



**Australian Government**

# **MEA30215 Certificate III in Aeroskills (Mechatronics)**

**Release 1**

## **MEA30215 Certificate III in Aeroskills (Mechatronics)**

### **Modification History**

Release 1 - New qualification

### **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 MEA41015 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 MEA41015 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 MEA30215 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
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 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	
MEA148	Apply mathematics and physics in aviation maintenance	
MEA201	Remove and install miscellaneous aircraft electrical hardware/components	MEA101, MEA103 MEA105, MEA107 MEA108, MEA109
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
MEA364	Maintain and/or repair small aircraft mechanical components or parts	MEA101, MEA103 MEA105, MEA107 MEA108, MEA109
MEA369	Inspect and maintain structures and related components of non-pressurised small aircraft	MEA101, MEA103 MEA105, MEA107 MEA108, MEA109
MSAENV272B	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	MEA246	Required for 100 hourly inspection on

Unit code	Unit title	Prerequisites	Unit selection guidelines
	instrument systems		basic light aircraft or helicopters
MEA276	Maintain basic light aircraft communication and radio navigation systems	MEA246	Required for 100 hourly inspection on basic light aircraft or helicopters
MEA302	Remove and install aircraft hydro-mechanical and landing gear system components	MEA101, MEA103 MEA105, MEA107 MEA108, MEA109	Required for hydraulic retractable undercarriage maintenance
MEA304	Remove and install non-pressurised aircraft structural and non-structural components	MEA302	Do not take with MEA317 – MEA363 provides credits towards this unit
MEA306	Remove and install engines and engine system components	MEA302	Applicable to piston and gas turbine engines
MEA307	Remove and install propeller systems and components	MEA101, MEA103 MEA105, MEA107 MEA108, MEA109	Required for variable pitch propellers
MEA308	Remove and install rotary wing rotor and flight control system components	MEA101, MEA103 MEA105, MEA107 MEA108, MEA109	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	MEA302	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

<b>Unit code</b>	<b>Unit title</b>	<b>Prerequisites</b>	<b>Unit selection guidelines</b>
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	MEA101, MEA103 MEA105, MEA107 MEA108, MEA109	Required for 100 hourly inspection on basic light aircraft
MEA352	Maintain basic rotary wing aircraft	MEA101, MEA103 MEA105, MEA107 MEA108, MEA109	Required for 100 hourly inspection on basic helicopters
MEA353	Maintain basic light aircraft engines and propellers	MEA101, MEA103 MEA105, MEA107 MEA108, MEA109	Required for 100 hourly inspection on basic light aircraft or helicopters
MEA354	Maintain light aircraft pneumatic systems	MEA101, MEA103 MEA105, MEA107 MEA108, MEA109	
MEA355	Maintain light aircraft air cycle air conditioning systems	MEA201, MEA246	
MEA356	Maintain light piston engine aircraft pressurisation systems	MEA201, MEA246	
MEA357	Inspect, test and repair aircraft fabric surfaces	MEA101, MEA103 MEA105, MEA107 MEA108, MEA109	
MEA359	Inspect and repair aircraft wooden structures	MEA101, MEA103 MEA105, MEA107 MEA108, MEA109	

Unit code	Unit title	Prerequisites	Unit selection guidelines
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	
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

Supersedes and is equivalent to MEA30211 Certificate III in Aeroskills (Mechatronics)

## Links

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