



Australian Government

MEA60322 Advanced Diploma of Aviation Non-Destructive Testing

Release 1

MEA60322 Advanced Diploma of Aviation Non-Destructive Testing

Modification History

Release 1. Supersedes and is equivalent to MEA60318 Advanced Diploma of Aviation Non-Destructive Testing. Unit codes updated.

Qualification Description

This qualification applies to individuals who perform aircraft and aircraft component non-destructive testing (NDT), develop NDT techniques and provide training in NDT in accordance with AS 3669-2006 Non-destructive testing – Qualification and approval of personnel – Aerospace at Level 3. The qualification also meets the regulatory requirements of the Civil Aviation Safety Authority (CASA) and of the Defence Aviation Safety Authority (DASA)

The qualification includes:

- preliminary core common and technical stream units for individuals who do not have a Certificate IV in Aeroskills or the Diploma of Aeroskills (Non-Destructive Testing)
- core units consisting of:
 - common and technical stream units that relate to the aviation maintenance environment
 - technical stream and imported units relating to the NDT work environment
 - imported units that specifically cover the competencies required to perform each relevant NDT technique to the standard specified in AS 3669-2006 Non-destructive testing – Qualification and approval of personnel – Aerospace for Level 2 and 3 personnel
 - imported units that cover competencies in the development, delivery and assessment of training.
- elective units, consisting of:
 - common units specific to either CASA or DASA regulatory requirements
 - technical stream and imported units that are applicable to various areas of employment in the NDT field at AS 3669-2006 Non-destructive testing – Qualification and approval of personnel – Aerospace Level 3.

Individuals who have a Certificate IV in Aeroskills and/or the Diploma of Aeroskills (Non-Destructive Testing) will already have a significant number of credits towards this qualification.

The qualification also provides credits towards the MEA60222 Advanced Diploma of Aviation Maintenance Management.

This qualification applies to workplaces that operate under the airworthiness regulatory systems of DASA and CASA. Any regulatory/licensing requirements associated with any MEA units of competency must be met.

Entry Requirements

Not applicable.

Packaging Rules

To be awarded the MEA60322 Advanced Diploma of Aviation Non-Destructive Testing, competency must be demonstrated in 39 to 48 units, depending on the entry level:

- 9 preliminary core units for individuals who do not have a Certificate IV or Diploma in Aeroskills
- 35 core units
- 4 elective units.

CORE UNITS

Unit code	Unit title	Prerequisites
MEA107	Interpret and use aviation maintenance industry manuals and specifications	
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	
MEA399	Lay out and set up aircraft systems	MEA154
MEAMEC003 2	Apply basic aircraft design characteristics	MEA107, MEA154, MEA158
MEAMEC003 3	Apply basic aircraft power plant design characteristics	MEA107, MEA154, MEA158

CORE UNITS

Unit code	Unit title	Prerequisites
MEA116	Apply work health and safety procedures at supervisor level in aviation maintenance	
MEA142	Manage self in the aviation maintenance environment	
MEA163	Perform aviation technical publication management activities	
MEA296	Use electrical test equipment in aviation maintenance activities	MEA107, MEA154, MEA155 MEA156, MEA157, MEA158
MEAAVI0038	Use electronic test equipment	MEA107, MEA154, MEA155 MEA156, MEA157, MEA158
MEACOM001 1	Manage an aviation maintenance quality system	
MEACOM002 1	Establish, maintain and evaluate the organisation's work health and safety system	
MEACOM002 2	Use computers in aviation maintenance-related integrated logistic support activities	
MEACOM003 2	Communicate aviation technical and maintenance management knowledge	
MEACOM004 1	Write aviation technical publications	
MEAENG000 1	Apply basic scientific principles and techniques in aeronautical engineering situations	MEM23004A
MEAENG000 3	Select and test aviation engineering materials	
MEASTR0018	Evaluate aircraft non-destructive tests	MEA158, MEACOM0032, MEM13013, MEM16010, MEM24002B, MEM24004B MEM24006B, MEM24008B, MEM24010B, MEM24012C
MEM09002	Interpret technical drawing	MEM12023

		(see Note 1) MEM12024 MEM13015 MEM16006
MEM09003	Prepare basic engineering drawing	MEM09002 MEM12023 (see Note 1) MEM12024 MEM13015 MEM16006
MEM12003	Perform precision mechanical measurement	MEM1101 MEM12023 (see Note 1) MEM13015 MEM16006
MEM13013	Work safely with ionizing radiation	MEM1101 MEM13015 MEM16006
MEM15017B	Use and maintain reference standards	MEM11011B MEM12003B MEM12004B (see Note 2) MEM12005B MEM12023A (see Note 1) MEM18001C (see Note 1) MEM18002B (see Note 1)
MEM16010	Write reports	MEM13015 MEM14006 (see Note 4)

		MEM16006
MEM23004A	Apply technical mathematics	
MEM24002B	Perform penetrant testing	MEM18001C (see Note 1) MEM24012C
MEM24004B	Perform magnetic particle testing	MEM18001C (see Note 1) MEM24012C
MEM24006B	Perform eddy current testing	MEM18001C (see Note 1) MEM24012C
MEM24008B	Perform ultrasonic testing	MEM18001C (see Note 1) MEM24012C
MEM24010B	Perform radiographic testing	MEM13013B MEM18001C (see Note 1) MEM24012C
MEM24011B	Establish non-destructive tests	MEM13013B MEM16010A (see Note 3) MEM18001C (see Note 1) MEM24002B MEM24004B MEM24006B MEM24008B MEM24010B MEM24012C
MEM24012C	Apply metallurgy principles	

MEM30007A	Select common engineering materials	
MEM30012A	Apply mathematical techniques in a manufacturing, engineering or related environment	
MSMENV672	Develop workplace policy and procedures for environmental sustainability	
TAEASS401	Plan assessment activities and processes	
TAEASS402	Assess competence	
TAEASS403	Participate in assessment validation	
TAEASS502	Design and develop assessment tools	
TAEDEL402	Plan, organise and facilitate learning in the workplace	

Notes

1. MEA158 is equivalent to the following three units combined MEM12023, MEM18001 and MEM18002.
2. MEA296 and MEAAVI0038 are together equivalent to MEM12004.
3. MEACOM0041 is equivalent to MEM16010.
4. MEA155 is equivalent to MEM14006.

ELECTIVE UNITS

Choose 4 units while observing the unit selection guidelines in column 4.

Unit code	Unit title	Prerequisites	
MEA112	Plan and implement civil aircraft maintenance activities		Mandatory for CASA regulatory system. All relevant technical units should be completed first.
MEA113	Supervise civil aircraft maintenance activities and manage human resources in the workplace		Mandatory for CASA regulatory system. All relevant technical units should be completed first
MEACOM0012	Manage aviation maintenance work environment policy and		

	practices		
MEACOM0024	Supervise aviation maintenance teams and perform maintenance quality inspections		Mandatory for ADF regulatory system
MEM09009	Create 2-D drawings using computer aided design system	MEM09002 MEM12023 MEM12024 MEM13015 MEM16006 MEM16008	
MEM15010	Perform laboratory procedures	MEM11011 MEM13015 MEM16006	
MEM16002	Conduct formal interviews and negotiations	MEM13015 MEM16006	
MEM16008	Interact with computing technology	MEM13015 MEM16006	
TAEDES401	Design and develop learning programs		

Qualification Mapping Information

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Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ce216c9c-04d5-4b3b-9bcf-4e81d0950371>