

National Certificate in Extractive Industries (Operations) (Level 3) with strands in Coal Plant, Drilling Surface, Drilling Underground, Maintenance Operations, Metalliferous Processing, Mobile Plant Surface, Processing Plant, Surface Extraction, Underground Extraction, and Water Treatment

Level	3
Credits	49-82

This qualification has been **reviewed**. The last date to meet the requirements is 31 December 2021.

Transition Arrangements

This qualification was republished in December 2018 to extend the last date of entry into programmes leading to this qualification from 31 December 2018 to 31 December 2019. The last date for assessment was also extended for this qualification from 31 December 2020 to 31 December 2021.

Version 3 was also republished to include reverse transition arrangements for unit standards 8897, 8898, 8911 and 17602.

This qualification includes the following standards that have expired and were not replaced: 1754, 14960, 14961 and 14962. These standards are no longer available to meet the requirements of the Elective sections of the qualification.

This qualification has been reviewed and replaced by the New Zealand Certificate in Surface Mining and Quarrying (Level 3) [Ref: 2785] and the New Zealand Certificate in Underground Mining (Level 3) [Ref: 2786].

The last date for entry into programmes leading to this qualification is 31 December 2019.

The last date for assessment of this qualification is 31 December 2021 when the qualification will be discontinued.

People currently working towards this qualification may either complete the requirements by 31 December 2021 or transfer their results to the replacement qualification.

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

This qualification contains other expiring and expired standards that have been replaced by later standards. Exemptions have been included in this qualification so people can complete the qualification using either the expiring/expired standards or replacement standards.

For the purpose of this qualification, people who have gained credit for the replacement standards are exempt from the requirement to gain credit for the expiring/expired standards – see table below.

Credit for	Exempt from
28794	8897 or 8898 or 8911
30265	17602

It is the intention of MITO New Zealand Incorporated that no existing trainee should be disadvantaged by these transition arrangements. Any person who considers they have been disadvantaged may appeal to MITO New Zealand Incorporated using the contact details below.

NZQF National Qualification Registration Information

Process	Version	Date	Last Date for Assessment
Registration	1	December 2009	December 2013
Revision	2	June 2011	December 2021
Review	3	August 2015	December 2021
Republication	3	September 2017	December 2021
Republication	3	December 2018	December 2021

Standard Setting Body

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National Certificate in Extractive Industries (Operations) (Level 3) with strands in Coal Plant, Drilling Surface, Drilling Underground, Maintenance Operations, Metalliferous Processing, Mobile Plant Surface, Processing Plant, Surface Extraction, Underground Extraction, and Water Treatment

Level	3
Credits	49-82

Purpose

This qualification is designed for junior/trainee miners/operators who work in an extractive industries surface or underground site.

The qualification comprises core compulsory standards related to hazard recognition and lifting and moving loads. The core elective sections relate to environmental requirements in an extractives workplace and provide opportunities for employers and employees to select standards from other areas of the National Qualifications Framework that meet the specific requirements of the enterprise.

The strands in this qualification recognise the skills and knowledge of a miner or operator in a range of roles in extractives industries at surface or underground sites.

The qualification has a significant health and safety component in recognition of the hazards associated with the extractive environment and the holders role; and gives the choice and flexibility to gain the core skills whilst offering options in keeping with individual and company preferences.

This qualification builds on the National Certificate in Extractive Industries (Introductory Skills) with strands in Surface Extraction, and Underground Extraction [Ref: 0247] and leads to the National Certificate in Extractive Industries (Operations) (Level 4) with strands in Drilling Underground, Metalliferous Processing, Processing Plant, Surface Extraction, and Underground Extraction [Ref: 1522]; the National Certificate in Extractive Industries (Supervision) (Level 4) with strands in Surface Extraction, and Underground Extraction [Ref: 0249]; the National Certificate in Extractive Industries (Supervision) (Level 5) with strands in Surface Extraction, and Underground Extraction [Ref: 1523]; and the National Diploma in Extractive Industries (Management) with strands in Surface Extraction, and Underground Extraction [Ref: 0806].

Replacement information

This qualification and the National Certificate in Extractive Industries (Lime Milling) (Level 4) [Ref: 1525] replaced the National Certificate in Extractive Industries (Operations) with strands in Lime Milling, Surface Extraction, and Underground Extraction [Ref: 0248].

Credit Range

	Core Compulsory	Core Elective 1	Core Elective 2
Level 2 credits	-	0-4	-
Level 3 or above credits	13	0-22	5
Minimum totals	13	4	5

	Coal Plant Strand	Drilling Surface Strand	
		Compulsory	Elective
Level 2 credits	9	4	0-5
Level 3 or above credits	25	20	4-10
Minimum totals	34	24	8
Minimum total for strand	34	32	
Minimum total for qualification	56	54	

	Drilling Underground Strand		Maintenance Operations Strand
	Compulsory	Elective	
Level 2 credits	-	-	0-7
Level 3 or above credits	45	10-20	38-45
Minimum totals	45	10	45
Minimum total for strand	55		45
Minimum total for qualification	77		67

	Metalliferous Processing Strand	
	Compulsory	Elective
Level 2 credits	2	0-18
Level 3 or above credits	-	27-45
Minimum totals	2	45
Minimum total for strand	47	
Minimum total for qualification	69	

	Mobile Plant Surface Strand	
	Elective 1	Elective 2
Level 2 credits	0-16	-
Level 3 or above credits	4-20	20
Minimum totals	20	20
Minimum total for strand	40	
Minimum total for qualification	62	

	Processing Plant Strand	Surface Extraction Strand	
		Compulsory	Elective
Level 2 credits	0-18	2	0-3
Level 3 or above credits	22-40	5	17-20
Minimum totals	40	7	20
Minimum total for strand	40	27	
Minimum total for qualification	62	49	

	Underground Extraction Strand	Water Treatment Strand	
		Compulsory	Elective
Level 2 credits	-	5	0-2
Level 3 or above credits	35	29	18-20
Minimum totals	35	34	20
Minimum total for strand	35	54	
Minimum total for qualification	57	76	

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

- Prior award of National Certificate in Extractive Industries (Introductory Skills) (Level 2) [Ref: 0247]
- Core Compulsory standards
- Core Elective 1 – A minimum of 1 standard as specified
- Core Elective 2 – A minimum of 5 credits as specified

One of the following strands is required

- Coal Plant Strand
- Drilling Surface Strand
- Drilling Underground Strand
- Maintenance Operations Strand
- Metalliferous Processing Strand
- Mobile Plant Surface Strand
- Processing Plant Strand
- Surface Extraction Strand
- Underground Extraction Strand
- Water Treatment Strand

Detailed Requirements

Core Compulsory

The following standards are required

Engineering and Technology > Extractive Industries > Extractive Industries Management

ID	Title	Level	Credit
16687	Demonstrate knowledge of hazardous substances at an extractive site	3	3
17695	Attach, lift, move, and place loads using mobile plant	3	10

Core Elective 1

A minimum of 1 standard

Engineering and Technology > Extractive Industries > Extractive Industries Management

ID	Title	Level	Credit
25876	Describe the effects of an extractives site on the environment and related requirements and responsibilities	3	4

Sciences > Environment > Environmental Education

ID	Title	Level	Credit
18663	Demonstrate knowledge of and apply sustainable environmental management practices in the workplace	2	4

Service Sector > Cranes > Crane Operation

ID	Title	Level	Credit
3789	Sling regular loads and communicate during crane operations	3	22

Core Elective 2

A minimum of 5 credits at Level 3 or above
From anywhere on the DAS

Coal Plant Strand

The following standards are required

Engineering and Technology > Extractive Industries > Extractive Industries Management

ID	Title	Level	Credit
17982	Describe and operate control rooms at an extraction site	4	15
19737	Demonstrate basic knowledge of coal quality assurance	2	5
25880	Use simple maths to solve extractives related problems	2	4

Engineering and Technology > Extractive Industries > Surface Extraction

ID	Title	Level	Credit
19736	Demonstrate knowledge of and operate a coal processing plant	3	10

Drilling Surface Strand

Meet the requirements of all of the following sets

- Drilling Surface Strand Compulsory
- Drilling Surface Strand Elective

Drilling Surface Strand Compulsory

The following standards are required

Engineering and Technology > Extractive Industries > Extractive Industries Management

ID	Title	Level	Credit
25880	Use simple maths to solve extractives related problems	2	4

Engineering and Technology > Extractive Industries > Surface Extraction

ID	Title	Level	Credit
8915	Conduct drilling operations at a surface extractive site	3	20

Drilling Surface Strand Elective

A minimum of 2 standards

- Of which a minimum of 1 standard at Level 3 or above

Engineering and Technology > Extractive Industries > Surface Extraction

ID	Title	Level	Credit
8900	Clean surface extraction fixed and mobile production plant, equipment, and site, and maintain site	2	5
15664	Demonstrate knowledge of the geological nature of surface extraction sites	3	5
15665	Demonstrate knowledge of the geology of surface extraction	4	5

Engineering and Technology > Mechanical Engineering > Engineering Core Skills

ID	Title	Level	Credit
2395	Select, use and care for, engineering hand tools	2	4
2396	Select, use and maintain portable hand held engineering power tools	2	4

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

ID	Title	Level	Credit
17602	Apply hazard identification and risk assessment procedures in the workplace	3	4

Drilling Underground Strand

Meet the requirements of all of the following sets

- Drilling Underground Strand Compulsory
- Drilling Underground Strand Elective

Drilling Underground Strand Compulsory

The following standards are required

Engineering and Technology > Drilling Industry > Drilling - Non-hydrocarbon

ID	Title	Level	Credit
22485	Conduct conventional core drilling in a non-hydrocarbon drilling environment	3	20

Engineering and Technology > Extractive Industries > Underground Extraction

ID	Title	Level	Credit
15666	Demonstrate knowledge of geology for underground extraction	4	10
21281	Interpret and test for gases in an underground extraction site	4	15

Drilling Underground Strand Elective

A minimum of 1 standard

Engineering and Technology > Extractive Industries > Underground Extraction

ID	Title	Level	Credit
7151	Operate a load haul dump machine with attachments in an underground mine	3	20
21818	Describe, drill, and install support systems with a hand held drill borer in an underground mine	4	10
21821	Supply, maintain, deliver, and store services for an underground mine	3	15

Maintenance Operations Strand

A minimum of 45 credits

Engineering and Technology > Extractive Industries > Extractive Industries Management

ID	Title	Level	Credit
8903	Maintain screens on production plant at an extractives site	3	5
25882	Inspect and maintain conveyors at an extractives site	4	8
25884	Inspect and maintain screens at an extractives site	4	3

Engineering and Technology > Extractive Industries > Surface Extraction

ID	Title	Level	Credit
8897	Adjust jaws on crushing plant for extractive industries	3	10
8898	Adjust cone crusher on crushing plant for extractive industries	3	10
8917	Operate haul trucks safely for surface work at an extractive site	3	12

ID	Title	Level	Credit
22341	Operate a wheeled dozer safely for surface work at an extractive site	3	15
22342	Operate a track type tractor safely for surface work at an extractive site	3	20
22345	Operate an articulated dump truck safely for surface work at an extractive site	3	15
22346	Operate a water truck safely for surface work at an extractive site	3	12
27238	Operate a wheeled loader safely for surface work at an extractive site	3	15
27239	Operate an excavator safely for surface work at an extractive site	3	15
27240	Operate a mechanical rockbreaker safely for surface work at an extractive site	3	12
27241	Operate a motor grader safely for surface work at an extractive site	3	20
27242	Operate an excavator at the face safely for surface work at an extractive site	3	10

Engineering and Technology > Extractive Industries > Underground Extraction

ID	Title	Level	Credit
7151	Operate a load haul dump machine with attachments in an underground mine	3	20
21279	Describe mobile machines and operate a mobile machine in an underground extractive site	3	20
21281	Interpret and test for gases in an underground extraction site	4	15

Engineering and Technology > Mechanical Engineering > Welding

ID	Title	Level	Credit
2671	Weld steel structures in the downhand positions using the manual metal arc welding process	3	6
2682	Weld steel in the downhand positions to a general purpose industry standard using the manual metal arc welding process	3	6
2683	Cut metals using manual thermal processes	3	4

Engineering and Technology > Metalliferous Mining > Metalliferous Mining - Operations

ID	Title	Level	Credit
24467	Service mine plant and equipment in a metalliferous mine	2	4
24471	Operate mine service vehicle in a metalliferous mine	3	3

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

ID	Title	Level	Credit
17599	Plan a confined space entry	4	5
17602	Apply hazard identification and risk assessment procedures in the workplace	3	4

Service Sector > Commercial Road Transport > Goods Service

ID	Title	Level	Credit
1754	Operate truck-mounted load lifting equipment	2	3

Service Sector > Cranes > Crane Operation

ID	Title	Level	Credit
3789	Sling regular loads and communicate during crane operations	3	22

Metalliferous Processing Strand

Meet the requirements of all of the following sets

- Metalliferous Processing Strand Compulsory
- Metalliferous Processing Strand Elective

Metalliferous Processing Strand Compulsory

The following standard is required

Engineering and Technology > Metalliferous Mining > Metalliferous Mining - Operations

ID	Title	Level	Credit
24477	Collect routine site samples in a metalliferous mine	2	2

Metalliferous Processing Strand Elective

A minimum of 45 credits

- Of which a minimum of 27 credits at Level 3 or above

Engineering and Technology > Extractive Industries > Extractive Industries Management

ID	Title	Level	Credit
17989	Describe, operate, and control recyclable water systems at an extraction site	4	12
25881	Operate conveyors at an extractives site	3	5
25883	Operate screens at an extractives site	3	3

Engineering and Technology > Extractive Industries > Surface Extraction

ID	Title	Level	Credit
8897	Adjust jaws on crushing plant for extractive industries	3	10

ID	Title	Level	Credit
8898	Adjust cone crusher on crushing plant for extractive industries	3	10
8900	Clean surface extraction fixed and mobile production plant, equipment, and site, and maintain site	2	5
8911	Operate a static primary crushing plant	2	12
8917	Operate haul trucks safely for surface work at an extractive site	3	12
17993	Describe and operate a tailings disposal system at an extractive site	3	12
22341	Operate a wheeled dozer safely for surface work at an extractive site	3	15
22342	Operate a track type tractor safely for surface work at an extractive site	3	20
22345	Operate an articulated dump truck safely for surface work at an extractive site	3	15
22346	Operate a water truck safely for surface work at an extractive site	3	12
27238	Operate a wheeled loader safely for surface work at an extractive site	3	15
27239	Operate an excavator safely for surface work at an extractive site	3	15
27240	Operate a mechanical rockbreaker safely for surface work at an extractive site	3	12
27241	Operate a motor grader safely for surface work at an extractive site	3	20
27242	Operate an excavator at the face safely for surface work at an extractive site	3	10

Engineering and Technology > Metalliferous Mining > Metalliferous Mining - Operations

ID	Title	Level	Credit
24473	Respond to local emergencies and incidents in a metalliferous mine	3	5

Manufacturing > Energy and Chemical Plant > Monitoring of Energy and Chemical Plant

ID	Title	Level	Credit
3058	Perform gas tests for energy and chemical plant	4	5

Service Sector > Driving > Driver Licence Endorsements

ID	Title	Level	Credit
18496	Demonstrate knowledge and skills for driving a forklift on a road for endorsement F (forklifts)	3	2

Field	Subfield	Domain
Engineering and Technology	Metalliferous Mining	Metalliferous Mining - Processing

Mobile Plant Surface Strand

Meet the requirements of all of the following sets

- Mobile Plant Surface Strand Elective 1
- Mobile Plant Surface Strand Elective 2

Mobile Plant Surface Strand Elective 1

A minimum of 20 credits

Engineering and Technology > Extractive Industries > Extractive Industries Management

ID	Title	Level	Credit
25880	Use simple maths to solve extractives related problems	2	4

Engineering and Technology > Extractive Industries > Surface Extraction

ID	Title	Level	Credit
8900	Clean surface extraction fixed and mobile production plant, equipment, and site, and maintain site	2	5
8901	Make and spread stockpiles for an extractive site	2	3
8905	Construct and maintain access roads within surface extraction sites	3	3
8906	Apply water to surfaces and stockpiles at an extractive site	2	2
8909	Maintain working surfaces at surface extraction sites	2	2
17990	Describe and plan sampling; and collect, store, and transport samples at a surface extraction site	3	15

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

ID	Title	Level	Credit
17602	Apply hazard identification and risk assessment procedures in the workplace	3	4

Mobile Plant Surface Strand Elective 2

A minimum of 20 credits

Engineering and Technology > Extractive Industries > Surface Extraction

ID	Title	Level	Credit
8917	Operate haul trucks safely for surface work at an extractive site	3	12
14870	Operate a rope excavator	3	12
14960	Describe and operate a ladle carrier at a slag extraction site	3	20

ID	Title	Level	Credit
14961	Describe and operate a dock truck at a slag extraction site	3	20
14962	Describe and operate a coil fork at a slag extraction site	3	20
17981	Describe and operate a hopper/cable reel car at a surface extraction site	3	6
22341	Operate a wheeled dozer safely for surface work at an extractive site	3	15
22342	Operate a track type tractor safely for surface work at an extractive site	3	20
22345	Operate an articulated dump truck safely for surface work at an extractive site	3	15
22346	Operate a water truck safely for surface work at an extractive site	3	12
27238	Operate a wheeled loader safely for surface work at an extractive site	3	15
27239	Operate an excavator safely for surface work at an extractive site	3	15
27240	Operate a mechanical rockbreaker safely for surface work at an extractive site	3	12
27241	Operate a motor grader safely for surface work at an extractive site	3	20
27242	Operate an excavator at the face safely for surface work at an extractive site	3	10

Processing Plant Strand

A minimum of 40 credits

- Of which a minimum of 22 credits at Level 3 or above

Engineering and Technology > Extractive Industries > Extractive Industries Management

ID	Title	Level	Credit
8903	Maintain screens on production plant at an extractives site	3	5
17982	Describe and operate control rooms at an extraction site	4	15
19737	Demonstrate basic knowledge of coal quality assurance	2	5
25880	Use simple maths to solve extractives related problems	2	4
25881	Operate conveyors at an extractives site	3	5
25882	Inspect and maintain conveyors at an extractives site	4	8
25883	Operate screens at an extractives site	3	3
25884	Inspect and maintain screens at an extractives site	4	3

Engineering and Technology > Extractive Industries > Surface Extraction

ID	Title	Level	Credit
8892	Blend product using a blending plant for extractive industries	4	8
8897	Adjust jaws on crushing plant for extractive industries	3	10
8898	Adjust cone crusher on crushing plant for extractive industries	3	10
8900	Clean surface extraction fixed and mobile production plant, equipment, and site, and maintain site	2	5
8911	Operate a static primary crushing plant	2	12
15664	Demonstrate knowledge of the geological nature of surface extraction sites	3	5
16694	Control quality of aggregate produced by mobile and static plant	3	4
17990	Describe and plan sampling; and collect, store, and transport samples at a surface extraction site	3	15
17993	Describe and operate a tailings disposal system at an extractive site	3	12
19735	Demonstrate knowledge of and operate an aerial ropeway at an extractive site	3	12
19736	Demonstrate knowledge of and operate a coal processing plant	3	10
21155	Review consent conditions and demonstrate knowledge of the use of water at surface extraction sites	3	10
22058	Describe and operate a drying plant at an extractive site	3	10

Engineering and Technology > Mechanical Engineering > Engineering Core Skills

ID	Title	Level	Credit
2395	Select, use and care for, engineering hand tools	2	4
2396	Select, use and maintain portable hand held engineering power tools	2	4

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

ID	Title	Level	Credit
17599	Plan a confined space entry	4	5
17602	Apply hazard identification and risk assessment procedures in the workplace	3	4
18426	Demonstrate knowledge of hazards associated with confined spaces	3	4

Surface Extraction Strand

Meet the requirements of all of the following sets

- Surface Extraction Strand Compulsory
- Surface Extraction Strand Elective

Surface Extraction Strand Compulsory

The following standards are required

Engineering and Technology > Extractive Industries > Surface Extraction

ID	Title	Level	Credit
8909	Maintain working surfaces at surface extraction sites	2	2
15664	Demonstrate knowledge of the geological nature of surface extraction sites	3	5

Surface Extraction Strand Elective

A minimum of 20 credits

- Of which a minimum of 17 credits at Level 3

Engineering and Technology > Extractive Industries > Surface Extraction

ID	Title	Level	Credit
8900	Clean surface extraction fixed and mobile production plant, equipment, and site, and maintain site	2	5
8901	Make and spread stockpiles for an extractive site	2	3
8905	Construct and maintain access roads within surface extraction sites	3	3
8906	Apply water to surfaces and stockpiles at an extractive site	2	2
8915	Conduct drilling operations at a surface extractive site	3	20
8918	Carry out shotfiring operations at a surface extraction site	3	12
14870	Operate a rope excavator	3	12
17988	Describe and operate primary feed systems at a sand extraction site	3	10
17993	Describe and operate a tailings disposal system at an extractive site	3	12
19735	Demonstrate knowledge of and operate an aerial ropeway at an extractive site	3	12
21153	Demonstrate and apply knowledge of dewatering, pump maintenance, and cleaning settling ponds at extraction sites	3	12
21155	Review consent conditions and demonstrate knowledge of the use of water at surface extraction sites	3	10

Engineering and Technology > Mechanical Engineering > Engineering Core Skills

ID	Title	Level	Credit
2395	Select, use and care for, engineering hand tools	2	4
2396	Select, use and maintain portable hand held engineering power tools	2	4

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

ID	Title	Level	Credit
17602	Apply hazard identification and risk assessment procedures in the workplace	3	4

Underground Extraction Strand

A minimum of 35 credits

Engineering and Technology > Extractive Industries > Underground Extraction

ID	Title	Level	Credit
7151	Operate a load haul dump machine with attachments in an underground mine	3	20
21279	Describe mobile machines and operate a mobile machine in an underground extractive site	3	20
21281	Interpret and test for gases in an underground extraction site	4	15
21663	Describe and operate pipejacking and microtunnelling equipment in an underground mine	4	20
21816	Describe and operate a diesel haul truck in an underground mine	3	20
21819	Describe and operate a shuttle car in an underground mine	3	20
21821	Supply, maintain, deliver, and store services for an underground mine	3	15

Engineering and Technology > Metalliferous Mining > Metalliferous Mining - Operations

ID	Title	Level	Credit
24470	Assess ground conditions in a metalliferous mine	3	4
24472	Conduct integrated tool carrier operations in a metalliferous mine	3	5

Engineering and Technology > Metalliferous Mining > Underground Metalliferous Mining

ID	Title	Level	Credit
24495	Conduct mechanical scaling in an underground metalliferous mine	3	3
24496	Conduct tele-remote operations in an underground metalliferous mine	3	8

Water Treatment Strand

Meet the requirements of all of the following sets

- Water Treatment Strand Compulsory
- Water Treatment Strand Elective

Water Treatment Strand Compulsory

The following standards are required

Engineering and Technology > Extractive Industries > Extractive Industries Management

ID	Title	Level	Credit
17989	Describe, operate, and control recyclable water systems at an extraction site	4	12

Engineering and Technology > Extractive Industries > Surface Extraction

ID	Title	Level	Credit
21155	Review consent conditions and demonstrate knowledge of the use of water at surface extraction sites	3	10

Engineering and Technology > Metalliferous Mining > Metalliferous Mining - Processing

ID	Title	Level	Credit
24474	Handle reagents for transportation, storage, mixing and usage in a metalliferous mine	2	5
24485	Conduct thickening and clarifying process in a metalliferous mine	3	7

Water Treatment Strand Elective

A minimum of 20 credits

Engineering and Technology > Extractive Industries > Extractive Industries Management

ID	Title	Level	Credit
17982	Describe and operate control rooms at an extraction site	4	15

Engineering and Technology > Extractive Industries > Surface Extraction

ID	Title	Level	Credit
21154	Demonstrate and apply knowledge of procedures to minimise environmental impact at an extraction site	5	7

Engineering and Technology > Metalliferous Mining > Metalliferous Mining - Operations

ID	Title	Level	Credit
24477	Collect routine site samples in a metalliferous mine	2	2
24486	Operate and monitor valve systems as part of a controlling process in a metalliferous mine	3	5
24490	Manage plant shutdown and restart in a metalliferous mine	4	10

Previous versions of the qualification

Version 2 was issued following a revision to update standard details following reviews and registration of new standards. Changes to structure and content included: standards 8917 and 27238-27242 were added to the list of elective standards in the Maintenance Operations Strand; standards 22343 and 22344 were removed from the list of elective standards in the Maintenance Operations Strand; minimum requirements for the

Metalliferous Processing Strand Elective were amended from ‘Of which a minimum of 27 credits at Level 3’ to ‘Of which a minimum of 27 credits at Level 3 or above’; standards 6468 and 16158 were removed from the Metalliferous Processing Strand Elective, and standards 8917, 22341, 22342, 22345, 22346, and 27238-27242 were added in their place; standards 24474-24476, 24478, 24480-24487 and 24490 (from the *Surface Metalliferous Mining* domain) were removed from the Metalliferous Processing Strand Elective and replaced by the *Metalliferous Mining - Processing* domain; standards 27238-27242 were added to the Mobile Plant Surface Strand Elective 2; standards 16158, 22343 and 22344 were removed from the Mobile Plant Surface Strand Elective 2; minimum requirements for the Processing Plant Strand were amended from ‘Of which a minimum of 22 credits at Level 3’ to ‘Of which a minimum of 22 credits at Level 3 or above’; the Water Treatment Strand Compulsory credits increased from 29 to 34, increasing the total credits required for the strand from 71 to 76; overall credit requirement was changed from 49-82 to 49-77; and standard details were updated to reflect changes made at review.

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
6468	27240
8908	25881, 25882, 25883, 25884
16158	27238
20732	25876

Version 1 was registered following a restructuring of the Extractives qualifications to greater reflect the pathway taken by people working in the industry.

This qualification and the National Certificate in Extractive Industries (Lime Milling) (Level 4) [Ref: 1525] replaced the National Certificate in Extractive Industries (Operations) with strands in Lime Milling, Surface Extraction, and Underground Extraction [Ref: 0248]. Many of the standards that were in the replaced qualification are in the National Certificate in Extractive Industries (Introductory Skills) (Level 2) with strands in Surface Extraction, and Underground Extraction [Ref: 0247] which is a prerequisite to this qualification.

Other standard setting bodies whose standards are included in the qualification

- Competenz
- MITO New Zealand Incorporated
- Primary Industry Training Organisation
- The Skills Organisation

Certification

This certificate will display the logos of NZQA, MITO New Zealand (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
323	Engineering and Technology > Extractive Industries	030303	Engineering and Related Technologies > Process and Resources Engineering > Mining and Resources 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. 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.