National Certificate in Electronics Technology (Level 2)

Level **2**

Credits **40**

This qualification has been **reviewed**. The last date to meet the requirements is 31 December 2020

Transition Arrangements

This qualification has been replaced by the New Zealand Certificate in Electronics Technology (Level 2) [Ref: 3633]

The last date for entry into programmes leading to the qualification is 31 December 2019. The last date for assessment of programmes leading to this qualification is 31 December 2020, at which time it will be discontinued.

For detailed information see Review Summaries on the NZQA website.

NZQF National Qualification Registration Information

Process	Version	Date	Last Date for Assessment
Registration	1	December 1996	December 2004
Revision	2	May 2001	December 2009
Revision	3	October 2002	December 2009
Revision	4	October 2004	December 2009
Review	5	June 2007	December 2013
Revision	6	October 2010	December 2020
Revision	7	February 2015	December 2020
Review	8	August 2017	December 2020

Standard Setting Body

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National Certificate in Electronics Technology (Level 2)

Level **2**

Credits **40**

Purpose

This is an introductory certificate for people interested in electronics and who may wish to pursue further training and employment in this field. The qualification has been developed for use in two training environments:

- in high schools, where a one year course is offered at Year 12;
- in private training establishments and polytechnics, where it serves as a pre-employment qualification for those seeking employment in the electronics industry, or as the first stage in an apprenticeship in the electrotechnology industry.

The qualification combines the following skills and knowledge:

- a fundamental level of chemistry, computing, electrical or electronic engineering, mathematics, physics, science, statistics and probability, and technology represented by the elective standards;
- basic electrical direct current principles relevant in the study of electronics;
- basic electronic components;
- combinations of components to form simple electronic systems;
- practical construction of a printed circuit including hand soldering of components;
- construction of simple electronic products.

After achieving the National Certificate in Electronics Technology (Level 2) [Ref: 0240], people interested in pursuing further training and employment in this field may wish to continue with any of the following:

- National Certificate in Electronics Technology (Level 3) [Ref: 1005] - normally delivered at Year 13;
- take up an apprenticeship in electronics or electrical industries and study for the National Certificates in Electronic Engineering at Levels 3 and 4 [Refs: 1093 and 1123] or the National Certificates in Electrical Engineering at Levels 2, 3, 4, and 5 [Refs: 0174, 0223, 1195, and 0951] or their replacements;
- study for the New Zealand Diploma in Engineering [Ref: 112950].

Credit Range

	Compulsory	Elective
Level 2 or above credits	24	16
Minimum totals	24	16

Requirements for Award of Qualification

Award of NZQF National 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 on the New Zealand Qualifications Authority (NZQA) website: http://www.nzqa.govt.nz/qualifications-standards/standards/standards-exclusion-list/.

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.

Summary of Requirements

- Compulsory standards
  - Elective – A minimum of 16 credits as specified

Detailed Requirements

Compulsory

The following standards are required

Engineering and Technology > Electronic Engineering > Electronics Technology

ID	Title	Level	Credit
18239	Demonstrate introductory knowledge of circuit concepts and measurements for electronics	2	5
18240	Demonstrate knowledge of basic electronic components	2	5
18241	Demonstrate knowledge of basic electronic systems	2	5
18242	Construct a simple printed circuit	2	3
18243	Construct simple electronic products from supplied circuit schematics	2	6

Elective

A minimum of 16 credits at Level 2 or above

Field	Subfield	Domain
Computing and Information Technology	Computing	Any
Engineering and Technology	Electrical Engineering	Any
	Electronic Engineering	Any
	Technology	Digital Technologies
		Generic Technology
Sciences	Mathematics	Any
	Science	Chemistry

Field	Subfield	Domain
		Physics
		Science - Core
	Statistics and Probability	Any

Transition Arrangements

Version 7

Version 7 was issued following a revision of the qualification to maintain achievability for candidates.

Changes to structure and content

- The domain *Generic Technology* was included in the elective section to replace the expiring domain *Technology – General Education*.
- The domain *Engineering and Technology > Technology > Digital Technologies* was added to the elective section.
- Reverse transition arrangements were included to allow candidates to complete version 6 of the qualification.

For detailed information see Review Summaries on the NZQA website.

Existing trainees may either complete the requirements of version 6 of the qualification or transfer to version 7.

All new trainees will be enrolled in programmes leading to version 7 of the qualification.

This qualification contains a classification that replaced an earlier classification. For the purposes of this qualification people with credit for standards listed in the expiring domain can use them to meet the relevant qualification elective requirements - see table below.

Credit for	Exempt from
Engineering and Technology > Technology > Technology - General Education	Engineering and Technology > Technology > Generic Technology

It is anticipated that no existing candidates will be disadvantaged by these transition arrangements. However, anyone who feels that they have been disadvantaged may appeal to The Skills Organisation at the address below:

Reverse transition

For candidates who choose to complete version 6 of this qualification, the following reverse transition arrangements have been included to allow existing candidates to complete the qualification using the standards from the replacement classification as credit for the expired standards – see table below.

Credit for	Exempt from
Engineering and Technology > Technology > Generic Technology	Engineering and Technology > Technology > Technology - General Education domain

Previous versions of the qualification

Version 6 of this qualification was revised to increase flexibility and bring the elective section into line with the elective section of the National Certificate in Electronic Technology (Level 3) [Ref: 1005], amend the purpose statement to clarify that a combination of both unit standards and/or achievement standards may be used, and remove reference to the National Certificate in Electronic Engineering (Level 2) [Ref: 1092]

Version 5 of the qualification was issued following the review of the Electronics Technology unit standards. The facility for candidates with relevant passes in Sixth Form Certificate subjects to claim credit exemptions for the elective section was removed. This facility ended on 31 December 2006. Candidates may still use RPL procedures towards the elective section of the qualification - see contact details below.

Version 4 of the qualification was issued following a revision. The elective requirements were expanded, the classification of the listed standards was updated to reflect the results of reviews, and the transition table for Sixth Form Certificate was amended.

Version 3 of the qualification was issued following a revision. The Sixth Form Certificate exemptions and elective options were expanded and the time limit relating to the exemptions was extended to 31 December 2006.

Version 2 of the qualification was issued following a revision. The qualification was redesigned to achieve better integration with teaching programmes at high schools and the early stage in the training of electronics technicians, and to prepare trainees for further training at diploma or degree levels.

Certification

This certificate will display the logos of NZQA, The Skills Organisation and the organisation that has been granted consent to assess against standards that meet the requirements of the qualification (accredited).

Classification

This qualification is classified according to the classification system listed on the Directory of Assessment Standards (DAS) and the New Zealand Standard Classification of Education (NZSCED) system as specified below.

DAS Classification		**NZSCED**	
Code	**Description**	**Code**	**Description**
1893	Engineering and Technology > Electronic Engineering > Electronics Technology	031303	Engineering and Related Technologies > Electrical and Electronic Engineering and Technology > Electronic Engineering

Quality Management Systems
Providers and Industry Training Organisations must be granted consent to assess by a recognised Quality Assurance Body before they can register credits from assessment against standards. Organisation with consent to assess and Industry Training Organisations assessing against standards must engage with the moderation system that applies to those standards. Consent to assess requirements and the moderation system are outlined in the associated Consent and Moderation Requirements (CMR) for each standard.