

National Certificate in Boatbuilding (Marine Electrical and Electronic Installation) (Level 3)

Level 3

Credits 83

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

Transition Arrangements

This replaced qualification version 3 was republished in October 2017 to extend its last date for entry into training programmes from 31 December 2017 to 31 May 2018 and last date for assessment against the replaced qualification from 31 December 2018 to 31 December 2019.

This qualification has been reviewed and replaced by the New Zealand Certificate in Marine Systems (Level 4) with strands in Systems Engineering, and Electrical - Electronics [Ref: 3124].

The last date for entry into programmes leading to the replaced qualification is 31 May 2018. The last date for assessment against the replaced qualification is 31 December 2019.

For detailed information see [Review Summaries](#) on the NZQA website.

NZQF National Qualification Registration Information

Process	Version	Date	Last Date for Assessment
Registration	1	February 2002	December 2012
Review	2	November 2010	December 2018
Review	3	January 2016	December 2018
Republished	3	December 2016	December 2018
Republished	3	October 2017	December 2019

Standard Setting Body

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National Certificate in Boatbuilding (Marine Electrical and Electronic Installation) (Level 3) – Last Date of Assessment 31 December 2019

Level 3

Credits 83

Purpose

The qualification has been designed to combine the theoretical and practical skills required for people working as 12 and 24 volt electrical or electronic installers in the boatbuilding sector of the Marine Industry.

This qualification covers general knowledge of the boatbuilding industry, health and safety and how to test and install electrical and electronic marine components and equipment on vessels. The skills and knowledge covered also include systems testing, plumbing, electrical, hydraulic, air conditioning, refrigeration, power plant installation and the application of multi axis CAD/CAM.

This certificate builds on the technical skills gained in the National Certificate in Electrical Engineering (Level 2) [Ref: 0174].

People wishing to progress with qualifications in the electrical trade are encouraged to complete the National Certificate in Electrical Engineering (Level 3) [Ref: 0223] and the National Certificate in Electrical Engineering (Electrician for Registration) (Level 4) [Ref: 1195].

People who wish to progress with electronic installation qualifications are encouraged to complete the National Certificate in Electronic Engineering (Level 3) [Ref: 1093] and the National Certificate in Electronic Engineering (Level 4) [Ref: 1123].

People may also progress to any of the strands in the National Certificate in Boatbuilding (Level 4) [Ref: 0877].

Credit Range

Level 2 credits	16
Level 3 credits	51
Level 4 credits	16
Total	83

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

- Prior award of National Certificate in Electrical Engineering (Level 2) [Ref: 0174]
- Compulsory standards

Detailed Requirements

Compulsory

The following standards are required

Engineering and Technology > Electronic Engineering > Core Electronics

ID	Title	Level	Credit
20430	Demonstrate and apply introductory knowledge of d.c. principles for electronics technicians	3	7

Engineering and Technology > Motor Industry > Automotive Electrical and Electronics

ID	Title	Level	Credit
5433	Demonstrate knowledge of electrical and electronic applications for marine use	4	8

Manufacturing > Boating Industries > Boatbuilding

ID	Title	Level	Credit
11794	Install marine electrical and electronic systems and equipment	3	20
18162	Calculate quantities and costs for boatbuilding projects	3	4
18163	Demonstrate knowledge of boatbuilding construction drawings and produce related freehand sketches	3	2
18165	Demonstrate knowledge of computer technology used in the boating industry	3	6
18166	Participate in a project team in the boating industry	2	4
18170	Contribute to a project team in the boating industry	3	3

ID	Title	Level	Credit
23243	Identify and explain the causes and prevention of material deterioration in the marine environment	4	8
23244	Identify and apply health and safety procedures for the boatbuilding industry	3	4
25344	Demonstrate knowledge of marine trades and expectations of employees	2	3

Manufacturing > Boating Industries > Marine Sales and Services

ID	Title	Level	Credit
9913	Demonstrate knowledge of the New Zealand marine industry	2	3

Service Sector > Maritime > Navigation and Seamanship

ID	Title	Level	Credit
20029	Demonstrate knowledge of navigation aids	3	5

Service Sector > Maritime > Sea Survival and Sea Safety

ID	Title	Level	Credit
26542	Demonstrate basic knowledge of the operation of pleasure craft by day	2	6

Transition Arrangements

Version 2

Version 2 was issued to update the content of the qualification. The qualification had not been reviewed since 2002.

Changes to structure and content

- The overall credit of the qualification has increased from 69 to 83.
- Standards 4249 and 9917 have been removed.
- Standard 497 has been removed and substituted with 23244.
- Standard 6915 has been replaced by 26542.
- Standard 9915 has been replaced by 23243.
- Standard 12308 has been replaced by 20029.
- Standards 20430 and 25344 have been added.

For detailed information see [Review Summaries](#) on the NZQA website.

People who are already part way through version 1 may choose to complete the requirements of that version or transfer their credits to version 2 of this qualification.

All new candidates will be enrolled in programmes or courses leading to the award of version 2 of the qualification.

This qualification contains standards that replace earlier standards. For the purposes of this qualification, people who have gained credit for the expiring standards are exempt from the requirement to gain credit for the replacement standards – see table below.

Credit for	Exempt from
497	23244
6915	26542
9915	23243
12308	20029

Any candidate who feels that they have been disadvantaged by the transition should contact the NZ Marine Industry Training Organisation.

Previous versions of the qualification

Version 1 of this qualification replaced the National Certificate in Boatbuilding and Maintenance (Marine Electronics and Marine Electrical - Commissioner) (Level 3) [Ref: 0542], and the National Certificate in Boatbuilding and Maintenance (Marine Electronics and Marine Electrical - Installer) (Level 2) [Ref: 0541].

The final date for the award of the replaced qualifications is 31 December 2012.

Other standard setting bodies whose standards are included in the qualification

Competenz
ElectroTechnology Industry Training Organisation
NZ Motor Industry Training Organisation (Incorporated)

Certification

This certificate will display the logos of NZQA, the NZ Marine Industry Training 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
1769	Manufacturing > Boating Industries > Boatbuilding	0301	Engineering and Related Technologies > Manufacturing, Engineering and Technology

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. 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.

REVIEW

Prerequisite Diagram

