

## National Certificate in Motor Industry (Automotive Body) (Level 4) with strands in Coachbuilding, Collision Repair, and Refinishing

**Level** 4

**Credits** 93-112

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

### Transition Arrangements

This qualification has been reviewed and replaced by the New Zealand Certificate in Collision Repair (Non-Structural Repair) (Level 4) [Ref: 3011] and also by the New Zealand Certificate in Automotive Refinishing (Level 4) [Ref: 3009].

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

#### Transition

The last date for entry into programmes leading to replaced qualifications is 31 December 2017.

The last date to meet the requirements of the replaced qualifications will be 31 December 2019 when the qualifications will be discontinued. From that date no results can be reported against the qualifications.

People currently working towards any of the replaced qualifications must complete its requirements or transfer to a programme of study or training leading to a replacement qualification by 31 December 2019.

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 MITO at the address below. Appeals will be considered on a case by case basis.

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

This qualification contained standards that had expired or been replaced by other standards. For the purposes of this qualification people who have gained credit for the replacement standards are exempt from the requirement to gain credit for the expiring or replaced standards – see table below.

Credit for	Exempt from
2422	25874, 25875
2423	25698, 25699

Credit for	Exempt from
2424	25700
2425	25702, 25703
7485	91046
7486	91068

## NZQF National Qualification Registration Information

Process	Version	Date	Last Date for Assessment
Registration	1	August 2008	December 2019
Republished	1	January 2014	December 2019
Review	2	November 2015	December 2019

## Standard Setting Body

NZ Motor Industry Training Organisation (Incorporated)  
 PO Box 10803  
 WELLINGTON

Telephone 0800 88 21 21  
 Facsimile 04 494 0006  
 Email [info@mito.org.nz](mailto:info@mito.org.nz)  
 Website [www.mito.org.nz](http://www.mito.org.nz)

## National Certificate in Motor Industry (Automotive Body) (Level 4) with strands in Coachbuilding, Collision Repair, and Refinishing

<b>Level</b>	<b>4</b>
<b>Credits</b>	<b>93-112</b>

### Purpose

The National Certificate in Motor Industry (Automotive Body) (Level 4) with strands in Coachbuilding, Collision Repair, and Refinishing [Ref: 1414] recognises the skills and knowledge required for people in roles that involve complex body repair or engineering work at an intermediate to advanced level and who work within the automotive body sector of the motor industry.

The qualification includes a core compulsory and core elective section common to each of the three strands. This core covers knowledge and skills primarily in areas of customer interaction, such as booking in work, selling goods and services, completing quotations and estimates for jobs, warranties and guarantees, and participating in quality improvement objectives. The standards in the compulsory section of each strand ensure that the candidate develops and applies knowledge and skills for use in more complex and unfamiliar jobs within their industry sector. The elective section of each strand allows candidates to add further skills that are relevant to their position and/or specific workplace requirements.

The qualification strands recognise the competencies required to work in a range of automotive body workplaces in:

- coachbuilding and other vehicle body manufacturing roles involved in the engineering, construction, and modification of coaches, truck bodies, motorhomes, caravans, and other purpose-built vehicle bodies
- collision repair roles involved in vehicle body repairs required as a result of collision and corrosion damage
- refinishing roles involved in the preparation, restoration, and finishing of painted vehicle body surfaces.

This qualification is one of a suite of qualifications developed at the intermediate to advanced level for the motor industry. The qualifications in this suite are grouped to reflect the industry-recognised sector subsets of: automotive body, automotive electrical and mechanical engineering, automotive heavy engineering, automotive specialist engineering, and vehicle servicing. In most cases these subsets are also divided into two levels to provide clearer entry and exit points from training.

Industry wished to be able to recognise a minimum and consistent set of fundamental competencies across all roles in all qualifications at each level. This has resulted in a common set of standards that appear consistently across the core sections in all of the Level 4 qualifications in the *Motor Industry* subfield. This structure has been modelled on the *Qualifications Roadmap* (the motor industry career pathway document), which allows a candidate to move more easily between strands of qualifications in similar areas and to transfer skills from this qualification to other motor industry qualifications.

People wishing to obtain information on career pathways, should contact the NZ Motor Industry Training Organisation Incorporated (see contact details below).

This qualification builds on the skills and knowledge developed in the National Certificate in Motor Industry (Automotive Body) Coachbuilding, Collision Repair, and Refinishing strands [Ref: 1413], each of which is a prerequisite for the award of this qualification. Candidates may choose to progress to the National Certificate in Motor Industry (Advanced Technical) (Level 5) with strands in Automotive Electrical and Mechanical, and Collision Repair [Ref: 1143], the National Certificate in Business (First Line Management) (Level 4) [Ref: 0649], or the National Diploma in Business (Level 5) [Ref: 0783].

## Replacement Information

This qualification and the National Certificate in Motor Industry (Automotive Body) with strands in Coachbuilding, Collision Repair, Dismantling and Recycling, Refinishing, and Vehicle Detailing [Ref: 1413] replaced the National Certificate in Motor Industry (Coachbuilding) with strands in Passenger Service Vehicles, Commercial Vehicles, and Motor Homes and Caravans [Ref: 0413], the National Certificate in Motor Industry (Panelbeating) [Ref: 0179], the National Certificate in Motor Industry (Automotive Dismantling and Recycling) [Ref: 0170], the National Certificate in Motor Industry (Automotive Refinishing) [Ref: 0178], and the National Certificate in Motor Industry (Vehicle Grooming) [Ref: 0213].

## Special Notes

The award of this qualification is dependent on the award in the appropriate strand of the National Certificate in Motor Industry (Automotive Body) [Ref: 1413]. NZQA will check this requirement before award of the qualification.

Application for the recognition of current competency should be made to the NZ Motor Industry Training Organisation or an accredited training provider. Credits are not automatic and an assessment of ability is required.

## Credit Range

	Core Compulsory	Core Elective
Level 2 credits	-	0-4
Level 3 credits	2	0-4
Level 4 credits	2	0-4
Minimum totals	4	4

	Coachbuilding Strand		Collision Repair Strand	
	Compulsory	Elective	Compulsory	Elective
Level 1 credits	-	0-6	-	-
Level 2 credits	-	0-34	-	-
Level 3 credits	-	0-39	5	0-2
Level 4 credits	38	0-66	66	2-14
Level 5 credits	-	0-28	-	0-10
Minimum totals	38	66	71	14
Qualification total	112		93	

	Refinishing Strand	
	Compulsory	Elective
Level 3 credits	-	0-6
Level 4 credits	79	0-6
Minimum totals	79	6
Qualification total	93	

## 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

- Core Compulsory standards
- Core Elective – A minimum of 4 credits as specified

One of the following strands is required

- Coachbuilding Strand
- Collision Repair Strand
- Refinishing Strand

### Detailed Requirements

#### Core Compulsory

The following standards are required

## Engineering and Technology &gt; Motor Industry &gt; Automotive Administration

ID	Title	Level	Credit
5777	Demonstrate knowledge of estimate and quotation procedures in the motor and related industries	4	2
22789	Demonstrate knowledge of warranties and guarantees that apply to the motor or related industries	3	2

**Core Elective**

A minimum of 4 credits

## Business &gt; Business Operations and Development &gt; Quality Management

ID	Title	Level	Credit
8077	Participate in a team to achieve specified quality improvement objectives	3	4

## Engineering and Technology &gt; Motor Industry &gt; Automotive Administration

ID	Title	Level	Credit
946	Book in and receive work for an automotive or related business	3	4
968	Estimate or quote the cost of a repair or service in the motor and related industries	4	4

**Coachbuilding Strand**

Prior award of National Certificate in Motor Industry (Automotive Body) [Ref: 1413]

Meet the requirements of all of the following sets

- Coachbuilding Compulsory
- Coachbuilding Elective

**Coachbuilding Compulsory**

The following standards are required

## Engineering and Technology &gt; Mechanical Engineering &gt; Composites

ID	Title	Level	Credit
3192	Provide for and attach fixings and fastenings in composites	4	4

## Engineering and Technology &gt; Motor Industry &gt; Coachbuilding

ID	Title	Level	Credit
11702	Make and fit a vehicle door in the coachbuilding industry	4	7
11703	Make and fit vehicle steps in the coachbuilding industry	4	4
11706	Make and fit a roof frame and panels to a vehicle in the coachbuilding industry	4	6

ID	Title	Level	Credit
11711	Interpret vehicle drawings and job specifications for coachbuilding, and produce a sketch with relevant measurements	4	3

## Engineering and Technology &gt; Motor Industry &gt; Collision Repair

ID	Title	Level	Credit
5762	Remove and replace a damaged motor vehicle panel attached by adhesives	4	8

## Engineering and Technology &gt; Motor Industry &gt; Vehicle Bodywork

ID	Title	Level	Credit
19638	Prepare and assemble vehicle body steel components by bonding	4	6

**Coachbuilding Elective**

A minimum of 66 credits

## Engineering and Technology &gt; Mechanical Engineering &gt; Engineering Drawing and Design

ID	Title	Level	Credit
2433	Create simple engineering drawings using computer aided design (CAD) software	2	6

## Engineering and Technology &gt; Mechanical Engineering &gt; Engineering - Fabrication

ID	Title	Level	Credit
16955	Calculate sizes, mass, volumes, and quantities for engineering fabrication	3	4
25698	Form and shape light fabrication materials	4	20
25699	Form and shape heavy fabrication materials	4	20
25700	Assemble and join light fabrication materials	4	20
25701	Assemble and join heavy fabrication materials	4	20
25702	Cut light fabrication materials	4	15
25703	Cut heavy fabrication materials	4	15
25874	Lay out and mark off light fabrication shapes	4	15
25875	Lay out and mark off heavy fabrication shapes	4	15

## Engineering and Technology &gt; Mechanical Engineering &gt; Engineering - Materials

ID	Title	Level	Credit
20799	Demonstrate basic knowledge of engineering metals	2	4

ID	Title	Level	Credit
20917	Demonstrate basic knowledge of engineering materials	2	2

## Engineering and Technology &gt; Mechanical Engineering &gt; Fluid Power - Hydraulics

ID	Title	Level	Credit
20597	Make a hydraulic power system safe	2	4
20599	Clean a hydraulic power system for service	2	4
20611	Demonstrate knowledge of hydraulics and hydraulic power systems	2	5
20613	Maintain a hydraulic power system under supervision	2	5

## Engineering and Technology &gt; Mechanical Engineering &gt; Welding

ID	Title	Level	Credit
2676	Weld stainless steel sheet with the gas tungsten arc welding process	3	6

## Engineering and Technology &gt; Motor Industry &gt; Automotive Administration

ID	Title	Level	Credit
24076	Determine vehicle production schedules and order materials in the motor industry	4	4

## Engineering and Technology &gt; Motor Industry &gt; Automotive Electrical and Electronics

ID	Title	Level	Credit
976	Specify the lighting requirements for a passenger coach or special purpose vehicle	5	4
978	Specify the battery and charging system requirements for a passenger coach or special purpose vehicle	5	4
16114	Demonstrate knowledge of vehicle security systems and their installation	3	4

## Engineering and Technology &gt; Motor Industry &gt; Coachbuilding

ID	Title	Level	Credit
10752	Carry out final quality checks on a vehicle in the coachbuilding industry	4	6
11695	Make and assemble a vehicle chassis drop section in the coachbuilding industry	4	5
11696	Lower and raise a chassis on a vehicle in the coachbuilding industry	5	10
11697	Lengthen and shorten chassis on vehicles in the coachbuilding industry	4	6
11704	Make and fit a flat deck and headboard on a vehicle in the coachbuilding industry	4	6
11712	Fit a tail lift to a vehicle in the coachbuilding industry	4	4



ID	Title	Level	Credit
11713	Fit an additional axle to a vehicle chassis in the coachbuilding industry	5	6
11714	Make and modify vehicle seat frames in the coachbuilding industry	4	5
11715	Fit out the interior of a passenger service or motor home type vehicle	4	8
11719	Make and fit a draw beam to a vehicle in the coachbuilding industry	4	5
11721	Fit a hoist to a vehicle in the coachbuilding industry	4	5

## Engineering and Technology &gt; Motor Industry &gt; Collision Repair

ID	Title	Level	Credit
23996	Demonstrate knowledge of repairing and replacing damaged non-structural motor vehicle aluminium panels	4	2
23997	Repair and replace a damaged non-structural aluminium panel on a motor vehicle	4	6

## Engineering and Technology &gt; Motor Industry &gt; Vehicle Bodywork

ID	Title	Level	Credit
11720	Evaluate vehicle weight requirements, and calculate a vehicle weight from specifications	5	4
22798	Remove and install direct glazed windscreens and side and rear glass on vehicles	4	6

## Engineering and Technology &gt; Technology &gt; Design and Visual Communication

ID	Title	Level	Credit
91068	Undertake development of design ideas through graphics practice	1	6

## Engineering and Technology &gt; Technology &gt; Generic Technology

ID	Title	Level	Credit
91046	Use design ideas to produce a conceptual design for an outcome to address a brief	1	6

## Manufacturing &gt; Industrial Textile Fabrication &gt; Industrial Textile Fabrication Core Skills

ID	Title	Level	Credit
1325	Establish product design and job specifications for industrial textile fabrication	4	12
1326	Develop and make up patterns in the industrial textile fabrication industry	4	6

## Planning and Construction &gt; Construction Trades &gt; Flooring

ID	Title	Level	Credit
17008	Demonstrate knowledge of the characteristics of adhesives used in the flooring industry	4	12

**Collision Repair Strand**

Prior award of National Certificate in Motor Industry (Automotive Body) [Ref: 1413]

Meet the requirements of all of the following sets

- Collision Repair Compulsory
- Collision Repair Elective

**Collision Repair Compulsory**

The following standards are required

## Engineering and Technology &gt; Motor Industry &gt; Collision Repair

ID	Title	Level	Credit
5758	Repair a severely damaged motor vehicle steel panel	4	6
5772	Demonstrate knowledge of motor vehicle suspension, steering, and brake systems, and the effects of collision	4	6
5773	Identify and align structural damage on a motor vehicle	4	15
23982	Inspect and identify vehicle damage	4	4
23993	Demonstrate knowledge of full and sectional panel replacement on motor vehicles	4	2
23995	Carry out a full and sectional panel replacement on motor vehicle panels	4	20
23996	Demonstrate knowledge of repairing and replacing damaged non-structural motor vehicle aluminium panels	4	2

## Engineering and Technology &gt; Motor Industry &gt; Panelbeating

ID	Title	Level	Credit
5770	Identify and work on damaged motor vehicles with anti-lock braking systems (ABS)	4	5

## Engineering and Technology &gt; Motor Industry &gt; Vehicle Bodywork

ID	Title	Level	Credit
5775	Remove and replace motor vehicle supplementary restraint systems	4	6
24000	Demonstrate knowledge of motor vehicle restraint systems	3	5

**Collision Repair Elective**

A minimum of 14 credits

## Engineering and Technology &gt; Motor Industry &gt; Collision Repair

ID	Title	Level	Credit
5762	Remove and replace a damaged motor vehicle panel attached by adhesives	4	8
5776	Complete repairs of perforated metal corrosion on a motor vehicle structural steel panel	4	6
5782	Identify and align aluminium structural damage on a motor vehicle	5	10
9076	Repair vehicle chassis damage	4	10
23997	Repair and replace a damaged non-structural aluminium panel on a motor vehicle	4	6

## Engineering and Technology &gt; Motor Industry &gt; Vehicle Bodywork

ID	Title	Level	Credit
19638	Prepare and assemble vehicle body steel components by bonding	4	6
23980	Demonstrate knowledge of removing and replacing vehicle dash panels and adjacent fittings	3	2
23981	Remove and replace vehicle dash panels and adjacent fittings	4	4

**Refinishing Strand**

Prior award of National Certificate in Motor Industry (Automotive Body) [Ref: 1413]

Meet the requirements of all of the following sets

- Refinishing Compulsory
- Refinishing Elective

**Refinishing Compulsory**

The following standards are required

## Engineering and Technology &gt; Motor Industry &gt; Automotive Refinishing

ID	Title	Level	Credit
5720	Paint vehicle panels in solid colour two pack enamel in the automotive refinishing industry	4	8
5723	Paint vehicle panels in basecoat and two pack clearcoat	4	8
24006	Demonstrate knowledge of paint scales and mixing machines, and colour matching in the automotive refinishing industry	4	4
24007	Prepare, mix and match colours to vehicles in the automotive refinishing industry	4	20
24012	Demonstrate knowledge of paint defects in the automotive refinishing industry	4	2
24013	Identify and repair paint defects in the automotive refinishing industry	4	4

ID	Title	Level	Credit
24014	Demonstrate knowledge of plastic automotive parts and painting automotive plastics	4	2
24015	Prepare and paint plastic automotive parts	4	4
24016	Demonstrate knowledge of touching up two pack solid and Clear-Over-Base (COB) finishes on a vehicle	4	3
24017	Touch up the paintwork on a vehicle using two pack solid and Clear-Over-Base (COB) colours	4	15
24018	Demonstrate knowledge of touching up pearl finishes	4	2
24019	Touch up the paintwork on a vehicle using three layer pearl finishes	4	7

### Refinishing Elective

A minimum of 6 credits

Engineering and Technology > Motor Industry > Automotive Refinishing

ID	Title	Level	Credit
5729	Paint vehicle panels in three layer pearl and two pack clearcoat	4	8
23994	Demonstrate knowledge of waterborne paint systems in the automotive refinishing industry	4	2
24022	Use waterborne paint systems in the automotive refinishing industry	4	4

Engineering and Technology > Motor Industry > Vehicle Bodywork

ID	Title	Level	Credit
22801	Demonstrate knowledge of adhesives and sealants used in the motor body industry	3	4
22802	Select and use adhesives and sealants for vehicle bodywork applications	3	3

### Transition Arrangements

This qualification and the National Certificate in Motor Industry (Automotive Body) with strands in Coachbuilding, Collision Repair, Dismantling and Recycling, Refinishing, and Vehicle Detailing [Ref: 1413] replaced the National Certificate in Motor Industry (Coachbuilding) with strands in Passenger Service Vehicles, Commercial Vehicles, and Motor Homes and Caravans [Ref: 0413], the National Certificate in Motor Industry (Panelbeating) [Ref: 0179], the National Certificate in Motor Industry (Automotive Dismantling and Recycling) [Ref: 0170], the National Certificate in Motor Industry (Automotive Refinishing) [Ref: 0178], and the National Certificate in Motor Industry (Vehicle Grooming) [Ref: 0213].

Version 1 of this qualification was republished to include reverse transition arrangements for expired and expiring standards 2422-2425, 7485, 7486, and 16954.

Programmes leading to the new qualifications are being introduced from 2008. People currently working towards any of the replaced qualifications may either complete the requirements for that qualification or transfer their results to one of the new qualifications.

The last date for entry to training programmes or courses for the replaced qualifications is December 2009. The last date for assessment of the replaced qualifications is:

- National Certificate in Motor Industry (Automotive Dismantling and Recycling) [Ref: 0170], 31 December 2011;
- National Certificate in Motor Industry (Automotive Refinishing) [Ref: 0178], 31 December 2012;
- National Certificate in Motor Industry (Panelbeating) [Ref: 0179], 31 December 2012;
- National Certificate in Motor Industry (Vehicle Grooming) [Ref: 0213], 31 December 2010;
- National Certificate in Motor Industry (Coachbuilding) with strands in Passenger Service Vehicles, Commercial Vehicles, and Motor Homes and Caravans [Ref: 0413], 31 December 2012.

Industry will continue to recognise the former qualifications, so there should be no need to 'upgrade' by those who have already achieved one.

### Differences between new and replaced qualifications

There are substantial differences between the new and replaced qualifications. Changes to structure and content include

- The new qualifications have core compulsory and core elective sections.
- Qualification Ref: 1413 has strands in Coachbuilding, Collision Repair, Dismantling and Recycling, Refinishing at Level 3, and a Vehicle Detailing strand at Level 2, with compulsory and elective sections in each strand.
- Qualification Ref: 1414 has strands in Coachbuilding, Collision Repair, and Refinishing at Level 4, with compulsory and elective sections in each strand.
- Candidates must now complete a strand in qualification Ref: 1413 before they may be awarded the corresponding strand in qualification Ref: 1414.

The new qualifications contain many standards that have replaced or been substituted for standards in the expiring qualifications. For details about these relationships, please refer to the exemption tables below. For a detailed summary of the main changes in the replacement qualifications, please refer to the Review of *Motor Industry* qualifications review report, which can be found in the [Review Summaries](#) on the NZQA website.

Version 1 of this qualification contains two expired standards (7485 and 7486), and standards that will expire in December 2014. For the purposes of this qualification, people who have gained credit for the replacement or substitute standards are exempt from the requirement to gain credit for the expired or expiring standards – see table below.

Credit for	Exempt from
21905	16954
25698	2423

Credit for	Exempt from
25700	2424
25702	2425
25874	2422
91046	7485
91068	7486

Version 1 of this qualification contains standards that replace or are being used as substitutes for expiring 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 or substitute standards – see table below.

Credit for	Exempt from
385	12008
398	22789
880, 10713	22798
5709, 5730	24006, 24007
5716	24012, 24013
5719	24014, 24015
5721, 5724	24016, 24017
5731	24018, 24019
5734	23994, 24022
5755	23980, 23981
5756	23982
5774	23993, 23995
5780	23996, 23997
8306	1325, 1326
11745	12008
15411	12008
19632	22801, 22802
19634	946

It is anticipated that no existing trainees will be disadvantaged by these transition arrangements. Any person who feels they have been disadvantaged by these transition

arrangements should contact MITO at the following address. All appeals will be considered on a case-by-case basis.

## Other standard setting bodies whose standards are included in the qualification

Competenz  
 NZ Flooring Industry Training Organisation Inc  
 NZQA  
 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.

## 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.