

AVIATION AUSTRALIA Certificate IV Aeroskills (Avionics) MEA40615

The largest CASR and EASA Part 147 approved Maintenance Training Organisation in Australia.

COURSE OUTLINE



EXCELLENCE IN AVIATION TRAINING

RTO Aviation Australia	Name	Aviation Australia Pty Ltd	RTO number CASR Part 147	30770 CASA.147MTO.0025
Course Details	Code	MEA40615		
	Title	Certificate IV Aeroskills (Avionics)		
Purpose of Course	<p>This course provides students with the underpinning knowledge and skills requirements to progress to an Avionics technician, enabling them to:</p> <ul style="list-style-type: none"> perform scheduled inspections; and fault diagnosis and repair, and modification of aircraft electrical, instrument and radio systems and system components. <p>This qualification articulates with the MEA50115 Diploma of Aeroskills (Avionics) which is one of the elements that qualifies individuals for the grant by CASA of a B2 Aircraft Maintenance Engineer Licence.</p> <p>The qualification also provides credits towards the MEA50315 Diploma of Aviation Maintenance Management (Avionics) and the MEA60115 Advanced Diploma of Aviation Maintenance Management (Avionics).</p>			
Target Group	<p>This qualification may apply to employees of civil aviation maintenance organisations or to individuals that wish to gain employment in the aviation industry who perform scheduled inspections, fault diagnosis and repair, and modification of aircraft electrical, instrument and radio systems and system components.</p> <p>The qualification defines the exit from an apprenticeship (for domestic students) and may apply to either aircraft maintenance performed on flight lines/ramps and in hangars, or to avionic component repair and overhaul performed in workshops.</p>			
Regulatory requirements/ Packaging Rules	<p>To be awarded the MEA40615 Certificate IV in Aeroskills (Avionics) competency must be demonstrated in:</p> <p>Aircraft Maintenance Stream</p> <ul style="list-style-type: none"> twelve (12) core units consisting of common, imported and some avionic technical stream units thirteen (13) elective technical stream units chosen from Group A Total: twenty-five (25) units <p>Or,</p> <p>Component Maintenance Workshop Stream</p> <ul style="list-style-type: none"> thirteen (13) core units consisting of common, imported and avionic technical stream units three (3) elective technical stream units chosen from Group B Total: sixteen (16) units 			



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Nationally Endorsed Training package (If applicable)	Code	MEA	Version	1.3
	Title	Aeroskills Training Package	Qualification	MEA40615 - Cert IV in Aeroskills (Avionics)
Core units of competency (Aircraft Maintenance Stream)				
Reference Competency Unit(s) (If Applicable)	National Code	Title	Core / Elective	
	MEA101	Interpret occupational health and safety practices in aviation maintenance	Core	
	MEA103	Plan and organise aviation maintenance work activities	Core	
	MEA105	Apply quality standards applicable to aviation maintenance processes	Core	
	MEA107	Interpret and use aviation maintenance industry manuals and specifications	Core	
	MEA108	Complete aviation maintenance industry documentation	Core	
	MEA109	Perform basic hand skills, standard trade practices and fundamentals in aviation maintenance	Core	
	MEA118	Conduct self in the aviation environment	Core	
	MEA148	Apply mathematics and physics in aviation maintenance	Core	
	MEA201	Remove and install miscellaneous aircraft electrical hardware/components	Core	
	MEA246	Fabricate and/or repair aircraft electrical hardware or parts	Core	
	MEA260	Use electrical test equipment	Core	
	MSAENV272B	Participate in environmentally sustainable work practices	Core	



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Core units of competency (Component Maintenance Workshop Stream)

Reference Competency Unit(s) (If Applicable)	National Code	Title	Core / Elective
	MEA101	Interpret occupational health and safety practices in aviation maintenance	Core
	MEA103	Plan and organise aviation maintenance work activities	Core
	MEA105	Apply quality standards applicable to aviation maintenance processes	Core
	MEA107	Interpret and use aviation maintenance industry manuals and specifications	Core
	MEA108	Complete aviation maintenance industry documentation	Core
	MEA109	Perform basic hand skills, standard trade practices and fundamentals in aviation maintenance	Core
	MEA118	Conduct self in the aviation environment	Core
	MEA148	Apply mathematics and physics in aviation maintenance	Core
	MEA201	Remove and install miscellaneous aircraft electrical hardware/components	Core
	MEA246	Fabricate and/or repair aircraft electrical hardware or parts	Core
	MEA260	Use electrical test equipment	Core
	MEA261	Use electronic test equipment	Core
	MSAENV272B	Participate in environmentally sustainable work practices	Core



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Group A
Elective units of competency (Aircraft Maintenance Stream)

Reference Competency Unit(s) (If Applicable)	National Code	Title	Core / Elective
	MEA202	Remove and install basic aircraft electrical system components	Elective
	MEA203	Remove and install advanced aircraft electrical system components	Elective
	MEA204	Remove and install basic aircraft instrument system components	Elective
	MEA205	Remove and install advanced aircraft instrument system components	Elective
	MEA206	Remove and install aircraft basic radio communication and navigation system components	Elective
	MEA207	Remove and install aircraft electronic system components	Elective
	MEA208	Remove and install aircraft pressurisation control system components	Elective
	MEA209	Remove and install aircraft oxygen system components	Elective
	MEA210	Inspect, test and troubleshoot basic aircraft electrical systems and components	Elective
	MEA211	Inspect, test and troubleshoot advanced aircraft electrical systems and components	Elective
	MEA212	Inspect, test and troubleshoot basic aircraft instrument systems and components	Elective
	MEA213	Inspect, test and troubleshoot advanced aircraft instrument systems and components	Elective
	MEA214	Inspect, test and troubleshoot aircraft basic communication and radio navigation systems and components	Elective
	MEA215	Inspect, test and troubleshoot advanced aircraft communications systems and components	Elective
	MEA216	Inspect, test and troubleshoot instrument landing systems and components	Elective
	MEA217	Inspect, test and troubleshoot fixed wing autopilot systems and components	Elective
	MEA218	Inspect, test and troubleshoot rotary wing autopilot systems and components	Elective



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MEA219	Inspect, test and troubleshoot aircraft pressurisation control systems and components	Elective
MEA220	Inspect, test and troubleshoot aircraft primary radar systems and components	Elective
MEA221	Inspect, test and troubleshoot aircraft secondary radar systems and components	Elective
MEA222	Inspect, test and troubleshoot aircraft oxygen systems and components	Elective
MEA223	Inspect aircraft electrical systems and components	Elective
MEA224	Inspect aircraft instrument systems and components	Elective
MEA225	Inspect fixed wing aircraft automatic flight control systems and components	Elective
MEA226	Inspect aircraft electronic systems and components	Elective
MEA227	Test and troubleshoot aircraft electrical systems and components	Elective
MEA228	Test and troubleshoot aircraft instrument systems and components	Elective
MEA229	Test and troubleshoot aircraft radio frequency navigation and communications systems and components	Elective
MEA230	Test and troubleshoot fixed wing aircraft automatic flight control systems and components	Elective
MEA231	Inspect, test and troubleshoot rotary wing aircraft automatic flight control systems and components	Elective
MEA232	Test and troubleshoot aircraft pulse systems and components	Elective
MEA233	Inspect, test and troubleshoot aircraft inertial navigation and reference systems and components	Elective
MEA234	Inspect, test and troubleshoot aircraft global navigation systems and components	Elective
MEA261	Use electronic test equipment	Elective
MEA262	Modify/repair single layer printed circuit boards	Elective
MEA263	Modify/repair multi-layer printed circuit boards	Elective

	MEA266	Terminate and repair aircraft optical fibre cable	Elective
	MEA278	Inspect, test and troubleshoot instrument display systems and components	Elective
	MEA279	Inspect, test and troubleshoot full authority digital engine control systems	Elective
	MEA280	Inspect, test and troubleshoot flight management systems and components	Elective
	MEA301	Perform aircraft flight servicing	Elective



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Group B
Elective units of competency (Component Maintenance Workshop Stream)

Reference Competency Unit(s) (If Applicable)	National Code	Title	Core / Elective
	MEA252	Test, align and troubleshoot synchro and servo system components	Elective
	MEA262	Modify/repair single layer printed circuit boards	Elective
	MEA263	Modify/repair multi-layer printed circuit boards	Elective
	MEA266	Terminate and repair aircraft optical fibre cable	Elective
	MEA282	Repair or overhaul aircraft pulse system components	Elective
	MEA283	Repair or overhaul aircraft display, control and distribution system components	Elective
	MEA284	Repair or overhaul aircraft instrument system components	Elective
	MEA285	Repair or overhaul aircraft radio frequency communication and navigation system components	Elective
	MEA286	Repair or overhaul aircraft electrical/electro-mechanical components	Elective
	MEA287	Repair or overhaul aircraft oxygen system components	Elective
	MEA288	Repair or overhaul aircraft audio and visual systems and reproducers	Elective



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Assessment Method and Delivery Mode	<p>Training Material can be accessed via Aviation Australia’s Learning Management System (LMS). Practice questions are also available to self-check their course progress.</p> <p>Remedial training programs are available on campus to support students. Programs are conducted to meet the individuals learning needs.</p> <p>CASR Part 66 The course delivery is in line with the CASR Part 66 basic knowledge syllabus. Delivered in a modular format with CASR Part 66 Multi-Choice-Question examinations as summative assessments.</p> <p>For units of competency that don’t align with Part 66 modules (e.g. MSAENV272B Participate in environmentally sustainable work practices), candidates will be assessed through online training courses with work-based assignments or, candidates have the opportunity to provide evidence of competence through the RPL process.</p>
Course Length	<p>Varies. Candidates post RPL can choose to self-study the training material, or attend scheduled instructor-led classes, or a combination of both.</p>
Course Costing	<ul style="list-style-type: none"> • \$1,500 enrolment/RPL/Journal of Experience/certification fee • The remaining costs for training material and CASR Part 66 examinations can only be determined by RPL and are therefore in addition to the above fee.
Outcome	<ul style="list-style-type: none"> • AQF MEA40615 Certificate IV in Aeroskills (Avionics) qualification. • CASR Part 147 Certificate of Recognition for CASR Part 66 basic knowledge examinations passed at over 75%



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Annex A

CASR Part 66 basic knowledge syllabus:

Subject Modules	Title
1	Mathematics
2	Physics
3	Electrical Fundamentals
4	Electronic Fundamentals
5	Digital Techniques electronic instrument systems
6	Materials and hardware
7	Maintenance Practices
8	Basic Aerodynamics
13	Aircraft structures and systems
14	Propulsion – avionic systems