

National Certificate in Motor Industry (Trailer Boat Systems Engineering) (Level 4)

Level 4

Credits 91

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

Version 3 of this qualification has been republished to extend the last date for assessment from 31 December 2016 to 31 December 2020 and to set a last date for entry as 31 December 2016.

Transition Arrangements

This qualification, the National Certificate in Motor Industry (Motorcycle Engineering) [Ref: 0015], National Certificate in Motor Industry (Automotive Engineering) [Ref: 0019], National Certificate in Motor Industry (Automotive Electrical Engineering) [Ref: 0137], National Certificate in Motor Industry (Outdoor Power Equipment Servicing) [Ref: 0697], and the National Certificate in Motor Industry (Trailer Boat Systems Engineering) (Level 3) [Ref: 0698], have been replaced by the National Certificate in Motor Industry (Automotive Electrical and Mechanical Engineering) (Level 3) with strands in Electrical and Electronics, Light Vehicle, Motorcycle, Outdoor Power Equipment, and Trailer Boat Systems [Ref: 1421] and the National Certificate in Motor Industry (Automotive Electrical and Mechanical Engineering) (Level 4) with strands in Electrical and Electronics, Light Vehicle, Motorcycle, Outdoor Power Equipment, and Trailer Boat Systems [Ref: 1422].

The last date for entry into this qualification is 31 December 2016.

People currently working towards this qualification must complete the requirements by 31 December 2020.

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

NZQF National Qualification Registration Information

Process	Version	Date	Last Date for Assessment
Registration	1	November 1999	December 2012
Review	2	August 2008	December 2012
Revision	3	November 2010	December 2016
Republished	3	February 2011	December 2020
Republished	3	November 2016	December 2020

Standard Setting Body

NZ Motor Industry Training Organisation (Incorporated)
PO Box 10803
The Terrace
Wellington 6143

Telephone 0800 88 21 21
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Other standard setting bodies whose standards are included in the qualification

NZ Marine Industry Training Limited
NZQA

Reviewed

National Certificate in Motor Industry (Trailer Boat Systems Engineering) (Level 4)

Level	4
Credits	91

Purpose

This certificate is designed as the national qualification for people working in the Trailer Boat Engineering industry. This qualification recognises the knowledge and skills required to carry out tasks required in trailer boat systems engineering from preparing a boat for delivery to a customer, installing accessories, costing jobs, to diagnosing and repairing systems on power boats. The certificate is designed for people wishing to work in a safe and professional manner; to maintain standards for the trailer boat servicing industry; and to provide a means of recognising prior learning for those already working in the industry.

This certificate follows on from the National Certificate in Motor Industry (Trailer Boat Systems Engineering) (Level 3) [Ref: 0698].

Details regarding industry recognition and industry registration can be obtained from NZ Motor Industry Training Organisation. Standards in this qualification have relevance to other automotive and marine engineering qualifications, and those people who wish to consider additional standards or qualifications should contact the NZ Motor Industry Training Organisation in the first instance.

Replacement Information

This qualification, the National Certificate in Motor Industry (Motorcycle Engineering) [Ref: 0015], National Certificate in Motor Industry (Automotive Engineering) [Ref: 0019], National Certificate in Motor Industry (Automotive Electrical Engineering) [Ref: 0137], National Certificate in Motor Industry (Outdoor Power Equipment Servicing) [Ref: 0697], and the National Certificate in Motor Industry (Trailer Boat Systems Engineering) (Level 3) [Ref: 0698], have been replaced by the National Certificate in Motor Industry (Automotive Electrical and Mechanical Engineering) (Level 3) with strands in Electrical and Electronics, Light Vehicle, Motorcycle, Outdoor Power Equipment, and Trailer Boat Systems [Ref: 1421] and the National Certificate in Motor Industry (Automotive Electrical and Mechanical Engineering) (Level 4) with strands in Electrical and Electronics, Light Vehicle, Motorcycle, Outdoor Power Equipment, and Trailer Boat Systems [Ref: 1422].

Special Notes

Prerequisite: National Certificate in Motor Industry (Trailer Boat Systems Engineering) (Level 3) [Ref: 0698].

It is expected that most people will undertake training towards this qualification in the form of an apprenticeship. Although most of the training and assessment will be carried out on

the job through the use of training manuals and record of achievement books, combinations of standards or individual standards may be offered by accredited polytechnics and private training establishments.

Applications for recognition of prior learning should be made to the NZ Motor Industry Training Organisation. Credits are not automatic and normally an assessment of ability is required.

Credit Range

	Compulsory	Elective
Level 3 credits	7	0-2
Level 4 credits	55	0-10
Level 5 credits	19	0-8
Minimum totals	81	10

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 10 credits as specified

Detailed Requirements

Compulsory

The following standards are required

Engineering and Technology > Motor Industry > Automotive Administration

ID	Title	Level	Credit
934	Cost a job for an automotive repair or service	4	3
946	Book in work for an automotive business	4	4

Engineering and Technology > Motor Industry > Automotive Fuel Systems and Exhaust

ID	Title	Level	Credit
892	Test, diagnose, and rectify faults in an electronic fuel injection (EFI) system on an engine	4	4

Engineering and Technology > Motor Industry > Engine Repairs

ID	Title	Level	Credit
879	Test a two stroke petrol engine to determine its condition	4	4
925	Carry out general repairs to and assemble an engine short block	3	5
15438	Diagnose and rectify outboard engine faults	4	4

Engineering and Technology > Motor Industry > Power Boat Systems

ID	Title	Level	Credit
5436	Diagnose and rectify faults in marine starting and charging systems	4	4
15451	Identify the construction and layout requirements of power boats	4	10
15452	Carry out basic marine fibreglass repairs	4	4
15453	Install, test, and repair or replace electrical accessories on power boats	4	6
15461	Plan basic equipment layout on a power boat, and install equipment	5	15
15463	Carry out a sea trial for a power boat	4	4
15464	Check and arrange the restoration of previously submerged boats, engines, systems, and components	5	4
15465	Check, determine the suitability, and repair a propeller for a power boat	4	4

Manufacturing > Boating Industries > Marine Sales and Services

ID	Title	Level	Credit
9916	Recommend measures to prevent material deterioration in the marine environment	4	4

Service Sector > Service Sector Skills > Service Sector - Core Skills

ID	Title	Level	Credit
376	Employ customer service techniques for differing customer behaviours in a given situation	3	2

Elective

A minimum of 10 credits

Engineering and Technology > Motor Industry > Automotive Administration

ID	Title	Level	Credit
398	Interpret warranties and guarantees that apply to the automotive industry	4	2

Engineering and Technology > Motor Industry > Automotive Fuel Systems and Exhaust

ID	Title	Level	Credit
11740	Install and commission domestic LPG systems and appliances in caravans or boats	4	6
15384	Demonstrate knowledge of electronic diesel management	4	4

Engineering and Technology > Motor Industry > Engine Repairs

ID	Title	Level	Credit
929	Test and repair starting aid systems on a diesel engine	3	2
971	Diagnose and repair diesel engine shut-down systems	4	2
15434	Diagnose and rectify inboard 4 stroke diesel engine faults on power boats	4	10
15435	Diagnose and rectify inboard petrol engine faults on power boats	4	8

Engineering and Technology > Motor Industry > Power Boat Systems

ID	Title	Level	Credit
15460	Inspect and repair power boat inboard driveline components	4	4
15462	Inspect, test, and rectify inboard engine cooling system faults on a power boat	4	4
15466	Test, inspect, and service a power boat impeller propulsion system (water jet unit)	4	3
15468	Inspect and repair a hydraulic type marine transmission	4	6
15469	Inspect and rebuild power boat stern legs	5	8

Transition Arrangements**Version 3**

This qualification was republished in February 2011 to correct an error in the reverse transition table.

Version 3 was issued to extend the expiry date of this qualification.

This qualification contains a standard that has been replaced by a later standard. Reverse transition has been included in this qualification to allow candidates to complete the qualification using either the expiring standard or the replacement standard.

For the purpose of this qualification, people who have gained credit for the replacement standard are exempt from the requirement to gain credit for the expiring standard – see table below. Candidates who wish to complete standard 9916 must do so before it expires on 31 December 2013.

Credit for	Exempt from
23243	9916

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

Previous version of the qualification

Version 2 was issued to indicate that this qualification is expiring.

This qualification, the National Certificate in Motor Industry (Motorcycle Engineering) [Ref: 0015], National Certificate in Motor Industry (Automotive Engineering) [Ref: 0019], National Certificate in Motor Industry (Automotive Electrical Engineering) [Ref: 0137], National Certificate in Motor Industry (Outdoor Power Equipment Servicing) [Ref: 0697], and the National Certificate in Motor Industry (Trailer Boat Systems Engineering) (Level 3) [Ref: 0698], have been replaced by the National Certificate in Motor Industry (Automotive Electrical and Mechanical Engineering) (Level 3) with strands in Electrical and Electronics, Light Vehicle, Motorcycle, Outdoor Power Equipment, and Trailer Boat Systems [Ref: 1421] and the National Certificate in Motor Industry (Automotive Electrical and Mechanical Engineering) (Level 4) with strands in Electrical and Electronics, Light Vehicle, Motorcycle, Outdoor Power Equipment, and Trailer Boat Systems [Ref: 1422].

Version 1 replaced the Trade Certificate in Power Boat Servicing with the National Certificate in Motor Industry (Trailer Boat Systems Engineering) (Level 3) and the National Certificate in Motor Industry (Trailer Boat Systems Engineering) (Level 4). The Trade Certificate in Power Boat Servicing will continue to be recognised by NZQA, MITO, and the industry. There is no requirement for people who hold the Trade Certificate in Power Boat Servicing to gain the national certificates.

People with an incomplete Trade Certificate in Power Boat Servicing after 31 December 2003 who wish to transfer to the National Certificate in Motor Industry (Trailer Boat Systems Engineering) (Level 4) [Ref: 0699] can have their existing achievements recognised through Recognition of Prior Learning Process (RPL). They are required to be registered on the Record of Learning and to pay the \$1.00 per credit and any additional costs associated with the RPL process.

Transition Table

Trade Certificate in Power Boat Servicing	Unit standards credited	Unit standards still required for completion of National Certificate in Motor Industry (Trailer Boat Systems Engineering) (Level 4)
2 nd Assessment	879	All other compulsory unit standards listed and meet the elective requirements

Certification

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

Classification

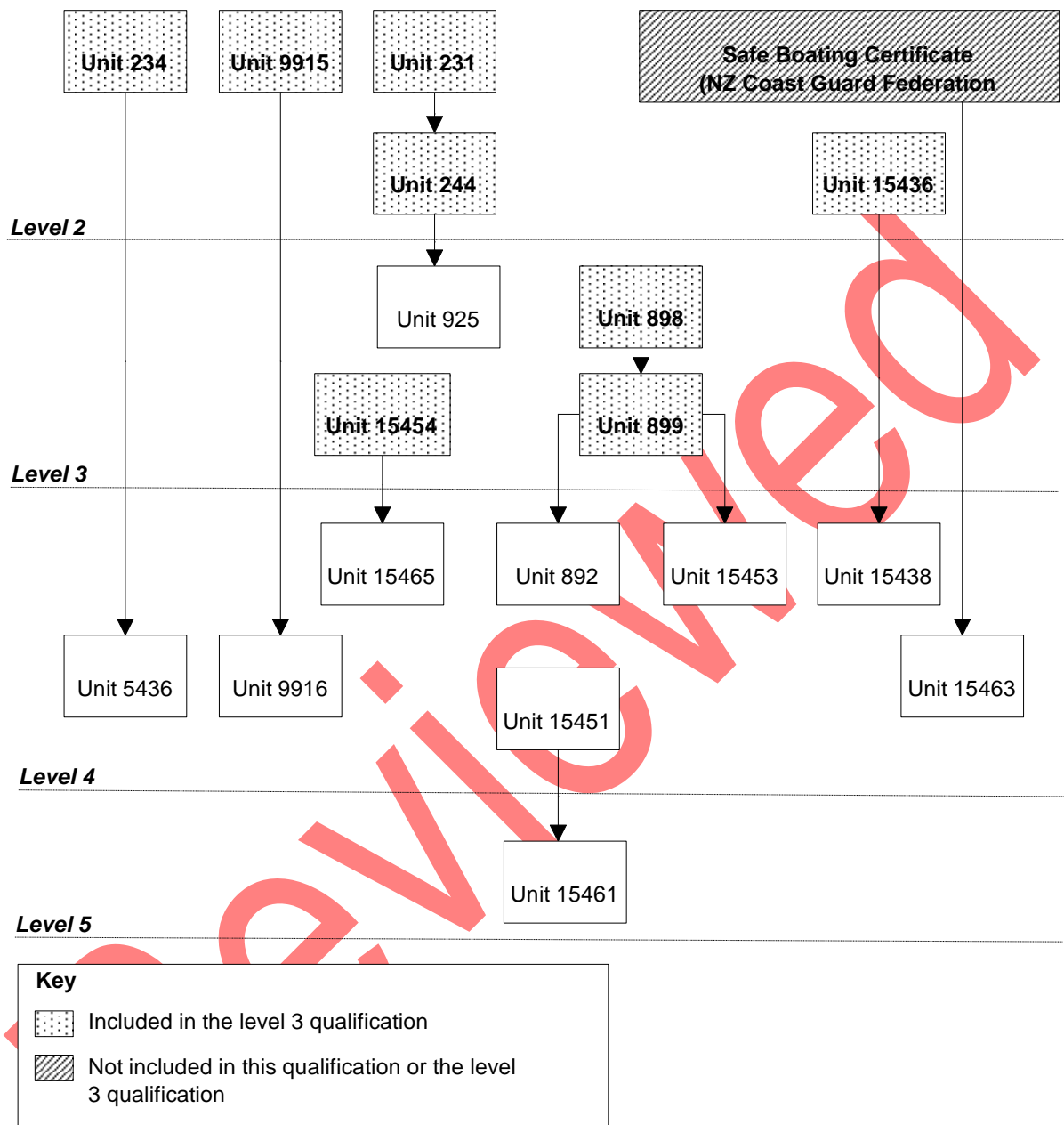
This qualification is classified according to the classification system listed on the Directory of Assessment Standards (DAS) and the New Zealand Standard Classification of Education (NZSCED) system as specified below.

DAS Classification		NZSCED	
Code	Description	Code	Description
257	Engineering and Technology > Motor Industry	031701	Engineering and Related Technologies > Maritime Engineering and Technology>Maritime 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. 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.

Prerequisite Diagram – compulsory unit standards



Prerequisite Diagram – elective unit standards

