

Qualification details

Title	New Zealand Certificate in Water Treatment (Level 4) with strands in Drinking-Water, Wastewater, Drinking-Water Multistage Processes, and Wastewater Multistage Processes		
Version	2	Qualification type	Certificate
Level	4	Credits	70-120
NZSCED	030907 Engineering and Related Technologies > Civil Engineering > Water and Sanitary Engineering		
Qualification developer	Infrastructure ITO		
Next review	December 2018		
Approval date	November 2016		
Strategic purpose statement	<p>The purpose of this qualification is to provide the water treatment industry with individuals who have the skills and knowledge to be responsible for the day-to-day operation of a water treatment plant.</p> <p>The qualification is stranded to recognise the specialist skills required to work in either drinking-water treatment plants, or wastewater treatment plants, or drinking-water treatment plants with multistage processes, or wastewater treatment plants with multistage processes.</p> <p>The trainee will benefit from having a qualification within a training pathway that recognises the range of processes and technologies in water treatment plants, progression through the water industry, as well as increased skills and knowledge acquisition to improve job performance.</p> <p>The water industry, and the wider community, will benefit from having qualified operators of water treatment plants who are able to maintain compliance with all aspects of relevant legislation.</p> <p>Graduates will be capable of working under broad guidance.</p>		
Outcome Statement	Graduate profile	<p>Graduates of this qualification will be able to:</p> <ul style="list-style-type: none"> – Oversee external contractors and visitors when on the water treatment plant site. <p>Graduates of the Drinking-Water Strand will also be able to:</p> <ul style="list-style-type: none"> – Operate a drinking-water treatment plant using chlorine disinfection processes. – Monitor drinking-water treatment plant operation, and report 	

		<p>findings.</p> <p>Graduates of the Wastewater Strand will also be able to:</p> <ul style="list-style-type: none"> – Operate a wastewater treatment plant with an average wastewater influent of 200 m³ per day, using preliminary treatment processes. – Monitor wastewater treatment plant operation, and report findings. <p>Graduates of the Drinking-Water Multistage Process Strand will also be able to:</p> <ul style="list-style-type: none"> – Operate a drinking- water treatment plant using chlorine disinfection processes. – Monitor drinking-water treatment plant operation, and report findings. – Operate a drinking-water treatment plant with a combination of three multistage processes. <p>Graduates of the Wastewater Multistage Process Strand will also be able to:</p> <ul style="list-style-type: none"> – Operate a wastewater treatment plant with an average wastewater influent of greater than 200 m³ per day, using preliminary treatment processes. – Monitor wastewater treatment plant operations, and report findings. – Operate a wastewater treatment plant with a combination of two multistage processes and wastewater influent greater than 200 m³ per day.
	Education pathway	This qualification can build on the relevant context of the New Zealand Certificate in Water Treatment (Drinking-Water/Wastewater) (Level 3) [Ref: 2241], and can lead on to the relevant strand of the New Zealand Diploma in Water Treatment (Level 5) with strands in Drinking-Water and Wastewater [Ref: 2245].
	Employment pathway	Graduates of this qualification will have the knowledge and skills to work as drinking-water or wastewater treatment plant operators.

Qualification specifications

Qualification award	This qualification will be awarded by an organisation which has an approved programme, or industry training programme leading to the qualification.
Evidence requirements for assuring consistency	<p>Evidence may include:</p> <ul style="list-style-type: none"> • Internal and external moderation processes and results relating to the assessment of graduate outcomes

	<ul style="list-style-type: none"> • Feedback and actions taken by the Tertiary Education Organisation in response to feedback • Programme completion data and course results • Post-graduate surveys (which must include survey of graduates and employers) • Any other relevant evidence
Minimum standard of achievement and standards for grade endorsements	Achieved
Other requirements for the qualification (including regulatory body or legislative requirements)	None

General conditions for the programme leading to the qualification

General conditions for programme	<p>Competency for this qualification will typically be demonstrated in a workplace environment.</p> <p>All outcomes in this qualification require aspects of record keeping, communication, and workplace health and safety, which should be considered as part of the assessment process.</p>
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Conditions relating to the Graduate profile

Qualification outcomes		Conditions
1	<p>Oversee external contractors and visitors when on the water treatment plant site.</p> <p>Credit 10</p>	
Drinking-Water Strand		
2	<p>Operate a drinking-water treatment plant using chlorine disinfection processes.</p> <p>Credit 40</p>	
3	<p>Monitor drinking-water treatment plant operation, and report findings.</p> <p>Credit 20</p>	Programmes must include sampling and testing procedures.
Wastewater Strand		

4	Operate a wastewater treatment plant with an average wastewater influent of 200 m ³ per day, using preliminary treatment processes. Credit 40	
5	Monitor wastewater treatment plant operations and report findings. Credit 20	Programmes must include sampling and testing procedures.
Drinking-Water Multistage Processes Strand		
6	Operate a drinking-water treatment plant using chlorine disinfection processes. Credit 40	
7	Monitor drinking-water treatment plant operation, and report findings. Credit 20	Programmes must include sampling and testing procedures.
8	Operate a drinking-water treatment plant with a combination of three multistage processes. Credit 50	Programmes must include a combination of at least three water treatment processes.
Wastewater Multistage Processes Strand		
9	Operate a wastewater treatment plant with a wastewater influent of greater than 200 m ³ per day using preliminary treatment processes. Credit 40	
10	Monitor wastewater treatment plant operation, and report findings. Credit 20	Programmes must include sampling and testing procedures.

11	Operate a wastewater treatment plant with a combination of two multistage processes and wastewater influent greater than 200 m ³ per day. Credit 50	Programmes must include a combination of at least two wastewater treatment processes.
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Transition information

Replacement information	This qualification replaced the National Certificate in Water Treatment (Level 4) [Ref: 0880] and the National Certificate in Wastewater Treatment (Level 4) [Ref: 0879].
<p>The last date for entry into programmes leading to the replaced qualifications is 30 June 2017. The last date for award of the replaced qualifications is 31 December 2018 at which time they will be discontinued.</p> <p>Trainees currently enrolled in programmes leading to the replaced qualifications may either complete that qualification or transfer their results to this replacement qualification.</p> <p>There are no registered programmes leading to Version 1 of this qualification and no candidates working towards Version 1. All new candidates are expected to enrol in Version 2 from date of publication.</p> <p>It is the intention of Infrastructure ITO that no existing trainee should be disadvantaged by these transition arrangements. Any person who considers they have been disadvantaged may appeal to the qualification developer – Infrastructure ITO (Connexis) at qualifications@connexis.org.nz or 04 499 9144.</p>	

Republication information

<p>Version 2 of this qualification was published in November 2016 following a revision to:</p> <ul style="list-style-type: none"> • transfer the qualification developer responsibility from Primary ITO to Infrastructure ITO and update qualification specifications • update specific conditions relating to the graduate profile outcome • Correct errors to the credits and wording of graduate profile outcomes <p>Version 1 of this qualification was republished in February 2015 to update the Evidence requirements for managing consistency.</p>
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