



**Australian Government**

# **MEA30218 Certificate III in Aeroskills (Mechatronics)**

**Release: 1**

## MEA30218 Certificate III in Aeroskills (Mechatronics)

### Modification History

Release 1. Supersedes and equivalent to MEA30215 Certificate III in Aeroskills (Mechatronics). Unit codes updated.

### Qualification Description

This qualification applies to individuals employed within the General Aviation industry sector on the maintenance of small aircraft who are not seeking direct progression to a Civil Aviation Safety Authority (CASA) B1.2 Aircraft Maintenance Engineer Licence limited to basic small aircraft maintenance. It may also be of use as a first Aeroskills qualification for individuals transitioning from an allied trade to employment on small aircraft maintenance.

Individuals who intend to seek the grant of a licence in the future should consider the requirements for the MEA41018 Certificate IV in Aeroskills (Mechatronics) when selecting elective units of competency for this qualification.

Depending on the choice of elective units this qualification articulates with the MEA41018 Certificate IV in Aeroskills (Mechatronics) and a number of units also provide credits towards other qualifications at Certificate IV and Diploma levels.

### Entry Requirements

Not applicable

### Packaging Rules

To be awarded the MEA30218 Certificate III in Aeroskills (Mechatronics), competency must be demonstrated in **twenty (20)** units of competency, as follows:

**fifteen (15)** core units consisting of common, technical stream and imported units

**five (5)** elective units drawn from the technical stream units listed in Group A while observing the unit selection guidelines.

Core units of competency

Unit code	Unit title	Prerequisites
MEA107	Interpret and use aviation maintenance industry manuals and specifications	
MEA118	Conduct self in the aviation maintenance environment	
MEA148	Apply mathematics and physics in aviation maintenance	

<b>Unit code</b>	<b>Unit title</b>	<b>Prerequisites</b>
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	MEA154, MEA107
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	MEA154, MEA155 MEA156, MEA107 MEA157, MEA158
MEA246	Fabricate and/or repair aircraft electrical hardware or parts	MEA201, MEA296
MEA296	Use electrical test equipment in aviation maintenance activities	MEA154, MEA155 MEA156, MEA107 MEA157, MEA158
MEA301	Perform aircraft flight servicing	MEA154, MEA155 MEA156, MEA107 MEA157, MEA158
MEA364	Maintain and/or repair small aircraft mechanical components or parts	MEA154, MEA155 MEA156, MEA107 MEA157, MEA158
MEA369	Inspect and maintain structures and related components of non-pressurised small aircraft	MEA154, MEA155 MEA156, MEA107 MEA157, MEA158
MSMENV272	Participate in environmentally sustainable work practices	Nil

## Elective units of competency

## Group A

Unit code	Unit title	Prerequisites	Unit selection guidelines
MEA202	Remove and install basic aircraft electrical system components	MEA201	Required for electrical retractable undercarriage maintenance – do not take with MEA274
MEA210	Inspect, test and troubleshoot basic aircraft electrical systems and components	MEA202, MEA246	Required for electrical retractable undercarriage maintenance – do not take with MEA274
MEA274	Maintain basic light aircraft electrical systems and components	MEA246	Required for 100 hourly inspection on basic light aircraft or helicopters
MEA275	Maintain basic light aircraft instrument systems and components	MEA246	Required for 100 hourly inspection on basic light aircraft or helicopters
MEA276	Maintain basic light aircraft communication and radio navigation systems and components	MEA246	Required for 100 hourly inspection on basic light aircraft or helicopters
MEA3000	Maintain small piston engine aircraft pressurisation systems		
MEA304	Remove and install non-pressurised aircraft structural and non-structural components	MEA398	Do not take with MEA317 – MEA363 provides credits towards this unit
MEA306	Remove and install engines and engine system components	MEA398	Applicable to piston and gas turbine engines
MEA307	Remove and install propeller	MEA154, MEA155	Required for

Unit code	Unit title	Prerequisites	Unit selection guidelines
	systems and components	MEA156, MEA107 MEA157, MEA158	variable pitch propellers
MEA308	Remove and install rotary wing rotor and flight control system components	MEA154, MEA155 MEA156, MEA107 MEA157, MEA158	Required for helicopters with powered flight controls – do not take with MEA352
MEA309	Inspect, test and troubleshoot aircraft hydro-mechanical and landing gear systems and components	MEA398	Required for hydraulic retractable undercarriage maintenance
MEA313	Inspect, test and troubleshoot piston engine systems and components	MEA306	Required for supercharged and turbocharged engines
MEA314	Inspect, test and troubleshoot gas turbine engine systems and components	MEA306	Required for gas turbine engines
MEA315	Inspect, test and troubleshoot propeller systems and components	MEA307	Required for variable pitch propellers
MEA316	Inspect, test and troubleshoot rotary wing rotor and control systems and components	MEA308	Required for helicopters with powered flight controls – count as 2 units - do not take with MEA352
MEA351	Maintain airframe systems of basic light fixed wing aircraft	MEA154, MEA155 MEA156, MEA107 MEA157, MEA158	Required for 100 hourly inspection on basic light aircraft
MEA352	Maintain basic rotary wing aircraft systems	MEA154, MEA155 MEA156, MEA107 MEA157, MEA158	Required for 100 hourly inspection on basic helicopters
MEA353	Maintain basic light aircraft	MEA154, MEA155	Required for 100 hourly inspection on

Unit code	Unit title	Prerequisites	Unit selection guidelines
	engines and propellers	MEA156, MEA107 MEA157, MEA158	basic light aircraft or helicopters
MEA354	Maintain light aircraft pneumatic systems	MEA154, MEA155 MEA156, MEA107 MEA157, MEA158	
MEA355	Maintain light aircraft air cycle air conditioning systems	MEA201, MEA246	
MEA357	Inspect, test and repair aircraft fabric surfaces	MEA154, MEA155 MEA156, MEA107 MEA157, MEA158	
MEA359	Inspect and repair aircraft wooden structures	MEA154, MEA155 MEA156, MEA107 MEA157, MEA158	
MEA360	Maintain aircraft diesel engines	MEA353	
MEA361	Maintain aircraft two stroke petrol engines	MEA353	
MEA362	Maintain aircraft vapour cycle air conditioning systems	MEA201, MEA246	
MEA367	Repair/modify aircraft composite structure using cold bonding	MEA369	Do not take with MEA405
MEA370	Repair the structure of non-pressurised small aircraft	MEA369	
MEA371	Perform major repairs and modifications to small aircraft metal structure	MEA369, MEA370	
MEA398	Remove and install aircraft hydro-mechanical and landing gear system components	MEA154	Required for hydraulic retractable undercarriage maintenance

<b>Unit code</b>	<b>Unit title</b>	<b>Prerequisites</b>	<b>Unit selection guidelines</b>
MEA405	Repair/modify aircraft composite material structure/components	MEA401 Note that MEA369 is equivalent to MEA401	Required for repairs to composite primary and secondary structure

## Qualification Mapping Information

Release 1. Supersedes and equivalent to MEA30215 Certificate III in Aeroskills (Mechatronics).

## Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=ce216c9c-04d5-4b3b-9bcf-4e81d0950371>