

QUALIFICATION DETAILS

Qualification number/Te nama o te tohu mātauranga	xxxx		
English title/Taitara Ingarihi	New Zealand Certificate in Drinking Water Treatment Operations (Level 4) with optional strands in Pre-treatment, Clarification, Coagulation and Flocculation, Ozone Disinfection, Ultraviolet Disinfection, Fluoridation, Inorganics Control, Organics Control, Media Filtration, Membrane Filtration		
Māori title/Taitara Māori	N/A		
Version number/Te putanga	1	Qualification type/Te momo tohu	Certificate
Level/Te kaupae	4	Credits/Ngā whiwhinga	120
NZSCED/Whakaraupapa	030907 Engineering and Related Technologies>Civil Engineering>Water and Sanitary Engineering		
Qualification developer/Te kaihanga tohu	Waihanga Ara Rau Construction and Infrastructure Workforce Development Council		
Review Date /Te rā arotake	31 December 2030		

OUTCOME STATEMENT/TE TAUĀKI Ā-HUA

Strategic Purpose statement/ Te rautaki o te tohu

The purpose of this qualification is to provide the drinking water treatment industry with individuals who have the skills and knowledge to carry out routine responsibilities for the control of drinking water treatment processes, and operation of a drinking water treatment plant.

This qualification has optional strands to recognise the skills required for the operation of various treatment processes.

This qualification is designed for people who are working in the water services industry.

Graduates of this qualification will be able to work in drinking water operator roles in a drinking water treatment plant.

Graduates of this qualification will work independently.

Graduate Profile/Ngā hua o te tohu

Graduates of this qualification will be able to:

- Implement and communicate health, safety, and compliance requirements for a drinking water treatment plant
- Manage and operate treatment plant to meet compliance requirements
- Monitor, maintain, and report on drinking water treatment operations to meet compliance requirements

Graduates of the Pre-treatment optional strand will also be able to:

- Manage pre-treatment processes

Graduates of the Clarification optional strand will also be able to:

- Manage clarification processes

Graduates of the Coagulation and Flocculation optional strand will also be able to:

- Manage coagulation and flocculation processes

Graduates of the Ozone Disinfection optional strand will also be able to:

- Manage ozone disinfection processes

Graduates of the Ultraviolet Disinfection optional strand will also be able to:

Manage ultraviolet disinfection processes

Graduates of the Fluoridation optional strand will also be able to:

- Manage fluoridation processes

Graduates of the Inorganics Control optional strand will also be able to:

- Manage inorganics control processes

Graduates of the Organics Control optional strand will also be able to:

- Manage organics control processes

Graduates of the Media Filtration optional strand will also be able to:

- Manage media filtration processes

Graduates of the Membrane Filtration optional strand will also be able to:

- Manage membrane filtration processes

Education Pathway/ Ngā huarahi mātauranga

This qualification can lead on from the New Zealand Certificate in Water Services (Level 3) [Ref: XXXX].

Employment, Cultural, Community Pathway/ Ko ngā huarahi ā-mahi, ā-ahurea, ā-whānau, ā-hapū, ā-iwi, ā-hapori anō hoki

Graduates of this qualification will have the knowledge and skills to work as drinking water treatment plant operators.

QUALIFICATION SPECIFICATIONS/ NGĀ TAUWHĀITITANGA O TE TOHU

Qualification Award/ Te whakawhiwhinga o te tohu	This qualification can be awarded by any organisation that has an approved programme or is accredited to deliver an approved programme leading to this qualification.
Evidence requirements for assuring consistency/ Ngā taunaki hei whakaū i te tauritenga	 Evidence requirements may include analysis of: Programme statistics such as completion data and destination data. Surveys of graduates and feedback from other end users to determine that graduates have met the graduate profile outcomes of the qualification. Evidence from external moderation processes.
Minimum standard of achievement and standards for grade endorsements/ Te pae o raro e tutuki ai, ngā paerewa hoki hei whakaatu i te taumata o te whakatutukinga	Achieved.
Other requirements for the qualification (including regulatory body or legislative requirements)/ Kō ētahi atu here o te tohu (tae atu hoki ki ngā here ā-hinonga whakamarumaru, ki ngā here ā-ture rānei)	None.

Programmes must use mandatory skill standards listed in the Conditions relating to the graduate profile below.

Programmes must be in accordance with current standards, acts and legislation.

Current standards can be accessed at: https://standards.co.nz.

Current Acts, legislation and regulations can be accessed at: https://legislation.govt.nz.

Programme delivery must reflect safe working practices. Approved Codes and Practice and best/good practice guidelines can be accessed at: https://worksafe.govt.nz.

Programmes must be delivered in the context of a water services environment operating at an industry acceptable standard.

Programme guidance is available at: gualifications@waihangaararau.nz.

Programme Endorsements

Providers are advised to refer to the Workforce Development Council Programme Endorsement considerations on:

- Programme content
- Equity for learners
- Programme engagement and consultation
- Te ao Māori
- Pacific languages and learners
- Disabled people.

Supporting information for programme developers on programme endorsement is available at waihangaararau.nz.

General conditions for programme/ Ngā tikanga whānui o te hōtaka

CONDITIONS RELATING TO THE GRADUATE PROFILE /NGĀ TIKANGA E HĀNGAI ANA KI NGA HUA O TE TOHU

Qualificatio	n outcomes/ Ngā hua	Credits/Ngā whiwhinga	Conditions/Ngā tikanga
1	Implement and communicate health, safety, and compliance requirements for a drinking water treatment plant	15 credits	Manage risk in a water services environment, Level 4 (5 credits) Manage compliance in water services (5 credits)
			Identify protective measures for natural or managed water bodies used for extraction and discharge (5 credits)
2	Manage and operate treatment plant to meet compliance requirements	80 credits	Manage source water abstraction (10 credits) Operate a water services treatment plant (30 credits) Apply mathematical principles to solve problems in water services (5 credits) Apply science to water services (5 credits) Operate chlorination processes (15 credits)
			Analyse the drinking water treatment process (15 credits)

3	Monitor, maintain, and report on drinking water treatment operations to meet compliance requirements	25 credits	Carry out sampling and testing (5 credits) Maintain plant and equipment in water services operations (20) credits)
Pre-treatme	nt Strand		
4	Manage pre- treatment processes	15 credits	Operate and control pre- treatment processes in drinking-water treatment (Level 4, 15 credits)
Clarification	Strand		
5	Manage clarification processes	15 credits	Operate and control clarification processes in drinking-water treatment (Level 4, 15 credits)
Coagulation	and Flocculation Strand		
6	Manage coagulation and flocculation processes	15 credits	Operate and control coagulation and flocculation processes in drinking-water treatment (Level 4, 15 credits)
Ozone Disin	fection Strand		
7	Manage ozone disinfection processes	15 credits	Operate and control ozone disinfection processes in drinkingwater treatment (Level 4, 15 credits)
Ultraviolet D	Disinfection Strand		
8	Manage ultraviolet disinfection processes	15 credits	Operate and control ultraviolet disinfection processes in drinking- water treatment (Level 4, 15 credits)
Fluoridation	Strand		
9	Manage fluoridation processes	15 credits	Operate and control fluoridation processes in drinking-water treatment

			(Level 4, 15 credits)
Inorgan	ics Control Strand		·
10	Manage inorganics control processes	15 credits	Operate and control inorganics control processes in drinking-water treatment (Level 4, 15 credits)
Organio	s Control Strand		
11	Manage organics control processes	15 credits	Operate and control organics control processes in drinking-water treatment (Level 4, 15 credits)
Media F	iltration Strand		
12	Manage media filtration processes	15 credits	Operate and control media filtration processes in water treatment (Level 4, 15 credits)
Membra	nne Filtration Strand		
13	Manage membrane filtration processes	15 credits	Operate and control membrane filtration processes in drinking- water treatment (Level 4, 15 credits)

TRANSITION INFORMATION/ HE KŌRERO WHAKAWHITI

Replacement information/ He kōrero mō te whakakapi	This qualification replaces the New Zealand Certificate in Drinking-water Treatment (Level 4) with optional strand in Multistage Processes [Ref: 4138].
Additional transition information/ Kō ētahi atu kōrero mō te whakakapi	Version Information Version 1 of this qualification was published in XXXX 2026.
	Please refer to Qualifications and Assessment Standards Approvals for further information. It is not intended that anyone be disadvantaged by these transition arrangements. However, anyone who feels they have been disadvantaged can appeal to: Waihanga Ara Rau Construction and Infrastructure Workforce

PO Box 27-048

Wellington 6140

Phone: 04 909 0174

Email: Qualifications@waihangararau.nz

Website: www.waihangaararau.nz

Please refer to <u>Qualifications and Assessment</u> <u>Standards Approvals</u> for further information.

