

National Certificate in Gas Network Operations (Level 3) with optional strands in Operations and Maintenance, and Field Auditing

Level	3
Credits	115

Purpose

This National Certificate is designed for people working in the network distribution sector of the gas industry, and recognises the skills and knowledge required by the New Zealand gas industry for certification as a trade operative in gas network operations and maintenance, and field auditing.

The compulsory section recognises competence in detecting and repairing gas leakages, first line emergency work, installing and maintaining standard gas metering and pressure control equipment, and understanding cathodic protection. The elective section acknowledges competence in using breathing apparatus.

The optional strand in Operations and Maintenance recognises skills, in a gas distribution network context, in gaining work approvals, implementing notifications, excavating and trenching, squeezing off, jointing, replacing pipe, installing fittings, testing and purging gas pipelines, responding gas leaks, and checking and maintaining the gas distribution network.

The optional strand in Field Auditing recognises the skill required to audit worksite systems in a gas distribution network.

This qualification contains optional standards that are not required for completion of the certificate. However, these may be considered necessary for some employment contexts in the gas distribution industry.

This qualification builds on the National Certificate in Gas Industry (Gas Distribution) (Level 2) [Ref: 1020], shares several standards with the National Certificate in Gas Network Operations (Leakage Control) (Level 3) [Ref: 0400] and the National Certificate in Gas Transmission Operations (Mechanical) (Level 3) [Ref: 1576], and leads to the National Certificate in Gas Network Operations (Gas Pressure Control) (Level 4) [Ref: 0401].

Replacement Information

This qualification replaced the National Certificate in Gas Network Operations (Operations and Maintenance) (Level 3) [Ref: 0885] and the National Certificate in Gas Network Operations (Gas Pressure Control) (Level 3) [Ref: 1021].

Special Notes

Prerequisite: National Certificate in Gas Industry (Gas Distribution) (Level 2) [Ref: 1020] or demonstrate equivalent knowledge and skills.

People working in a gas pressure control context will require achievement of the compulsory and elective sections; people who repair gas networks will require the optional strand in operations and maintenance; and people who undertake audits may choose the optional field auditing strand.

For accreditation as an official industry auditor both optional strands are required.

Credit Range

	Compulsory	Elective
Level 2 credits	6	-
Level 3 credits	88	3-6
Level 4 and above credits	18	-
Minimum totals	112	3
Qualification total	115	

	Operations and Maintenance Optional Strand	Field Auditing Optional Strand
Level 3 credits	71	4
Level 4 credits	18	-
Total for strand	89	4

	Optional Standards
Level 2 credits	0-2
Level 3 credits	0-30
Level 4 and above credits	0-28
Minimum total	0

Requirements for Award of Qualification

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.

Summary of Requirements

- Compulsory standards
- Elective – A minimum of 3 credits as specified

The following strands are optional

- Operations and Maintenance Optional Strand
- Field Auditing Optional Strand

Detailed Requirements

Compulsory

The following standards are required

Engineering and Technology > Gas Industry > Gas Measurement

ID	Title	Level	Credit
12450	Demonstrate knowledge of gas meters and correctors	2	3
23084	Read and interpret gas metering equipment	3	4

Engineering and Technology > Gas Industry > Gas Network Construction

ID	Title	Level	Credit
10981	Fit mechanical couplings in a gas distribution network	3	3
10984	Cut, thread, and join steel pipes in a gas distribution network	2	3

Engineering and Technology > Gas Industry > Gas Network Operations

ID	Title	Level	Credit
12507	Use gas leakage detection equipment on reticulated gas networks	3	5
12510	Install and change domestic meters and regulators in a gas distribution network	3	6
19549	Make temporary repairs of gas escapes in a gas distribution network	3	5
19550	Restore supply after interruption to domestic gas consumer in a gas distribution network	3	5
19552	Stabilise a gas emergency site and deal with a gas-filled building	4	16
19555	Assemble, install, test, and commission a standard gas pressure reducing and metering station	3	10
19557	Perform maintenance on a standard gas pressure reducing and metering station	3	10
19560	Troubleshoot and rectify faults on a standard gas pressure reducing and metering station	3	20
23088	Demonstrate knowledge of standard gas pressure control equipment	3	8

ID	Title	Level	Credit
23089	Relight gas appliances safely after disruption of supply from a gas network	3	12

Engineering and Technology > Petrochemical Industry > Petrochemical Cathodic Protection

ID	Title	Level	Credit
9575	Explain the purpose and application of cathodic protection in a petrochemical workplace	4	2

Elective

A minimum of 3 credits

Community and Social Services > Fire and Rescue Services > Fire and Rescue Services - Generic Fire Fighting

ID	Title	Level	Credit
3272	Wear and operate breathing apparatus in general emergencies	3	3

Engineering and Technology > Gas Industry > Gas Network Operations

ID	Title	Level	Credit
12526	Use fresh air distance breathing apparatus in a gas distribution network	3	3

Operations and Maintenance Optional Strand

The following standards are required

Engineering and Technology > Gas Industry > Gas Network Construction

ID	Title	Level	Credit
10975	Squeeze off a polyethylene pipe in a gas distribution network	3	6
10992	Use pipe and cable locators in a gas distribution network	3	3
19546	Test, connect, and purge a main in a gas distribution network	3	8
19547	Connect, test, and purge a service in a gas distribution network	3	8
25608	Carry out a flow stopping operation on a live gas main	4	12
25611	Demonstrate knowledge of stopple equipment and operations in a gas distribution network	3	3

Engineering and Technology > Gas Industry > Gas Network Operations

ID	Title	Level	Credit
11328	Gain approvals and implement notification procedures for works in a gas distribution network	3	3
12503	Respond to and locate gas escapes in a gas distribution network	3	20
12504	Perform and record walking leakage surveys in a gas distribution network	3	6
12518	Check and maintain in-line valves in a gas distribution network	3	3
19551	Inspect and advise on works in the vicinity of a gas distribution network	3	3
20590	Test gas for odour level and odorant concentration in a gas network	3	3

Manufacturing > Plastics Processing Technology > Plastics Fabrication

ID	Title	Level	Credit
10980	Perform electrofusion jointing on polyethylene pipe for a distribution network	4	6
25610	Demonstrate knowledge of equipment and operations for jointing polyethylene pipe for a distribution network	3	5

Field Auditing Optional Strand

The following standard is required

Engineering and Technology > Gas Industry > Gas Network Operations

ID	Title	Level	Credit
19543	Audit worksite systems in a gas distribution network	3	4

Optional standards

The following standards are optional

Health > Health Studies > Core Health

ID	Title	Level	Credit
6400	Manage first aid in emergency situations	3	2

Health > Occupational Health and Safety > Occupational Health and Safety Practice

ID	Title	Level	Credit
17588	Apply for, accept, and carry out work according to a work permit in the workplace	3	4
17590	Issue worksite specific work permits	3	6

Service Sector > Driving > Specialist Driving Knowledge and Skills

ID	Title	Level	Credit
17976	Demonstrate knowledge of operating a light four wheel drive (4WD) vehicle in an off-road environment	3	4

Engineering and Technology > Gas Industry > Gas Network Construction

ID	Title	Level	Credit
10968	Decommission and disconnect a main in a gas distribution network	4	8
10969	Decommission and disconnect services in a gas distribution network	3	8
10993	Use a Holiday detector in a gas distribution network	2	2
23087	Pig a pipeline in a gas network	4	4

Engineering and Technology > Gas Industry > Gas Network Operations

ID	Title	Level	Credit
12509	Install and test cathodic protection in a gas distribution network	4	7
12518	Check and maintain in-line valves in a gas distribution network	3	3
20590	Test gas for odour level and odorant concentration in a gas network	3	3

Engineering and Technology > Gas Industry > Gas Transmission Operations

ID	Title	Level	Credit
9550	Perform basic pipe wrapping on a steel pipeline	4	3

Engineering and Technology > Highway Construction and Maintenance > Temporary Traffic Management

ID	Title	Level	Credit
5628	Operate as a Site Traffic Management Supervisor (STMS) for low volume and Level 1 roads	5	3

Engineering and Technology > Petrochemical Industry > Petrochemical Cathodic Protection

ID	Title	Level	Credit
9576	Carry out cathodic protection system monitoring in a petrochemical workplace	4	3

Transition Arrangements

Version 2

Version 2 was issued to update reviewed standard details and remove a redundant standard.

Changes to structure and content

- expiring standard 10985, in the Operations and Maintenance Optional Strand, was replaced by standard 25608;
- standard 25610 was added to the Operations and Maintenance Optional Strand as it is recommended for entry to standard 10980;
- standard 25611 was added to the Operations and Maintenance Optional Strand as it is prerequisite for entry to standard 25608;
- classifications, titles, levels, and credits of reviewed standards were updated;
- credits for the Operations and Maintenance Optional Strand increased from 72 to 89; and
- the prerequisite and pathways diagrams were 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 working towards version 1 of the qualification may complete the requirements of that version or transfer to this version. People currently working towards either the National Certificate in Gas Network Operations (Operations and Maintenance) (Level 3) [Ref: 0885] or the National Certificate in Gas Network Operations (Gas Pressure Control) [Ref: 1021] may either complete the requirements for that qualification by 31 December 2010 or transfer existing credits to version 2 of this 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
9573, 9574	20590
10971	19546
10973	19547
12499, 12500	19552
12453, 12454	23084
12508	19551
12511, 12514	19555

Credit for	Exempt from
12512, 12515	19560
12513, 12516	19557
19553	23088

The above arrangements have been designed for a smooth transition. However, anyone who feels they have been disadvantaged may appeal to NZ Extractive Industries Training Organisation.

Previous versions of the qualification

Version 1 replaced the National Certificate in Gas Network Operations (Operations and Maintenance) (Level 3) [Ref: 0885] and the National Certificate in Gas Network Operations (Gas Pressure Control) (Level 3) [Ref: 1021].

There were substantial differences between the new and replaced qualifications.

NQF Registration Information

Process	Version	Date	Last Date for Assessment
Registration	1	October 2007	December 2012
Revision	2	July 2010	N/A

Standard Setting Body

NZ Extractive Industries Training Organisation
 PO Box 2623
 Christchurch 8140

Telephone 03 964 4710
 Facsimile 03 964 4714
 Email info@exito.org.nz
 Website <http://www.exito.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

Fire and Rescue Services Industry Training Organisation
 InfraTrain New Zealand
 New Zealand Industry Training Organisation
 NZQA
 Tranzqual ITO

Certification

The certificate will display the logos of NZQA, the NZ Extractive Industries Training Organisation and the accredited organisation.

Classification

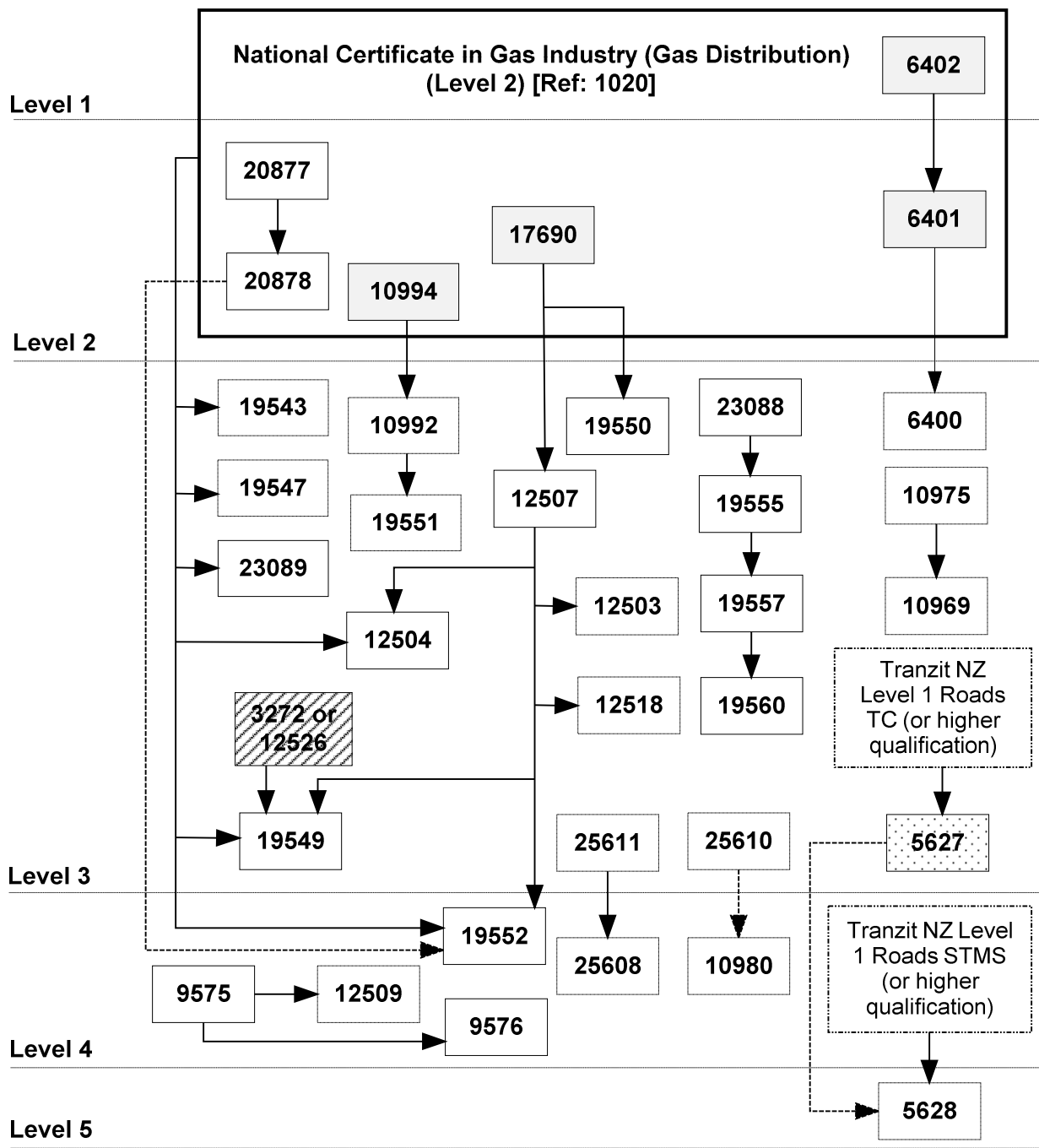
This qualification is classified according to the NQF classification system and the New Zealand Standard Classification of Education (NZSCED) system as specified below.

NQF Classification		NZSCED	
Code	Description	Code	Description
1379	Engineering and Technology > Gas Industry > Gas Network Operations	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.

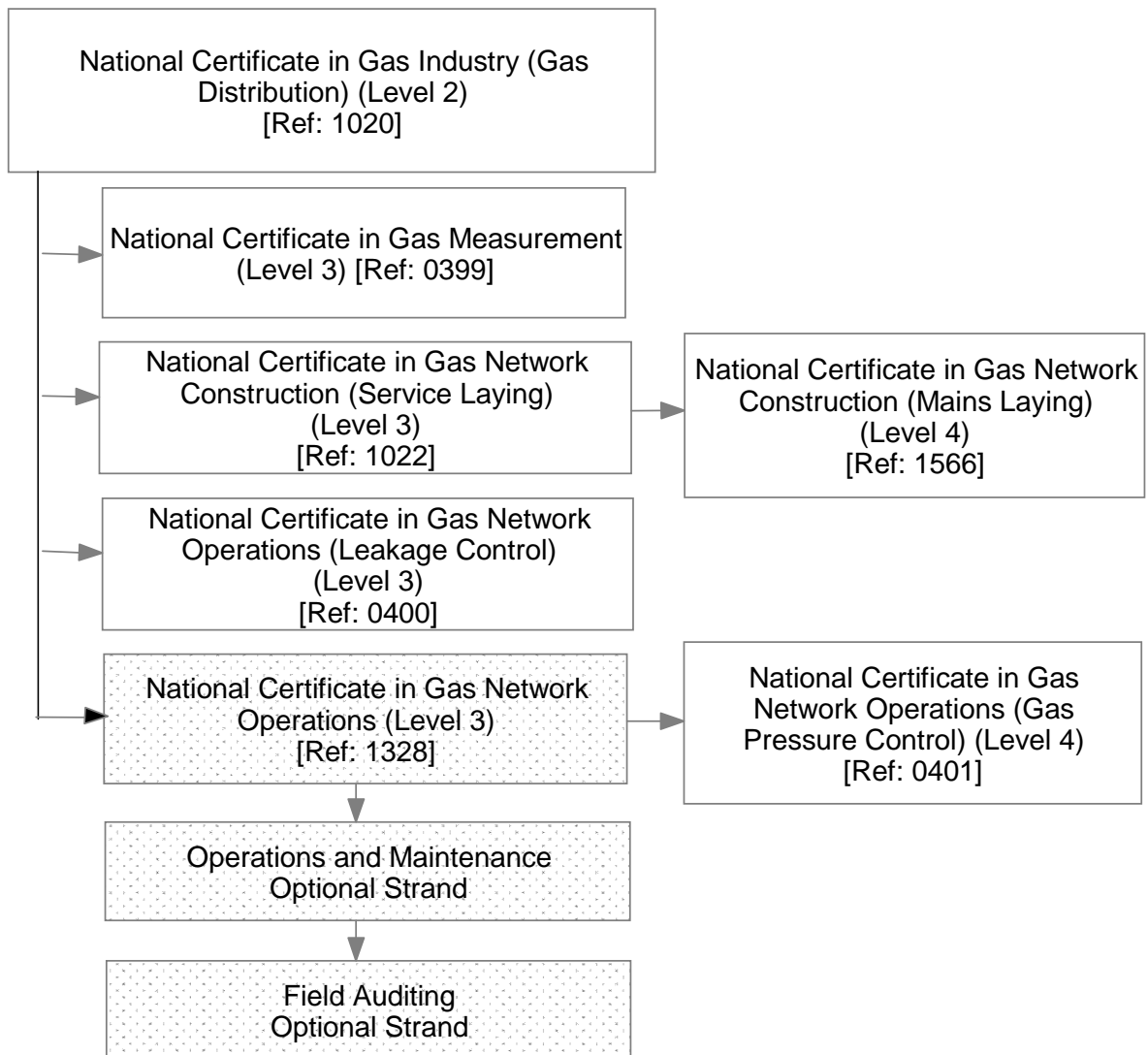
Prerequisite Diagram




Key

- Prerequisite
- Recommended
- ▭ In prerequisite National Certificate in Gas Industry (Gas Distribution) (Level 2) [Ref: 1020]
- ▨ Elective in qualification
- ▭ Optional in qualification
- ▭ Not in qualification
- ▭ Qualification not on New Zealand Qualifications Framework

Pathways Diagram – Gas Network Industry



Key

 Qualification and optional strands separated to show sequence for award of qualification with optional strands