with CASA, and training has been delivered in accordance with the requirements of CASR Part 147.

Credits are also provided towards the MEA50422 Diploma of Aviation Maintenance Management and the MEA60222 Advanced Diploma of Aviation Maintenance Management.

Entry Requirements

Not applicable

Packaging Rules

To be awarded the MEA50219 Diploma of Aeroskills (Mechanical) competency must be demonstrated in 35 to 43 units, chosen as described below.

All B1 Licence sub-categories require the following 28 units:

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

Depending on the CASA B1 Licence sub-category being sought, an additional 7 to 15 units are required. 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 – **13 or 15** units

Group B Elective technical stream units required by CASA for a B1.2 licence - **13** units.

Group C Elective technical stream units required by CASA for a B1.3 Licence - **8** units.

Group D Elective technical stream units required by CASA for a B1.4 licence - **7** units.

Core units of competency

Complete the **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	
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)

Unit code	Unit title	Prerequisites
MEA343	Remove and install avionic system components	MEA294 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)
MSMENV472	Implement and monitor environmentally sustainable work practices	

Note 1: While the above core 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 17 core Certificate IV common and avionic/mechanical technical stream units listed below which are mandatory for CASA B1 licence subcategories.

Unit code	Unit title	Prerequisites
MEA107	Interpret and use aviation maintenance industry manuals and specifications	
MEA118	Conduct self in the aviation maintenance environment	
MEA154	Apply work health and safety practices in aviation maintenance	
MEA155	Plan and organise aviation maintenance work activities	MEA154
MEA156	Apply quality standards during aviation maintenance activities	MEA107, MEA154
MEA157	Complete aviation maintenance industry documentation	
MEA158	Perform basic hand skills, standard trade practices and fundamentals in aviation maintenance	
MEA201	Remove and install miscellaneous aircraft electrical hardware/components	MEA107, MEA154, MEA155 MEA156, MEA157, MEA158

Unit code	Unit title	Prerequisites
MEA203	Remove and install advanced aircraft electrical system components	MEA201
MEA246	Fabricate and/or repair aircraft electrical hardware or parts	MEA201, MEA296
MEA296	Use electrical test equipment in aviation maintenance activities	MEA107, MEA154, MEA155 MEA156, MEA157, MEA158
MEA301	Perform aircraft flight servicing	MEA107, MEA154, MEA155, MEA156, MEA157, MEA158
MEA303	Remove and install aircraft pneumatic system components	MEA107, MEA154, MEA155 MEA156, MEA157, MEA158
MEA306	Remove and install engines and engine system components	MEA107, MEA154, MEA155, MEA156, MEA157, MEA158
MEA328	Maintain and/or repair aircraft mechanical components or parts	MEA303, MEA398
MEA339	Inspect, repair and maintain aircraft structures	MEA304 or MEA317
MEA398	Remove and install aircraft hydro-mechanical and landing gear system components	MEA154

Elective units of competency

Group A

To meet the criteria for the grant of a **B1.1** Licence complete **13** or **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 aircraft pressurisation control system components	MEA201	
MEA209	Remove and install aircraft oxygen system components	MEA107, MEA154 MEA155, MEA156, MEA157, MEA158	
MEA219	Inspect, test and troubleshoot	MEA208, MEA246	

Unit code	Unit title	Prerequisites	Unit selection guidance
	pressurisation control systems and components		
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	MEA398	
MEA307	Remove and install propeller systems and components	MEA107, MEA154, MEA155, MEA156, MEA157, MEA158	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 non-structural components	MEA369 or MEA398 and MEA303	
MEA318	Inspect aircraft hydro-mechanical, mechanical, gaseous and landing gear systems and components	MEA303, MEA305, MEA398	
MEA319	Inspect gas turbine engine systems and components	MEA306	
MEA320	Test and troubleshoot aircraft hydro-mechanical, gaseous and landing gear systems and components	MEA318	
MEA321	Test and troubleshoot aircraft fixed wing flight control systems and components	MEA318	

Unit code	Unit title	Prerequisites	Unit selection guidance
MEA322	Test and troubleshoot gas turbine engine systems and components	MEA319	

Group B

To meet the criteria for a **B1.2** Licence complete 13 units listed below.

Unit code	Unit title	Prerequisites
MEA208	Remove and install pressurisation control system components	MEA201
MEA209	Remove and install aircraft oxygen system components	MEA107, MEA154 MEA155, MEA156 MEA157, MEA158
MEA219	Inspect, test and troubleshoot pressurisation control systems and components	MEA208, MEA246
MEA222	Inspect, test and troubleshoot aircraft oxygen systems and components	MEA209
MEA294	Inspect, test and troubleshoot advanced aircraft electrical systems and components	MEA203
MEA305	Remove and install aircraft fixed wing flight control system components	MEA398
MEA307	Remove and install propeller systems and components	MEA107, MEA154 MEA155, MEA156 MEA157, MEA158
MEA309	Inspect, test and troubleshoot aircraft hydro-mechanical and landing gear systems and components	MEA398

Unit code	Unit title	Prerequisites
MEA310	Inspect, test and troubleshoot aircraft pneumatic systems and components	MEA303
MEA312	Inspect, test and troubleshoot aircraft fixed wing flight control systems and components	MEA305
MEA313	Inspect, test and troubleshoot piston engine systems and components	MEA306
MEA315	Inspect, test and troubleshoot propeller systems and components	MEA307
MEA317	Remove and install pressurised aircraft structural and non-structural components	MEA369 or MEA398 and MEA303

Group C

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

Unit code	Unit title	Prerequisites
MEA294	Inspect, test and troubleshoot advanced aircraft electrical systems and components	MEA203
MEA304	Remove and install non-pressurised aircraft structural and non-structural components	MEA398
MEA308	Remove and install rotary wing rotor and flight control system components	MEA398
MEA309	Inspect, test and troubleshoot aircraft hydro-mechanical and landing gear systems and components	MEA398
MEA310	Inspect, test and troubleshoot aircraft pneumatic systems and	MEA303

Unit code	Unit title	Prerequisites
	components	
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

Group D

To meet the criteria for a B1.4 Licence complete 7 units listed below

Unit code	Unit title	Prerequisites
MEA294	Inspect, test and troubleshoot advanced aircraft electrical systems and components	MEA203
MEA304	Remove and install non-pressurised aircraft structural and non-structural components	MEA398
MEA308	Remove and install rotary wing rotor and flight control system components	MEA398
MEA309	Inspect, test and troubleshoot aircraft hydro-mechanical and landing gear systems and components	MEA398
MEA310	Inspect, test and troubleshoot aircraft pneumatic systems and components	MEA303
MEA313	Inspect, test and troubleshoot piston engine systems and components	MEA306
MEA316	Inspect, test and troubleshoot rotary wing rotor and control systems and components	MEA308

Qualification Mapping Information

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Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?docId=ce216c9c-04d5-4b3b-9bcf-4e81d0950371&n=Aeroskills%20Training%20Package>