

National Certificate in Gas Measurement (Level 3)

Level 3

Credits 69

Purpose

This National Certificate is designed for people working in the specialist gas measurement sector of the gas industry, and recognises the skills and knowledge required by the New Zealand gas industry for certification as a trades operative in gas measurement activities.

The compulsory section recognises competence in calibrating, installing, commissioning and maintaining gas measurement equipment in a gas distribution network. The elective section enables people to select the competencies related to gas measurement that are required in their workplace.

This qualification builds on the National Certificate in Gas Industry (Gas Distribution) (Level 2) [Ref: 1020].

Credit Range

	Compulsory	Elective
Level 2 credits	9	-
Level 3 credits	34	0-34
Level 4 credits	20	0-10
Minimum totals	63	6

Requirements for Award of Qualification

This qualification will be awarded to people who have met the requirements of the compulsory and elective sections.

Award of NQF 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 in section 7 of the New Zealand Qualifications Authority (NZQA) *Rules and Procedures* publications available at <http://www.nzqa.govt.nz/ncea/acrp/index.html>.

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.

Detailed Requirements

Compulsory

The following standards are required

Engineering and Technology > Electrical Engineering > Core Electrical

Id	Title	Level	Credit
15845	Draw and explain simple electrical diagrams	2	4
15851	Demonstrate knowledge of electrical safety and safe working practices for electrical workers	2	3
15852	Isolate and test low-voltage electrical subcircuits	2	2

Engineering and Technology > Gas Industry > Gas Measurement

Id	Title	Level	Credit
12456	Install, commission, and maintain electronic gas flow correctors	4	8
19544	Test gas meters using a bell prover	3	12
19545	Test gas meters using a transfer prover	4	12
23084	Read and interpret gas metering equipment	3	4

Engineering and Technology > Industrial Measurement and Control > Industrial Measurement and Control - Theory

Id	Title	Level	Credit
2630	Demonstrate an understanding of pressure measurement systems used in industry	3	8
2636	Demonstrate an understanding of flow measurement systems used in industry	3	6
2653	Demonstrate an understanding of strain gauges, and weighing systems	3	2
2665	Demonstrate an understanding of instrumentation calibration terminology and standards	3	2

Elective

A minimum of 6 credits

Engineering and Technology > Gas Industry > Gas Marketing, Business and Administration

Id	Title	Level	Credit
11335	Demonstrate knowledge of, use, and maintain a gas data processing and billing system	3	8

Engineering and Technology > Gas Industry > Gas Measurement

Id	Title	Level	Credit
12455	Install, commission, and maintain mechanical gas flow correctors	4	10

Engineering and Technology > Gas Industry > Gas Network Operations

Id	Title	Level	Credit
12510	Install and change domestic meters and regulators in a gas distribution network	3	6

Engineering and Technology > Industrial Measurement and Control > Industrial Measurement and Control - Maintenance

Id	Title	Level	Credit
2631	Maintain pressure measurement devices	3	10
2637	Maintain flow measurement devices used in industry	3	10

Transition Arrangements

Version 6

Version 6 was issued following the planned review of the qualification and taking account of a review of gas industry standards, New Zealand gas industry competency requirements, and feedback from industry, assessors, and providers.

Changes to structure and content

- special notes removed
- standard 12454 replaced by standard 23084 in compulsory
- standard 3490 removed
- title of standard 12455 and level of standard 12510 updated
- credit ranges updated and total credit decreased from 73 to 69
- prerequisite diagram added
- qualification pathway diagram updated.

For detailed information see Review Summaries on the NZQA website.

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

People currently working towards version 4 or 5 of this qualification may either complete the requirements for that version or transfer existing credits to version 6.

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
743	15845
1179	15851, 15852
12451	19544
12452	19545
12454	23084

It is not intended that anyone is disadvantaged by this review, and the above arrangements have been designed for a smooth transition. However, anyone who feels they have been disadvantaged may appeal to NZ Motor Industry Training Organisation (Incorporated).

Previous versions of the qualification

Version 5 was issued to update the Standard Setting Body information following the amalgamation of the Gas and Petrochemical Industry Training Organisation with the NZ Motor Industry Training Organisation (Incorporated), and to update the qualification pathway diagram.

Version 4 was issued in September 2003 following a review. Changes to content included: standard 3492 replaced by standard 3490; and prerequisite qualification requirements changed to recommended in special notes.

Version 3 was issued in June 2003 following a review of gas industry standards. Changes to structure and content included: standard 12451 replaced by standard 19544 and moved to compulsory; standard 12452 replaced by standard 19545; standard 12510 made elective; prerequisite qualification requirements amended to National Certificate in Gas Industry (Gas Distribution) (Level 2) [Ref: 1020] which replaced the National Certificate in Gas Industry (Gas Distribution) with strand in Gas Pressure Control [Ref: 0397]; credit total increased from 66 to 73.

Version 2 was revised and issued in June 1999 following a review of electrical engineering standards.

NQF Registration Information

Process	Version	Date	Last Date for Assessment
Registration	1	November 1997	December 2004
Revision	2	June 1999	December 2004
Review	3	June 2003	December 2004
Revision	4	September 2003	December 2008
Revision	5	June 2004	December 2008
Review	6	October 2007	N/A

Standard Setting Body

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

Telephone 0800 88 2121
 Fax 04 494 0006
 Email info@mito.org.nz
 Website www.mito.org.nz

Planned Review

Any person or organisation may contribute to the review of this qualification by sending feedback to the standard setting body at the above address.

Next Review	2013
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Other standard setting bodies whose standards are included in the qualification

ElectroTechnology Industry Training Organisation

Certification

The certificate will display the logos of NZQA and NZ Motor Industry Training Organisation (Incorporated).

Classification

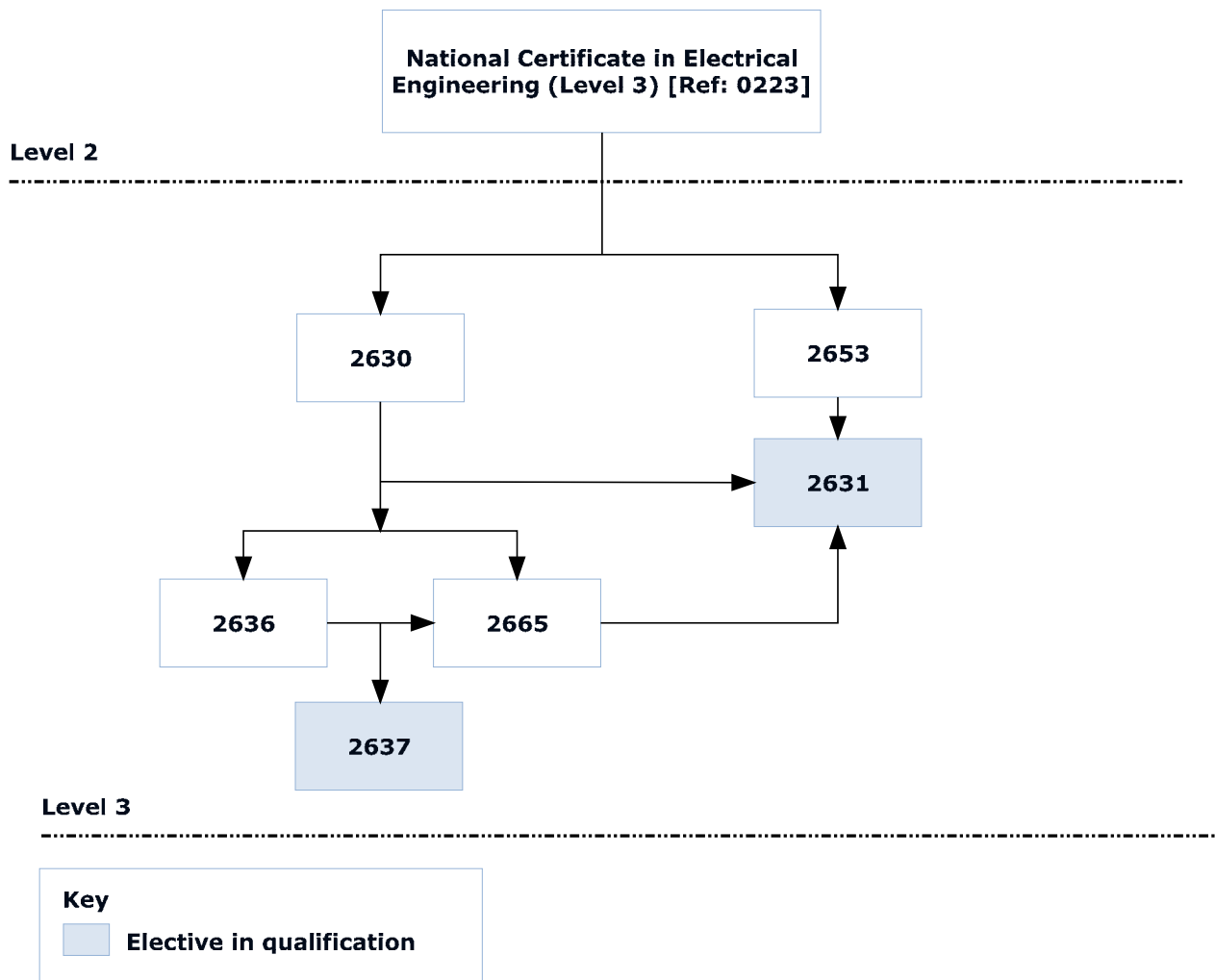
This qualification is classified according to the NQF classification system and the New Zealand Standard Classification of Education (NZSCED) system as specified below

NQF Classification		NZSCED	
Code	Description	Code	Description
1380	Engineering and Technology > Gas Industry > Gas Measurement	039999	Engineering and Related Technologies > Other Engineering and Related Technologies > Engineering and Related Technologies not elsewhere classified

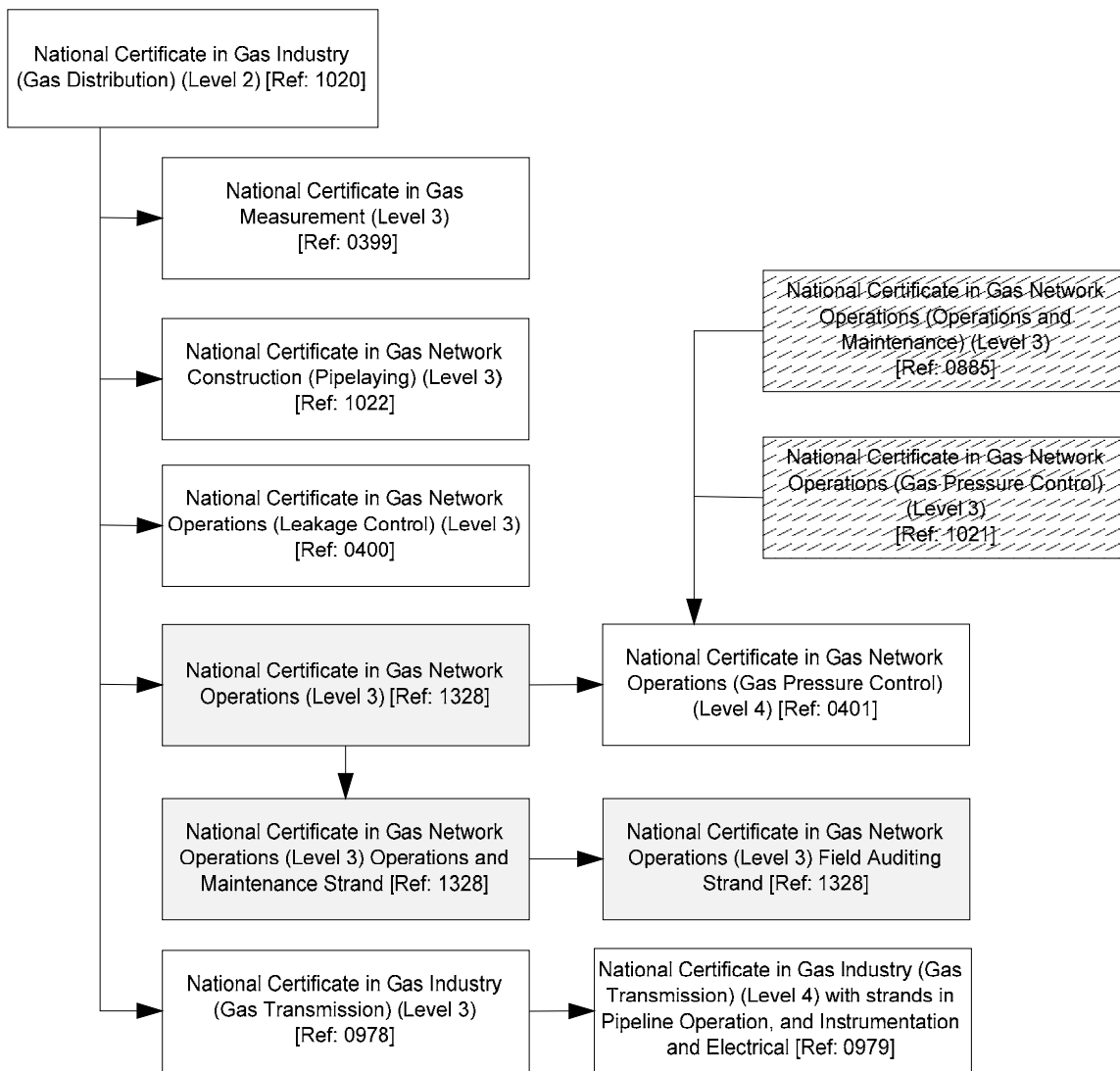
Quality Management Systems

Providers and Industry Training Organisations must be accredited 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.

Recommended Prerequisite Relationship Diagram



Gas Industry Qualification Pathway



Key

