

National Certificate in Motor Industry (Automotive Air Conditioning)

Level	4
Credits	131

This qualification is **expiring**. The last date to meet the requirements is 31 December 2020.

Purpose

This certificate is designed as the national qualification for people working in the Automotive Air Conditioning branch of the Motor Industry. Holders of this qualification are able to ascertain customer's requirements and promote and sell air conditioning equipment; provide advice on automotive air conditioning systems; test, service and repair air conditioning systems; and install an air conditioning system to a vehicle. This certificate is designed for those wishing to work in a safe and professional manner; to maintain standards for the air conditioning industry; and to provide a means of recognising prior learning for those already working in the industry.

Replacement Information

This qualification, the National Certificate in Motor Industry (Diesel Fuel Injection Engineering) [Ref: 0139], and the National Certificate in Motor Industry (Automotive Machining) [Ref: 0371] have been replaced by the National Certificate in Motor Industry (Automotive Specialist Engineering) (Level 3) with strands in Automotive Heating, Ventilation, and Air Conditioning; Automotive Machining; Diesel Fuel Injection; and Motorsport [Ref: 1415] and the National Certificate in Motor Industry (Automotive Specialist Engineering) (Level 4) with strands in Automotive Heating, Ventilation, and Air Conditioning; Automotive Machining; Diesel Fuel Injection; and Motorsport [Ref: 1416].

Special Notes

Some of the listed standards have prerequisites that are in the National Certificate in Motor Industry (Entry to Automotive Trades) [Ref: 0017]. Therefore, it is recommended that this certificate be obtained initially.

It is expected that most people will undertake training towards this qualification in the form of an apprenticeship. 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 or an accredited provider. Credits are not automatic and normally an assessment of ability is required.

Credit Range

Level 2 credits	3
Level 3 credits	52
Level 4 credits	57
Level 5 credits	19
Total	131

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

Detailed Requirements

Compulsory

The following standards are required

Engineering and Technology > Motor Industry > Automotive Administration

ID	Title	Level	Credit
382	Demonstrate knowledge of payment types, and carry out office procedures in an automotive company	3	4
386	Determine stock levels of automotive products	5	4
387	Demonstrate knowledge of stock ordering, and maintain stock for an automotive business	3	6
391	Prepare a quotation for the supply of an automotive product, repair, or service	3	3
392	Maintain automotive stock and plant security	2	2
398	Interpret warranties and guarantees that apply to the automotive industry	4	2
934	Cost a job for an automotive repair or service	4	3

ID	Title	Level	Credit
946	Book in work for an automotive business	4	4
968	Estimate the cost of an automotive repair	4	4
986	Prepare and implement an automotive on-the-job instruction programme	5	5
3384	Demonstrate an automotive product to show its operation and use	3	3

Engineering and Technology > Motor Industry > Automotive Air Conditioning

ID	Title	Level	Credit
881	Test, service, and repair an automotive air conditioning system	4	4
902	Test a vehicle heating and ventilation system	3	3
906	Diagnose and rectify automotive climate control system faults	4	4
981	Install an automotive air conditioning system	4	3
3397	Convert an automotive air conditioning system from R-12 to R-134a	4	2
15373	Demonstrate knowledge of automotive air conditioning	3	4

Engineering and Technology > Motor Industry > Automotive Electrical and Electronics

ID	Title	Level	Credit
898	Identify an automotive wiring diagram and translate information to a motor vehicle circuit	3	3
899	Carry out automotive wiring repairs and test circuits for serviceability	3	3
907	Install audio entertainment systems in vehicles, repair installation faults, and replace components	4	4
909	Install, repair, and replace electrical accessories in vehicles	3	2
910	Diagnose and rectify faults in automotive instruments and gauges	4	5
975	Design a wiring harness for a particular automotive application	4	4
5463	Explain the operation and repair requirements of automotive electronic control systems	4	8
8182	Diagnose and rectify faults in automotive electronically controlled systems	4	6

Engineering and Technology > Motor Industry > Automotive Preventative Maintenance

ID	Title	Level	Credit
964	Implement a schedule for an automotive preventative maintenance programme	5	2

Engineering and Technology > Motor Industry > Automotive Sales

ID	Title	Level	Credit
383	Demonstrate knowledge of purchasing automotive parts for resale and storing parts	3	3
385	Sell automotive products	3	4
390	Promote automotive products	5	4
15412	Demonstrate knowledge of automotive product promotion, and complete a promotional plan	4	4

Engineering and Technology > Motor Industry > Automotive Workshop Engineering

ID	Title	Level	Credit
913	Use the oxy-acetylene process for welding and allied uses in the motor industry	3	4
924	Clean automotive components and maintain cleaning equipment	2	1

Engineering and Technology > Motor Industry > Engine Repairs

ID	Title	Level	Credit
878	Repair an engine cooling system	3	4
965	Analyse vehicle or machine cooling system problems and requirements	5	4

Engineering and Technology > Motor Industry > Vehicle Bodywork

ID	Title	Level	Credit
912	Remove, repair, and replace vehicle body interior components	3	3

Service Sector > Retail, Distribution, and Sales > Sales

ID	Title	Level	Credit
379	Sell goods and/or services on an in-coming telephone call	3	3

Transition Arrangements

Version 6

Version 6 of this qualification was issued to extend the expiry date, and subsequently republished to include reverse transition arrangements for expiring standard 379.

Version 6 of this qualification contains a standard that will expire in December 2014. For the purposes 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.

Credit for	Exempt from
26862	379

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

Previous versions of the qualification

Version 5 was issued to indicate that this qualification is expiring.

This qualification, the National Certificate in Motor Industry (Diesel Fuel Injection Engineering) [Ref: 0139], and the National Certificate in Motor Industry (Automotive Machining) [Ref: 0371] have been replaced by the National Certificate in Motor Industry (Automotive Specialist Engineering) (Level 3) with strands in Automotive Heating, Ventilation, and Air Conditioning; Automotive Machining; Diesel Fuel Injection; and Motorsport [Ref: 1415] and the National Certificate in Motor Industry (Automotive Specialist Engineering) (Level 4) with strands in Automotive Heating, Ventilation, and Air Conditioning; Automotive Machining; Diesel Fuel Injection; and Motorsport [Ref: 1416].

Version 4 was issued in order to update reviewed standards and to extend the period of registration to December 2006, to allow time to implement a full review of the qualification.

People currently working towards earlier versions of this qualification may either complete the requirements for that version or transfer their results to this version of the qualification.

Version 3 was issued to incorporate standards which were prerequisites of other standards in the qualification. Standard 408 was removed and these changes caused the credit total to increase from 126 to 131.

Version 2 was issued to take account of *Motor Industry* and *Service Sector* standard reviews. Standard 900 was replaced by two new standards.

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

Credit for	Exempt from
900	5463 and 8182

NZQF National Qualification Registration Information

Process	Version	Date	Last Date for Assessment
Registration	1	September 1995	December 2011
Revision	2	December 1999	December 2011
Revision	3	October 2000	December 2011
Revision	4	December 2003	December 2011
Review	5	August 2008	December 2011
Revision	6	November 2010	December 2016
Republished	6	January 2014	December 2016

Standard Setting Body

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

Telephone 0800 88 21 21
 Facsimile 04 494 0006
 Email info@mito.org.nz

Other standard setting bodies whose standards are included in the qualification

ServiceIQ

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

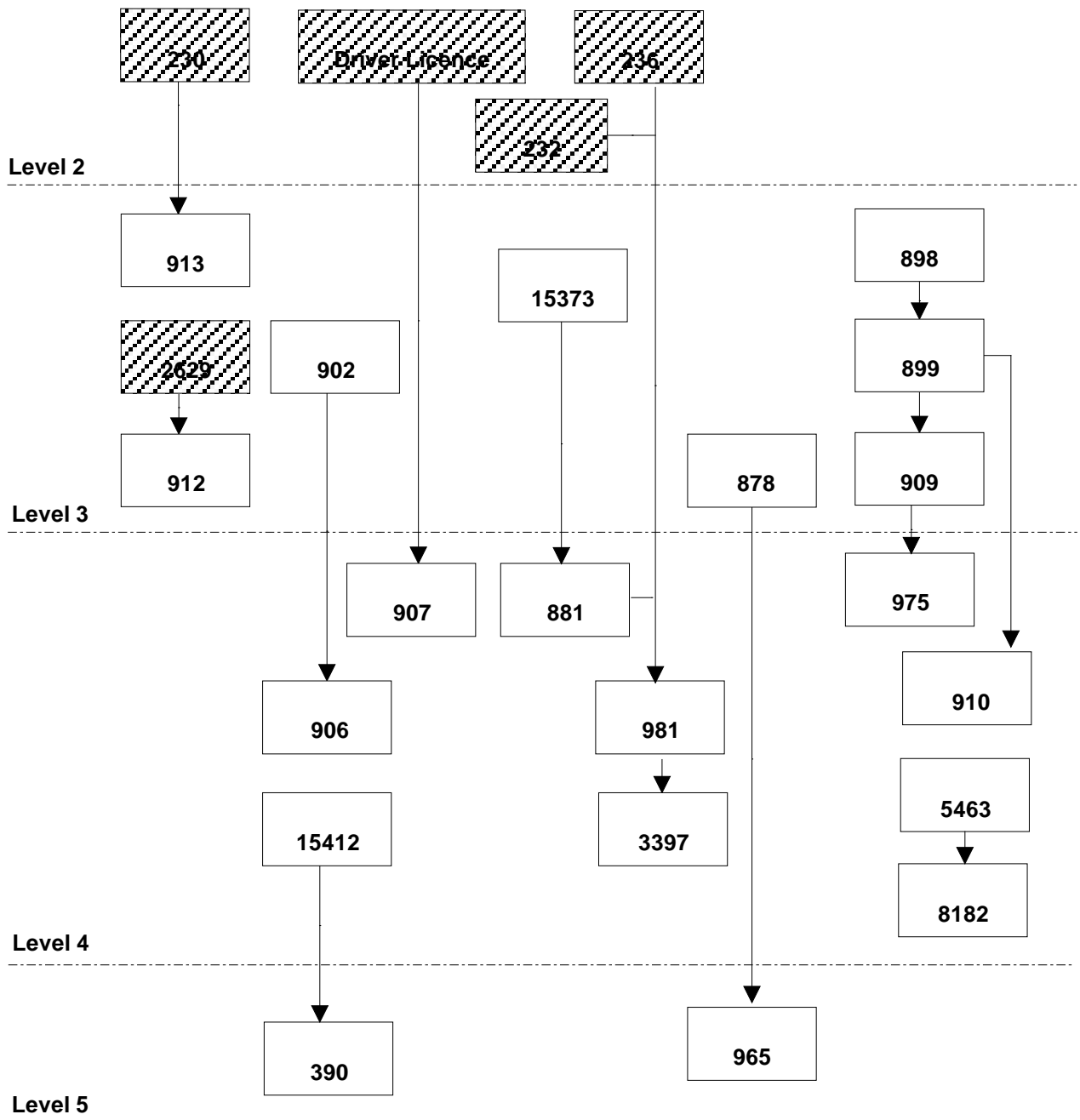
This qualification is classified according to the classification system listed on the Directory of Assessment Standards (DAS) and the New Zealand Standard Classification of Education (NZSCED) system as specified below.

DAS Classification		NZSCED	
Code	Description	Code	Description
257	Engineering and Technology > Motor Industry	030599	Engineering and Related Technologies > Automotive Engineering and Technology > Automotive Engineering and Technology not elsewhere classified

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.

Prerequisite Diagram



Key
 Standards/prerequisites not part of this