

AVIATION AUSTRALIA

Diploma of Aeroskills (Mechanical)

MEA50215 – CASR Part 66 B1 licence

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	MEA50215		
	Title	Diploma of Aeroskills (Mechanical)		
Purpose of Course	<p>The requirement for the awarding of MEA50215 Diploma of Aeroskills (Mechanical) is demonstrated competency in listed competency units under the conditions set out below. The listed units also satisfy the Civil Aviation Safety Authority (CASA) requirements for the grant, under Civil Aviation Safety Regulations (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 as detailed in the CASR Part 66 Manual of Standards, and training has been delivered in accordance with the requirements of CASR Part 147.</p> <p>Candidates must undergo a Recognition of Prior Learning (RPL) assessment during the initial enrolment phase to ensure that appropriate units of competency are selected for the category of licence being sought (e.g. B1.1 and B1.3).</p> <p>The course consists of:</p> <ul style="list-style-type: none"> • 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 OHS competency plus competencies required by CASA for the exercise of licence privileges; and • Diploma level mechanical technical stream units covering advanced fault diagnosis and aircraft weight and balance calculation. 			
Target Group	<p>This qualification applies to:</p> <ul style="list-style-type: none"> • individuals seeking the grant of a CASR Part 66 B1 Aircraft Maintenance Engineer Licence covering the supervision, performance and certification of airframe, gas-turbine engine, electrical and structural maintenance on aircraft that are type-rated by CASA for maintenance purposes; or • candidates holding a Certificate IV Aeroskills qualification and wishing to upskill; or • candidates holding a CASR Part 66 B1 licence with exclusions listed on licence and wishing to upskill. 			
Regulatory requirements/ Packaging Rules	<p>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.</p> <p>All B1 licence sub-categories require the following twenty eight (28) or twenty nine (29) units:</p> <ul style="list-style-type: none"> • eleven (11) Core Diploma level (CASA licensing) common, technical stream and imported units • seventeen (17) Core Certificate IV common and technical stream units <p>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:</p> <ul style="list-style-type: none"> • Elective technical stream units required by CASA for a B1.1 licence – 11 or 15 units • Elective technical stream units required by CASA for a B1.3 licence – 8 units 			



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Nationally Endorsed Training package (If applicable)	Code	MEA	Version	1.3
	Title	Aeroskills Training Package	Qualification	MEA50215 – Diploma of Aeroskills (Mechanical)
Reference Competency Unit(s) (If Applicable)	B1.1 Diploma of Aeroskills Gas Turbine Fixed Wing			
	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
	MEA111	Perform administrative processes to prepare for certification of civil aircraft maintenance		Core
	MEA112	Plan and implement civil aircraft maintenance activities		Core
	MEA113	Supervise civil aircraft maintenance activities and manage human resources in the workplace		Core
	MEA116	Apply occupational health and safety procedures at supervisor level		Core
	MEA118	Conduct self in the aviation environment		Core
	MEA142	Manage self in the aviation maintenance environment		Core
	MEA148	Apply mathematics and physics in aviation maintenance		Core
	MSAENV472B	Implement and monitor environmentally sustainable work practices		Core
	MEA201	Remove and install miscellaneous aircraft electrical hardware/components		Core
	MEA203	Remove and install advanced aircraft electrical system components		Core



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Reference Competency Unit(s) (If Applicable)	MEA208	Remove and install aircraft pressurisation control system components	Elective
	MEA209	Remove and install aircraft oxygen system components	Elective
	MEA219	Inspect, test and troubleshoot aircraft pressurisation control systems and components	Elective
	MEA222	Inspect, test and troubleshoot aircraft oxygen systems and components	Elective
	MEA223	Inspect aircraft electrical systems and components	Elective
	MEA227	Test and troubleshoot aircraft electrical systems and components	Elective
	MEA246	Fabricate and/or repair aircraft electrical hardware or parts	Core
	MEA260	Use electrical test equipment	Core
	MEA301	Perform aircraft flight servicing	Core
	MEA302	Remove and install aircraft hydro-mechanical and landing gear system components	Core
	MEA303	Remove and install aircraft pneumatic system components	Core
	MEA305	Remove and install aircraft fixed wing flight control system components	Elective
	MEA306	Remove and install engines and engine system components	Core
	MEA307	Remove and install propeller systems and components	Elective
	MEA315	Inspect, test and troubleshoot propeller systems and components	Elective
	MEA317	Remove and install pressurised aircraft structural and non-structural components	Elective
	MEA318	Inspect aircraft hydro-mechanical, mechanical, gaseous and landing gear systems and components	Elective
	MEA319	Inspect gas turbine engine systems and components	Elective
	MEA320	Test and troubleshoot aircraft hydro-mechanical, mechanical, gaseous and landing gear systems and components	Elective



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Reference Competency Unit(s) (If Applicable)	MEA321	Test and troubleshoot aircraft fixed wing flight control systems and components	Elective
	MEA322	Test and troubleshoot gas turbine engine systems and components	Elective
	MEA323	Perform advanced troubleshooting in aircraft mechanical maintenance	Core
	MEA325	Weigh aircraft and perform aircraft weight and balance calculations as a result of modifications	Core
	MEA328	Maintain and/or repair aircraft mechanical components	Core
	MEA339	Inspect, repair and maintain aircraft structures	Core
	MEA343	Remove and install avionic system components	Core
	MEA365	Assess structural repair/modification requirements and evaluate structural repairs and modifications	Core



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	B1.3 Diploma of Aeroskills Gas Turbine Rotary Wing		
	National Code	Title	Core / Elective
Reference Competency Unit(s) (If Applicable)	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
	MEA111	Perform administrative processes to prepare for certification of civil aircraft maintenance	Core
	MEA112	Plan and implement civil aircraft maintenance activities	Core
	MEA113	Supervise civil aircraft maintenance activities and manage human resources in the workplace	Core
	MEA116	Apply occupational health and safety procedures at supervisor level	Core
	MEA118	Conduct self in the aviation environment	Core
	MEA142	Manage self in the aviation maintenance environment	Core
	MEA148	Apply mathematics and physics in aviation maintenance	Core
	MSAENV472B	Implement and monitor environmentally sustainable work practices	Core
	MEA201	Remove and install miscellaneous aircraft electrical hardware/components	Core
	MEA203	Remove and install advanced aircraft electrical system components	Core
	MEA211	Inspect, test and troubleshoot advanced aircraft electrical systems and components	Elective



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MEA246	Fabricate and/or repair aircraft electrical hardware or parts	Core
MEA260	Use electrical test equipment	Core
MEA301	Perform aircraft flight servicing	Core
MEA302	Remove and install aircraft hydro-mechanical and landing gear system components	Core
MEA303	Remove and install aircraft pneumatic system components	Core
MEA304	Remove and install non-pressurised aircraft structural and non-structural components	Elective
MEA306	Remove and install engines and engine system components	Core
MEA308	Remove and install rotary wing rotor and flight control system components	Elective
MEA309	Inspect, test and troubleshoot aircraft hydro-mechanical and landing gear systems and components	Elective
MEA310	Inspect, test and troubleshoot aircraft pneumatic systems and components	Elective
MEA316	Inspect, test and troubleshoot rotary wing rotor and control systems and components	Elective
MEA319	Inspect gas turbine engine systems and components	Elective
MEA322	Test and troubleshoot gas turbine engine systems and components	Elective
MEA323	Perform advanced troubleshooting in aircraft mechanical maintenance	Core
MEA325	Weigh aircraft and perform aircraft weight and balance calculations as a result of modifications	Core
MEA328	Maintain and/or repair aircraft mechanical components	Core
MEA339	Inspect, repair and maintain aircraft structures	Core
MEA343	Remove and install avionic system components	Core
MEA365A	Assess structural repair/modification requirements and evaluate structural repairs and modifications	Core



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Assessment Method and Delivery Mode	<p>There is no direct enrolment into the Diploma of Aeroskills program without holding one of the following pre-requisites:</p> <ul style="list-style-type: none"> • individuals seeking the grant of a CASA B1 Aircraft Maintenance Engineer Licence covering the supervision, performance and certification of airframe, gas-turbine engine, electrical and structural maintenance on aircraft that are type-rated by CASA for maintenance purposes; or • candidates holding a Certificate IV Aeroskills qualification and wishing to upskill; or • candidates holding a CASA B1 licence with exclusions listed on licence and wishing to upskill. <p>Apprenticeship Pathway The traditional apprenticeship model includes a one year on-campus program combining a face-to-face trainer led theory class, computer self-paced learning and practical sessions involving small group and individual activities.</p> <p>Subsequent to the completion of the on-campus program, depending on the success of the student gaining employment, the student will enter an apprenticeship and complete his/her work-based component (generally 3 more years in duration). On successful completion of the work-based component, the student will be awarded with a Certificate IV qualification. Once the Certificate IV is completed, the student will be eligible to enrol into the diploma program via an RPL as required by CASA to complete the outstanding subjects to obtain the diploma. Candidates must undergo a RPL assessment during the initial enrolment phase to ensure that appropriate units of competency are selected for the category of licence being sought (e.g. B1.1 or B1.3).</p>
Assessment Method and Delivery Mode	<p>Course presentations for each module of training are made available to all students participating in the course of training and students access this material via access to 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. MSAENV472B Implement and monitor environmentally sustainable work practices and MEA142B Manage self in the aviation maintenance environment), 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"> • \$2,000 enrolment/RPL assessment/Journal of Experience/certification fee in single sub-category • \$1,000 ex-student fee available, please note conditions apply, contact us for clarification • \$500 per additional sub-category • 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.
Pre-course requirements / pre-requisite	<p>Candidates must undergo a RPL assessment during the initial enrolment phase to ensure that appropriate units of competency are selected for the category of licence being sought (e.g. B1.1 or B1.3).</p>
Outcome	<ul style="list-style-type: none"> • MEA50215 Diploma of Aeroskills (Mechanical) • CASR Part 147 Certificate of Recognition for CASR Part 66 basic knowledge examinations passed at over 75% • CASA Form 465 submission once the full training requirement has been met IAW CASR Part 66 Manual of Standards.



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Annex A

CASR Part 66 basic knowledge syllabus:

Subject Modules	Title	B1.1	B1.3
1	Mathematics	X	X
2	Physics	X	X
3	Electrical Fundamentals	X	X
4	Electronic Fundamentals	X	X
5	Digital Techniques electronic instrument systems	X	X
6	Materials and hardware	X	X
7	Maintenance Practices	X	X
8	Basic Aerodynamics	X	X
9	Human Factors	X	X
10	Aviation Legislation	X	X
11	Aeroplane aerodynamics, structures and systems	X	
12	Helicopter aerodynamics, structures and systems		X
15	Gas turbine engine	X	X
17	Propeller	X	



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