National Certificate in Mechanical Engineering Technology (Level 1)

Level 1

Credits 40

This qualification has been **reviewed**. The last date to meet the requirements is 31 December 2019.

Transition Arrangements

The review occurred as a result of the mandatory review of Mechanical Engineering qualifications, part of the Targeted Review of Qualifications (TRoQ).

The last date for entry into programmes leading to this qualification is 31 December 2017.

The last date for assessment of this qualification is 31 December 2019 when the qualification will be discontinued.

For detailed information see <u>Review Summaries</u> on the NZQA website.

NZQF Registration Information

Process	Version	Date	Last Date for Award
Registration	1	November 2006	December 2019
Review	2	July 2015	December 2019

Standard Setting Body

Competenz PO Box 9005 Newmarket Auckland 1149 Telephone 0800 526 1800 Email 0800 526 1800 gualifications@competenz.org.nz Website www.competenz.org.nz

National Certificate in Mechanical Engineering Technology (Level 1)

Level		1	
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Credits 40

Purpose

This is an introductory qualification for people interested in mechanical engineering technology, and has been developed primarily for use in Secondary Schools to attract students to careers in mechanical engineering or related trades or professions. Achievement of the qualification is an excellent preparation for gateway programmes and engineering apprenticeships, and will demonstrate to prospective employers that the candidate has the right skills to commence employment in their industry.

The qualification is also intended to provide students with a well balanced, practically orientated course that develops lifelong skills, stimulating self-esteem, confidence and a pride in paying attention to detail.

The qualification has a compulsory and an elective component. The compulsory section incorporates the following basic skills and knowledge:

- basic workshop safety procedures;
- basic engineering workshop techniques including, cutting, marking out, measuring, joining, assembly, and finishing;
- use of basic tools and machinery; and
- investigation, design and building of a simple product.

The elective section allows students to complement the above with achievement or unit standards from a number of supporting domains.

Following achievement of this qualification, trainees will be well prepared for entry into a variety of programmes and apprenticeships in the engineering industry, such as:

- a Gateway programme;
- National Certificate in Engineering Fabrication (Level 4) with strands in Heavy Fabrication, Light Fabrication, and Welding [Ref: 0122];
- National Certificate in Heating, Ventilating, and Air Conditioning (Mechanical Services) (Level 4) [Ref: 0124];
- National Certificate in Locksmithing (Level 4) [Ref: 0452];
- National Certificate in Mechanical Engineering (Level 2) [Ref: 1220];
- National Certificate in Mechanical Engineering (Level 4) with strands in Fitting and Machining, General Engineering, Machining, Maintenance Engineering, and Toolmaking [Ref: 1262];
- National Certificate in Metal Casting (Technology) (Level 4) [Ref: 0129];
- National Certificate in Refrigeration and Air Conditioning (Level 4) [Ref: 0130]; and
- National Certificate in Split System Air Conditioning (Level 3) [Ref: 1242].

The workshop skills gained would also be very useful for those wishing to pursue a National Diploma in Engineering (Level 6) with strands in Mechanical Engineering, Production Engineering, and an optional Practical Endorsement strand [Ref: 0534], or an engineering degree.

Credit Range

	Compulsory	Elective
Level 1 credits	24	16
Total	40	

Requirements for Award of Qualification

This qualification will be awarded to people who have met the requirements of the compulsory and elective sections.

Award of NQF Qualifications

Credit gained for a standard may be used only once to meet the requirements of this qualification.

Unit standards and achievement standards that are equivalent in outcome are mutually exclusive for the purpose of award. The table of mutually exclusive standards is provided in the Qualifications Authority *Rules and Procedures* publications available at <u>www.nzqa.govt.nz/ncea/</u>.

Reviewed standards that continue to recognise the same overall outcome are registered as new versions and retain their identification number (Id). Any version of a standard with the same Id may be used to meet qualification requirements that list the Id and/or that specify the past or current classification of the standard.

Detailed Qualification Requirements

Compulsory

All the standards listed below are required.

Field	Engineering and Technology		
Subfield			
Domain	Mechanical Engineering Technology		
ld 🥖	Title	Level	Credit
22923	Demonstrate basic engineering workshop skills under close	1	12
	supervision		
22924	Develop a simple product using engineering materials	1	10
22926	Demonstrate knowledge of safety procedures in a specific engineering workshop	1	2
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Elective

A minimum of 16 credits at level 1 or above is required from achievement standards or unit standards in any of the following subfields and domains.

Field	Subfield	Domain	
Business	Business Administration	Business Information	
		Processing	
		Text and Information	
		Management - Generic	
Core Generic	Core Generic	Work and Study skills	
Engineering and Technology	Design	Design - Computer Graphics	
		Design - Graphic	
		Communication	
		Generic Design	
	Mechanical Engineering	Any	
	Motor Industry	Any	
	Technology	Any	
Health	Occupational Health and	Occupational Health and	
	Safety	Safety Practice	
Humanities	Communication Skills	Interpersonal Communications	
		Reading	
	English	English Oral Language	
		English Written Language	
Sciences	Mathematics	Any	
	Science	Physics	
		Science - Core	
Service Sector	Service Sector Skills	Service Sector - Core Skills	

Any person or organisation may contribute to the review of this qualification by sending feedback to the standard setting body at the above address.

The review of this qualification is planned to take place in 2011.

Other standard setting bodies whose standards are included in the qualification

New Zealand Industry Training Organisation NZ Motor Industry Training Organisation NZQA

Certification

The certificate will display the logos of the Qualifications Authority and Competenz.

Classification

This qualification is classified according to the NQF classification system and the New Zealand Standard Classification of Education (NZSCED) system as specified below.

DAS Classification		NZSCED	NZSCED	
Code	Description	Code	Description	
212	Engineering and Technology/Mechanical Engineering	030701	Engineering and Related Technologies/Mechanical and Industrial Engineering and Technology/Mechanical Engineering	

Quality Management Systems

Providers and Industry Training Organisations must be accredited by a recognised Quality Assurance Body before they can register credits from assessment against standards. Accredited providers and Industry Training Organisations assessing against standards must engage with the moderation system that applies to those standards. Accreditation requirements and the moderation system are outlined in the associated Accreditation and Moderation Action Plan (AMAP) for each standard.