

Qualification details

Qualification number/Te nama o te tohu mātauranga	2907-2		
English title/Taitara Ingarihi	New Zealand Diploma in Aeronautical Maintenance Certification (Level 6) with strands in Aeroplane, Rotorcraft, Powerplant Piston, Powerplant Turbine, Electrical, Instrument, and Radio		
Māori title/Taitara Māori			
Version number/Te putanga	2	Qualification type/Te momo tohu	Diploma
Level/Te kaupae	6	Credits/Ngā whiwhinga	240
NZSCED/Whakaraupapa	031503 Engineering and Related Technologies>Aerospace Engineering and Technology>Aircraft Maintenance Engineering		
Qualification developer/Te kaihanga tohu	Ringa Hora Services Workforce Development Council		
Review Date /Te rā arotake	31/12/2027		

Outcome statement/Te tauāki ā-hua

Strategic Purpose statement/ Te rautaki o te tohu
<p>The purpose of this qualification is to provide the aeronautical engineering industry with graduates who have attained sufficient theoretical knowledge and practical skills to certify aircraft maintenance.</p> <p>The qualification covers the requirements of the subjects for the issue of the Civil Aviation Authority (CAA) Aircraft Maintenance Engineer Licence (AMEL) (issued under Part 66 Rule of the Civil Aviation Act 1990) without rating privileges, with the individual strands recognising the specific categories and groups as defined in CAA Part 66, to achieve employment as licenced aircraft maintenance engineers.</p> <p>This qualification is intended for experienced aeronautical engineers, who want to broaden their knowledge and skills, to enable them to certify aircraft maintenance work.</p>

Graduate Profile/Ngā hua o te tohu
<p>Graduates of this qualification will be able to:</p> <ul style="list-style-type: none"> - Apply a detailed knowledge of the theoretical and practical aspects in the areas of aircraft engineering, aircraft materials, avionics, air law, human factors, aero science - mathematics and physics, and aero science - electrical fundamentals, with the ability to combine and apply the separate elements of knowledge in a logical and comprehensive manner. <p>Graduates of the Aeroplane strand will also be able to:</p> <ul style="list-style-type: none"> - Make decisions on and manage, within the Aeroplane category, part or all of one or more well defined and undefined aeronautical engineering (aeroplane) activities including detailed description, operation,

component location, removal/installation, and troubleshooting procedures to maintenance manual level, and making judgements regarding the scope, processes, and quality of maintenance for release to service certification.

Graduates of the Rotorcraft strand will also be able to:

- Make decisions on and manage, within the Rotorcraft category, part or all of one or more well defined and undefined aeronautical engineering (rotorcraft) activities including detailed description, operation, component location, removal/installation, and troubleshooting procedures to maintenance manual level, and making judgements regarding the scope, processes, and quality of maintenance for release to service certification.

Graduates of the Powerplant Piston strand will also be able to:

- Make decisions on and manage, within the Powerplant category (piston group), part or all of one or more well defined and undefined aeronautical engineering (piston powerplant) activities including detailed description, operation, component location, removal/installation, and troubleshooting procedures to maintenance manual level, and making judgements regarding the scope, processes, and quality of maintenance for release to service certification.

Graduates of the Powerplant Turbine strand will also be able to:

- Make decisions on and manage, within the Powerplant category (turbine group), part or all of one or more well defined and undefined aeronautical engineering (turbine powerplant) activities including detailed description, operation, component location, removal/installation, and troubleshooting procedures to maintenance manual level, and making judgements regarding the scope, processes, and quality of maintenance for release to service certification.

Graduates of the Electrical strand will also be able to:

- Make decisions on and manage, within the Electrical category, part or all of one or more well defined and undefined aeronautical engineering (electrical) activities including detailed description, operation, component location, removal/installation, and troubleshooting procedures to maintenance manual level, and making judgements regarding the scope, processes, and quality of maintenance for release to service certification.

Graduates of the Instrument strand will also be able to:

- Make decisions on and manage, within the Instrument category, part or all of one or more well defined and undefined aeronautical engineering (instrument) activities including detailed description, operation, component location, removal/installation, and troubleshooting procedures to maintenance manual level, and making judgements regarding the scope, processes, and quality of maintenance for release to service certification.

Graduates of the Radio strand will also be able to:

- Make decisions on and manage, within the Radio category, part or all of one or more well defined and undefined aeronautical engineering (radio) activities including detailed description, operation, component location, removal/installation, and troubleshooting procedures to maintenance manual level, and making judgements regarding the scope, processes, and quality of maintenance for release to service certification.

Education Pathway/ Ngā huarahi mātauranga

<p>This qualification can provide a pathway to other training opportunities in Aeronautical Engineering.</p> <p>Graduates of this qualification may also progress onto specific aircraft type or group ratings for which a number of training opportunities are available.</p> <p>Graduates will continue to work towards the privileges of certifying the release to service of aircraft or their components following maintenance.</p> <p>Pathway qualifications include:</p> <p>New Zealand Diploma in Aeronautical Engineering (Quality and Safety - SMS) (Level 6) [Ref: 2905]</p> <p>New Zealand Diploma in Aeronautical Engineering (Technical Support) (Level 6) [Ref: 2906]</p>
--

<p>Employment, Cultural, Community Pathway/ Ko ngā huarahi ā-mahi, ā-ahurea, ā-whānau, ā-hapū, ā-iwi, ā-hapori anō hoki</p>
<p>On completion of requisite training, graduates will, subject to ratings and categories issued and CAA approval, have the skills and knowledge to be employed as a licensed aircraft maintenance engineer and be entitled to certify aircraft or components safe to fly, as well as supervising and approving work carried out by unlicensed maintenance engineers.</p>

Qualification Specifications/ Ngā tauwhāititanga o te tohu

<p>Qualification Award/ Te whakawhiwhinga o te tohu</p>	<p>This qualification may be awarded by any education organisation with an approved programme.</p>
<p>Evidence requirements for assuring consistency/ Ngā taunaki hei whakaū i te tauritenga</p>	<p>Evidence may include the following:</p> <ul style="list-style-type: none"> analysis of employer surveys to determine if graduates of the qualification meet the graduate profile outcomes analysis of graduate surveys to determine if graduates of the qualification meet the graduate profile outcomes analysis of a range of workplace evidence demonstrating that graduates of the qualification meet the graduate profile outcomes evidence of effective internal and external quality assurance systems to assure that graduates of the qualification meet the graduate profile outcomes.
<p>Minimum standard of achievement and standards for grade endorsements/ Te pae o raro e tutuki ai, ngā paerewa hoki hei whakaatu i te taumata o te whakatutukinga</p>	<p>Achieved.</p>
<p>Other requirements for the qualification (including regulatory body or legislative requirements)/ Kō ētahi atu here o te tohu (tae atu hoki ki ngā here ā-hinonga whakamarumarū, ki ngā here ā-ture rānei)</p>	<p>None.</p>
<p>General conditions for programme/ Ngā tikanga whānui o te hōtaka</p>	<p>To achieve this qualification trainees must at all times comply with aviation regulations applicable to aeronautical engineers, such as those set in place by Civil Aviation Authority (CAA) Rules or New Zealand Defence Force (NZDF) Policy.</p> <p>Additional guidance and recommendations for</p>

	<p>programme development can be found on the Ringa Hora website at https://www.ringahora.nz/qualifications-and-standards-overview/programme-guidance-documents-for-providers-developing-programmes/</p> <p>All subject areas are as defined and specified in CAA Rule Part 66 and applicable Advisory Circulars.</p> <p>Providers are advised to refer to the Ringa Hora Services Workforce Development Council Programme endorsement considerations:</p> <ul style="list-style-type: none"> • Ngā Whakamārama - Programme content • Mana ōrite mō te hunga ako - Equity for learners • Torotoronga me te kimi whakaaro - Programme engagement and consultation • Te ao Māori • Te akoako me ngā reo o Te Moana-nui-a-Kiwa - Pacific languages and learners • Tangata Whaikaha - Disabled people <p>Further information is available from NZQA on Programme approval and provider accreditation</p>
--	--

Conditions relating to the Graduate Profile /Ngā tikanga e hāngai ana ki nga hua o te tohu

Qualification outcomes/ Ngā hua		Credits/Ngā whiwhinga	Conditions/Ngā tikanga
1.	Apply a detailed knowledge of the theoretical and practical aspects in the areas of aircraft engineering, aircraft materials, avionics, air law, human factors, aero science - mathematics and physics, and aero science - electrical fundamentals, with the ability to combine and apply the separate elements of knowledge in a logical and comprehensive manner.	155 credits	Programmes must include the following unit standards: 20895, 20896, 20902, 20904, 21060, 26963, 26964
Elective Strand - Aeroplane			
2.	Make decisions on and manage, within the Aeroplane category, part or all of one or more well defined and undefined aeronautical engineering (aeroplane) activities including detailed description, operation, component location, removal/installation, and troubleshooting procedures to maintenance manual level, and making judgements regarding the scope, processes, and quality of maintenance for release to service certification.	85 credits	Programmes must include the following unit standards: 20897, 20903
Elective Strand - Rotorcraft			

3.	Make decisions on and manage, within the Rotorcraft category, part or all of one or more well defined and undefined aeronautical engineering (rotorcraft) activities including detailed description, operation, component location, removal/installation, and troubleshooting procedures to maintenance manual level, and making judgements regarding the scope, processes, and quality of maintenance for release to service certification.	85 credits	Programmes must include the following unit standards: 20899, 20903
Elective Strand - Powerplant Piston			
4.	Make decisions on and manage, within the Powerplant category (piston group), part or all of one or more well defined and undefined aeronautical engineering (piston powerplant) activities including detailed description, operation, component location, removal/installation, and troubleshooting procedures to maintenance manual level, and making judgements regarding the scope, processes, and quality of maintenance for release to service certification.	85 credits	Programmes must include the following unit standard: 20900
Elective Strand - Powerplant Turbine			
5.	Make decisions on and manage, within the Powerplant category (turbine group), part or all of one or more well defined and undefined aeronautical engineering (turbine powerplant) activities including detailed description, operation, component location, removal/installation, and troubleshooting procedures to maintenance manual level, and making judgements regarding the scope, processes, and quality of maintenance for release to service certification.	85 credits	Programmes must include the following unit standard: 20901
Elective Strand - Electrical			
6.	Make decisions on and manage, within the Electrical category, part or all of one or more well defined and undefined aeronautical engineering	85 credits	Recommended unit standards: 20897, 26965, 26966 Within the Field Engineering and Technology, and the Subfield

	(electrical) activities including detailed description, operation, component location, removal/installation, and troubleshooting procedures to maintenance manual level, and making judgements regarding the scope, processes, and quality of maintenance for release to service certification.		Aeronautical Engineering, standards from any Domain at Level 4 or above
Elective Strand - Instrument			
7.	Make decisions on and manage, within the Instrument category, part or all of one or more well defined and undefined aeronautical engineering (instrument) activities including detailed description, operation, component location, removal/installation, and troubleshooting procedures to maintenance manual level, and making judgements regarding the scope, processes, and quality of maintenance for release to service certification.	85 credits	Recommended unit standards: 20897, 26965, 26967 Within the Field Engineering and Technology, and the Subfield Aeronautical Engineering, standards from any Domain at Level 4 or above
Elective Strand - Radio			
8.	Make decisions on and manage, within the Radio category, part or all of one or more well defined and undefined aeronautical engineering (radio) activities including detailed description, operation, component location, removal/installation, and troubleshooting procedures to maintenance manual level, and making judgements regarding the scope, processes, and quality of maintenance for release to service certification.	85 credits	Recommended unit standards: 20897, 26965, 26968 Within the Field Engineering and Technology, and the Subfield Aeronautical Engineering, standards from any Domain at Level 4 or above

Transition information/ He kōrero whakawhiti

Replacement information/ He kōrero mō te whakakapi	This qualification replaced the National Diploma in Aeronautical Maintenance Certification with strands in Aeroplane, Rotorcraft, Powerplant Piston, Powerplant Turbine, Electrical, Instrument, and Radio [Ref: 1133]. The National qualification was discontinued on 31 December 2020.
Additional transition information/ Kō ētahi atu kōrero mō te whakakapi	Version Information Version 2 of this qualification was published in December 2022 as the result of a scheduled review.

	<p>Please refer to Qualifications and Assessment Standards Approvals for further information.</p> <p>The last date for assessment for programmes leading to version 1 of this qualification is 31 December 2026.</p> <p>It is the intention of Ringa Hora Services Workforce Development Council that no existing trainee should be disadvantaged by these transition arrangements.</p> <p>Any person who considers they have been disadvantaged may appeal to:</p> <p>Ringa Hora Services Workforce Development Council PO Box 445 Wellington Phone: 04 909 0306 Web: https://www.ringahora.nz/ Email Qualifications@ringahora.nz</p>
--	---