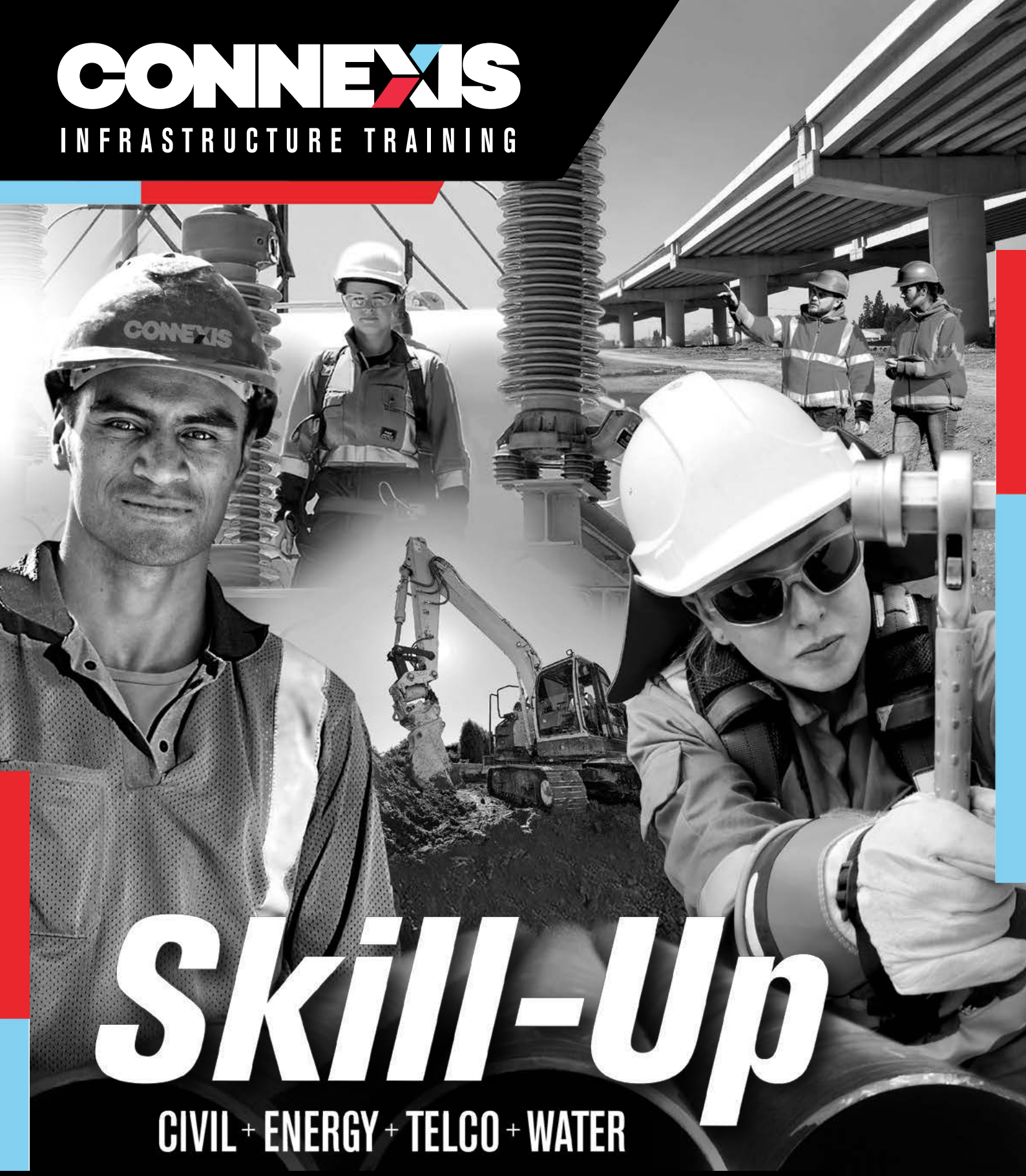
CONNEXIS

INFRASTRUCTURE TRAINING



Skill-Up

CIVIL + ENERGY + TELCO + WATER

QUALIFICATION CATALOGUE

ABOUT CONNEXIS

Connexis is New Zealand's Infrastructure training provider. We arrange, deliver, support and assess work-based learning for the Civil, Energy, Telecommunications and Water infrastructure industries.

We are passionate about creating a sustainable infrastructure workforce, which responds to the needs of industry, both now and in the future.

#InfrastructureApprenticeships
#IndustryTrainingNZ

Connexis is a Business Division of Te Pūkenga - New Zealand Institute of Skills and Technology

November 2024

Contents

Gateway

Available through eLearning

Kickstart infrastructure careers.

Gateway is a great opportunity to introduce high-school students in years 11-13 to the Civil and Energy industries. Students gain practical work experience and training with local infrastructure companies, while getting a recognised NZQA Micro-credential (MC) that gives them credits towards NCEA and a qualification.

Our Micro-credentials:

Civil	Energy
Dig It - Introduction to Infrastructure Works (Level 2)	Power Up - Introduction to the Electricity Supply Industry (Level 2)
Breaking Ground - Infrastructure Worksites (Level 3)	Switched On - Working Safely in the Electricity Supply Industry (Level 2)

How does it work?

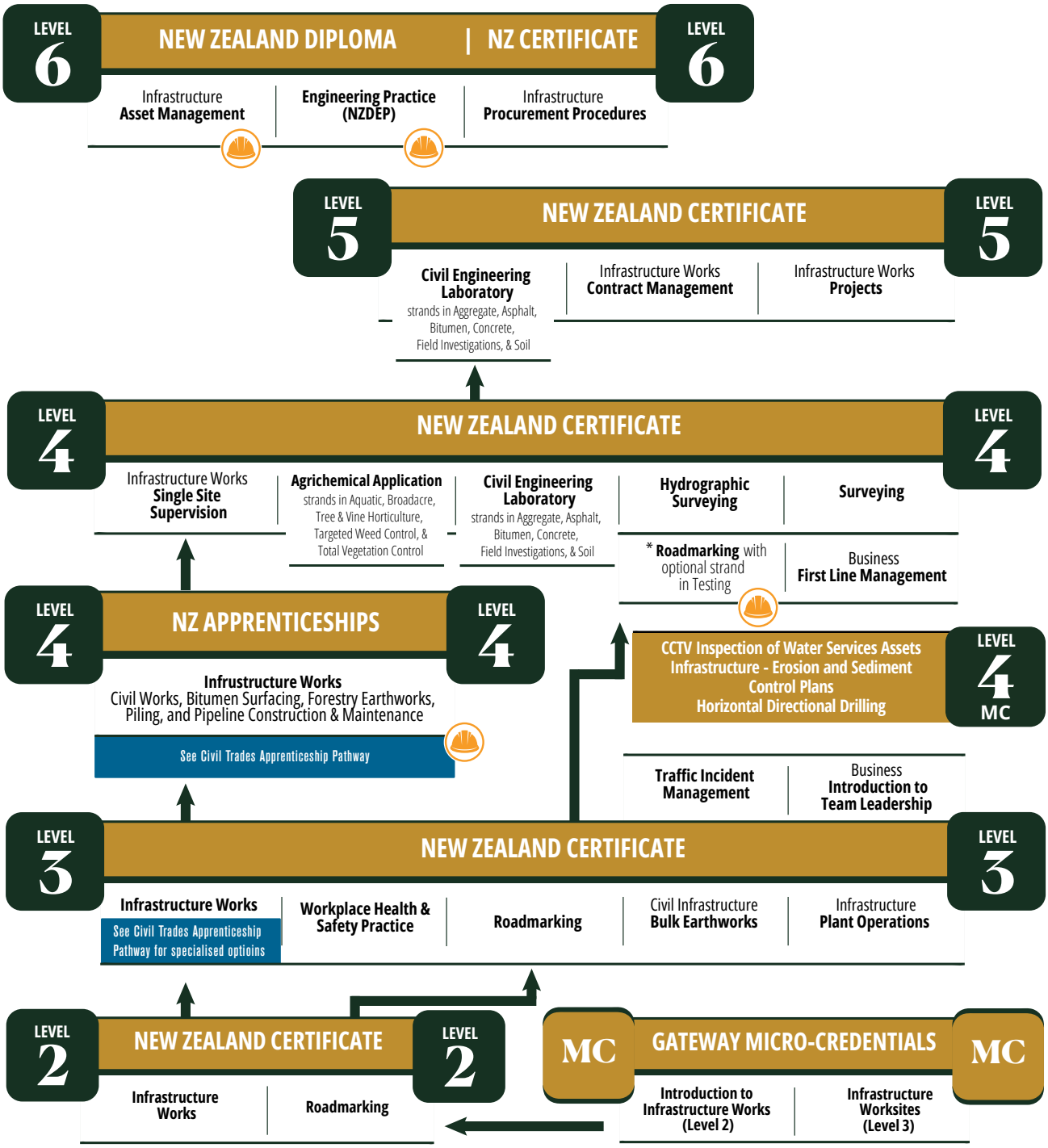
Company	Connexis	School
• Works with the student, family, and school to determine the best timing for the student to be on-site, and how regularly. • Supports the student with their training requirements. If you're an Employer or Training Manager and would like more information visit **connexis.org.nz/employers-info/#gateway**	• Processes enrolment and payment. • Assigns assessor. • Provides an NZQA recognised MC certificate to the student upon completion. • Provides guidance and support throughout the journey to gaining a Gateway MC.	• Enrols the student into their desired industry MC. • Funds the training programme. • Supports the student through training and assessment requirements. If you're a Gateway Coordinator, Teacher or Student and would like more information visit **connexis.org.nz/schools/#gateway**

Civil Career

PROGRESSION PATHWAYS

FEES FREE. govt.nz

VISIT THE FEES FREE WEBSITE TO CHECK YOUR ELIGIBILITY



*This programme is recognised as an NZ Apprenticeship when the optional strand is completed

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CONNEXIS INFRASTRUCTURE TRAINING

Civil Apprenticeships

NEW ZEALAND APPRENTICESHIPS

Our civil apprenticeships are great for those starting their career in the industry. They are also available to recognise the skills and knowledge of more experienced people for those wanting to skill-up, or who are looking for a career change. A civil apprenticeship can also lead towards Civil Trade Certification (see pg. 9).

We have a large selection of infrastructure apprenticeships available now that are recognised on the NZQA framework.

Bitumen Surfacing Construction (Level 4)

- NZ Apprenticeship in Infrastructure Works (Bitumen Surfacing Construction)
- Duration: 19 months
- Credits: 120
- NZQA: 3775

ADVANCED APA AVAILABLE PORTFOLIO ASSESMENT

Skills Covered:

- Assessing and preparing a site for bitumen surfacing construction.
- Implementing quality work processes on a bitumen surfacing construction worksite.
- Safely operating bitumen surfacing construction equipment and machinery.
- Assessing a worksite for health and safety.
- Supporting and mentoring a team on-site.

Civil (Level 4)

- NZ Apprenticeship in Infrastructure Works (Civil) with strands in Earthworks, Road Construction, and Road Maintenance
- Duration: 18 months
- Credits: 137
- NZQA: 2725-2

ADVANCED APA AVAILABLE PORTFOLIO ASSESMENT

Skills Covered:

- Working safely on an infrastructure worksite.
- Reading site plans and carrying out work to specifications.
- Operating machinery and organising materials needed for civil site works.
- Communicating well within a crew.

Forestry Earthworks (Level 4)

- NZ Apprenticeship in Infrastructure (Forestry Earthworks)
- Duration: 16 months
- Credits: 120
- NZQA: 3782

ADVANCED APA AVAILABLE PORTFOLIO ASSESMENT

Skills Covered:

- Reading and making plans for forestry earthworks.
- How to work within environmental, sustainable and safety standards.
- Working in a team and with other forestry users.
- Meeting worksite requirements using flexible work practises.

Piling (Level 4)

- NZ Apprenticeship in Infrastructure (Piling)
- Duration: 24 months
- Credits: 150
- NZQA: 3966

ADVANCED APA AVAILABLE PORTFOLIO ASSESMENT

Skills Covered:

- Installing piles to job specifications.
- Implenting work plans and drawings.
- Applying health and safety requirements.
- Monitoring site conditions and communicating with stakeholders on-site.

Civil Apprenticeships

NEW ZEALAND APPRENTICESHIPS

Pipe Installation (Level 4)

- NZ Apprenticeship in Infrastructure Works (Pipe Installation)
- Duration: 25 months
- Credits: 125
- NZQA: 4441

Skills Covered:

- Meeting health, safety, environment, and quality assurance requirements when installing pipes.
- Applying knowledge of pipes, fittings, and structures to complete pipe installations to job specifications.
- Installing pipes underground using appropriate trenched installations methodology and technology.

Pipeline Construction & Maintenance (Level 4)

- NZ Apprenticeship in Infrastructure Works (Pipeline Construction & Maintenance) with strands in Drinking-Water, Wastewater and Stormwater, and Trenchless Technologies
- Duration: 24 months
- Credits: 164
- NZQA: 3858-2

Skills Covered:

- Following and making plans to construct and maintain pipelines.
- Coordinating materials and operating tools and equipment needed to construct pipelines.
- Meeting health and safety requirements while ensuring the safety of learner and crew.
- Communicating well with team while on-site

The Drinking-Water, or Stormwater and Wasterwater strand, also covers maintaining reticulation assets (depending on chosen strand), including planned and reactive works.

The Trenchless Technologies strand also covers installing or rehabilitating infrastructure assets using appropriate trenchless installation methodology and technology.

Roadmarking with Testing strand (Level 4)

- NZ Apprenticeship in Roadmarking with strand in Testing
- Duration: 19 months
- Credits: 120
- NZQA: 3236-2

Skills Covered:

- Applying health, safety, and environmental management procedures to meet compliance requirements.
- Planning, coordinating and carrying out roadmarking work tasks to meet contract specifications.
- A skilled operator will be able to carry out both remark and new work using an A-type or B-type applicator.
- Supervising a roadmarking team to complete daily work activities on a roadmarking site, to meet contract specifications.

Graduates of the Testing strand will also be able to certify roadmarking applicators to ensure compliance with industry standards.

Civil Trades Career

PROGRESSION PATHWAYS

FEES FREE. govt.nz

VISIT THE FEES FREE WEBSITE TO CHECK YOUR ELIGIBILITY

HIGHER LEVEL QUALIFICATIONS

See Civil Career Progression Pathway

NEW ZEALAND CIVIL TRADES CERTIFICATION

Road Construction & Maintenance	Road Surfacing	Pipeline Construction & Maintenance	Piling	Pipe Installation

Civil Trades Certification is offered by Civil Contractors New Zealand.
Head to civilcontractors.co.nz for eligibility criteria and the application process

LEVEL 4 — NEW ZEALAND APPRENTICESHIP IN INFRASTRUCTURE WORKS

- Bitumen Surfacing Construction
- Roadmarking with strand in Testing
- Civil — strands in Earthworks, Road Construction, & Road Maintenance
- Forestry Earthworks
- Pipeline Construction & Maintenance — strands in Drinking-Water, Wastewater & Stormwater, & Trenchless Technologies
- Piling
- Pipe Installation

LEVEL 3 — NEW ZEALAND CERTIFICATE IN INFRASTRUCTURE WORKS WITH INDUSTRY CONTEXT OPTIONS IN

Civil Works	Bitumen Surfacing	Forestry Earthworks	Pipeline Construction & Maintenance	Piling

LEVEL 2 — NEW ZEALAND CERTIFICATE

Infrastructure Works

CIVIL TRADES

Valid as of November 2024

*This programme is recognised as an NZ Apprenticeship when the optional strand is completed

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PWCT01

CONNEXIS INFRASTRUCTURE TRAINING

Civil Trade Certification (CTC)

The Civil Trades Certification programme, offered by Civil Contractors New Zealand (CCNZ), is a nationally recognised accreditation programme for civil industry workers that blends a recognised trade qualification with certified hours of practical experience, and leads to registration as a Certified Tradesperson. With benefits for employers and employees alike, it's the pathway of choice for the Civil Infrastructure workforce of the future.

How can I get Civil Trade Certified?

1. A civil infrastructure level 4 qualification
2. 8,000 hours of practical experience
3. Be endorsed for Civil Trade Certification

Head to civilcontractors.co.nz for more information.

Level 4 qualifications eligible for Civil Trades Certification:

New Zealand Certificate (NZC) in Infrastructure Works:

- Bitumen Surfacing Construction
- Civil
- Forestry Earthworks
- Pipeline Construction and Maintenance
- Piling
- Pipe Installation
- Roadmarking with strand in Testing

CIVIL TRADES

QUALIFIED PEOPLE QUALITY INFRASTRUCTURE

Advanced Portfolio Assessment (APA)

Advanced Portfolio Assessment (APA), previously known as Recognition of Current Competence (RCC) is an offering for those within the workforce who already have at least four years prior experience at the level of the qualification they wish to achieve. We have a selection of qualifications available to complete via APA.

So how does it work? Learners will complete a portfolio of evidence of their existing skills to advance their progress towards gaining their qualification. The assessment is conducted using historical evidence (within previous 24 months) of a learner's knowledge and experience within a workplace environment. This may consist of worksheets, employer references, photos and video evidence.

ADVANCED APA AVAILABLE PORTFOLIO ASSESMENT

To find out more, and check your eligibility for APA, chat to your local Customer Service Account Manager (CSAM) (see map on pg. 31).

Civil Qualifications

We offer a wide range of civil training programmes from entry-level to management level.

Infrastructure Works (Level 2)

- NZ Certificate in Infrastructure Works
- Duration: 7 months
- Credits: 41
- NZQA: 2522-2

Skills Covered:

By completing this certificate learners will gain operational knowledge and skills in:

- Health, safety, and environmental care
- Working safely and responsibly on worksites
- Workplace professionalism
- Maintaining and using tools and small machinery
- Aggregates, mixes, and manual excavation

Roadmarking (Level 2)

- NZ Certificate in Roadmarking with optional strands in Piloting, and Raised Pavement Markers
- Duration: 7 months
- Credits: 44-55
- NZQA: 3234-2

Skills Covered:

- Standard roadmarking processes.
- Working safely and responsibly with others while on-site.

The Piloting strand covers using pilot vehicles.

The Raised Pavement Markers strand covers installing and removing raised pavement markers.

Bulk Earthworks (Level 3)

- NZ Certificate in Civil Infrastructure (Bulk Earthworks)
- Duration: 14 months
- Credits: 92
- NZQA: 4439

Skills Covered:

- Following processes and procedures, and complying with environmental protocols to deliver quality outcomes.
- Completing work to job specifications effectively and efficiently.
- Applying health and safety procedures.

Infrastructure Works (Level 3)

- NZ Certificate in Infrastructure Works
- Duration: 9 months
- Credits: 60
- NZQA: 4440

Skills Covered:

This programme equips learners with the knowledge and skills required across a range of standard infrastructure worksites. This includes:

- Applying health and safety procedures during work operations.
- Following work procedures and complying with environmental quality requirements.
- Completing infrastructure work operations to the required specifications.

With the industry contexts available in this programme, learners will gain foundational skills and knowledge to complete the programme in their chosen industry area including civil works; pipeline construction and maintenance; bitumen surfacing; forestry earthworks or piling.

Civil Qualifications

Plant Operations (Level 3)

◆	NZ Certificate in Infrastructure (Plant Operations)
⏱	Duration: 14 months
☑	Credits: 83
🔍	NZQA: 4436

Skills Covered:

- Following work processes and procedures for plant operations to comply with environmental and quality outcomes.
- Operating plant to complete infrastructure work operations to job specifications.
- Applying health and safety procedures during plant operations on infrastructure worksites.

Roadmarking (Level 3)

◆	NZ Certificate in Roadmarking
⏱	Duration: 14 months
☑	Credits: 93
🔍	NZQA: 3235-2

Skills Covered:

- Coordinate tasks and activities on a roadmarking site to meet safety, quality, and environmental requirements.
- Safely operate an applicator to complete remark work on a roadmarking site.
- Apply knowledge of roadmarking materials and processes to meet contract specifications.

Traffic Incident Management (Level 3)

◆	NZ Certificate in Traffic Incident Management
⏱	Duration: 9 months
☑	Credits: 60
🔍	NZQA: 4263

Skills Covered:

- Assessing risks to ensure the safety of first responders and other road users during a traffic incident.
- Responding, monitoring and adjusting traffic incident response to reduce incident duration and restore normal traffic flow as soon as is safely possible.
- Completing documentation and post incident procedures to re-open a traffic incident site.

Agrichemical Application (Level 4)

◆	NZ Certificate in Agrichemical Application (Level 4) with strands in Aquatic, Broadacre, Tree and Vine Horticultural, Targeted Weed Control, and Total Vegetation Control
⏱	Duration: 11 months
☑	Credits: 65-70
🔍	NZQA: 3984

Skills Covered:

- What is needed to work confidently in agrichemical application.
- Best practice in transporting agrichemical concentrates by road, and developing an emergency procedure guide.
- Health and safety requirements and risk assessment.
- General knowledge of agrichemicals and the environmental aspects of agrichemical use.

Civil Qualifications

Civil Engineering Laboratory (Level 4)

◆	NZ Certificate in Civil Engineering Laboratory with strands in Aggregate, Asphalt, Bitumen, Concrete, Field Investigations, and Soil
⏱	Duration: 13-14 months
☑	Credits: 77-83
🔍	NZQA: 2692-2

Skills Covered:

- Operating, maintaining and calibrating equipment in a civil engineering laboratory.
- Planning, preparing and conducting a range of specialised activities.
- Applying quality standards, material specifications and mathematical methods to sampling and testing.
- Accurately sampling, and testing the material of chosen strand.

Hydrographic Surveying (Level 4)

◆	NZ Certificate in Hydrographic Surveying
⏱	Duration: 10 months
☑	Credits: 65
🔍	NZQA: 2958-2

Skills Covered:

- Understanding and applying tidal and depth measurement theory to work.
- Using positioning and hydrographic surveying principles to complete surveys.
- Applying practical surveying, communication and mathematical skills for surveying under supervision.
- Applying health, safety, and environmental practices and complying with legislative requirements when carrying out work.

Roadmarking (Level 4)

◆	NZ Certificate in Roadmarking
⏱	Duration: 16 months
☑	Credits: 100
🔍	NZQA: 3236-2

ADVANCED APA AVAILABLE PORTFOLIO ASSESMENT

Skills Covered:

- Applying health, safety, and environmental management procedures to meet compliance requirements.
- Planning, coordinating and carrying out roadmarking work tasks to meet contract specifications.
- A skilled operator will be able to carry out both remark and new work using an A-type or B-type applicator.
- Supervising a roadmarking team to complete daily work activities on a roadmarking site, to meet contract specifications.

Single Site Supervision (Level 4)

◆	NZ Certificate in Infrastructure Works (Single Site Supervision)
⏱	Duration: 17 months
☑	Credits: 110
🔍	NZQA: 2617-2

ADVANCED APA AVAILABLE PORTFOLIO ASSESMENT

Skills Covered:

- Supervising implementation of health and safety, and environmental procedures for single site works.
- Leading and monitoring a team.
- Meeting site and job contract requirements.
- Planning and tracking resources, equipment and machinery needed on-site.
- Implementing industry best practise procedures on a single site.

Civil Qualifications

Surveying (Level 4)

◆	NZ Certificate in Surveying
⏱	Duration: 13 months
☑	Credits: 78
🔍	NZQA: 2957-2

Skills Covered:

- Applying knowledge of land surveying fundamentals to surveying operations.
- Applying safe work practices when operating in a surveying environment.
- Setting up, checking calibration, and maintaining surveying equipment.
- Undertaking survey measurement tasks and checks.
- Applying effective communication when undertaking surveying operations.

Projects (Level 5)

◆	NZ Certificate in Infrastructure Works (Projects)
⏱	Duration: 16 months
☑	Credits: 100-104
🔍	NZQA: 2619-2

Skills Covered:

- Ensuring infrastructure works projects meet requirements for quality, health, safety and environmental standards
- Leading infrastructure works projects to ensure they are delivered to contract specifications.

Civil Engineering Laboratory (Level 5)

◆	NZ Certificate in Civil Engineering Laboratory with strands in Aggregate, Asphalt, Bitumen, Concrete, Field Investigations, and Soil
⏱	Duration: 11-13 months
☑	Credits: 79-91
🔍	NZQA: 2693-2

Skills Covered:

- Leading a team to achieve projects in a civil engineering laboratory.
- Managing the health, safety, environment and quality of Civil Engineering laboratory activities.
- Determining, evaluating, and reporting on precision and bias in proficiency data.
- Quantifying and validating the uncertainty of measurements in test results.
- Contributing to budget management.
- Evaluating and troubleshooting tests for a range of different materials depending on the optional strand chosen.

Civil Qualifications

Civil Engineering Practice (Level 6)

◆	NZ Diploma in Engineering Practice (Civil)
◔	Duration: 30 months
☑	Credits: 120
🔍	NZQA: 1714-2

Skills Covered:

- Defining, investigating and analysing well defined engineering problems in accordance with good practice for civil engineering.
- Designing and/or developing solutions to well-defined engineering problems by applying accepted procedures and methodologies.
- Identifying risks and applying risk management techniques to well-defined civil engineering problems.

Programme+| Pipeline Construction & Maintenance (PCM)

Complete additional unit standards on top of your existing PCM qualification, or complete new compulsory unit standards that weren't available when you completed a previous equivalent National Certificate.

You can select as many unit standards to achieve as you would like.

Unit Standard selections:

- Ranging from Level 3 to 4.
- Level 3 Unit Standards up to 9 credits each.
- Level 4 Unit Standards up to 20 credits each.

Civil Qualifications

Micro-credential | CCTV Inspection of Water Services Assets (Level 4)

◆	Micro-credential in CCTV Inspection of Water Services Assets
⏱	Duration: 2 months
☑	Credits: 14
🔍	NZQA: 4412

Skills Covered:

By completing this Micro-credential (MC) learners will gain operational knowledge and skills required to use closed-circuit television (CCTV) to inspect and report on non-pressure water services assets, including:

- The role of CCTV in the management of non-pressure water services assets.
- Procedures for survey of assets, including how to prepare assets.
- Safe practice, selection and set up of CCTV equipment.
- Inspection of non-pressure water services assets.
- Identification of pipe defects and features.
- Recording of information from CCTV inspection.

Micro-credential | Horizontal Directional Drilling (Level 4)

◆	Micro-credential in Horizontal Directional Drilling
⏱	Duration: 6 months
☑	Credits: 40
🔍	NZQA: 4416

Skills Covered:

By completing this Micro-credential (MC) learners will gain operational knowledge and skills required to operate a drill rig and provide tracking for horizontal directional drilling, including:

- The role of HDD in pipe installation and procedures for the HDD.
- Drill rig maintenance and operation.
- Carrying out a pilot bore including preparing for tracking and tracking bore paths.
- Recording as-built data.

Micro-credential | Infrastructure - Erosion and Sediment Control Plans (Level 4)

◆	Micro-credential and Infrastructure - Erosion and Sediment Control Plans
⏱	Duration: 3 months
☑	Credits: 20
🔍	NZQA: 4164

Skills Covered:

By completing this Micro-credential (MC) learners will gain knowledge and skills required to understand and carry out the implementation of ESC plans on infrastructure worksites including:

- Executing construction and decommissioning controls.
- Maintaining monitoring programs for worksites.
- Integrating Te Aranga Design Principles throughout the implementation of the ESC plan.

AC

CONNEXIS

ELECTRICITY
SUPPLY
INDUSTRY
EVENT

ANNUAL CONNECTION

Annual Connection is a unique three-day competition held in different parts of New Zealand annually. Bringing together Line Mechanics and Cable Jointers who compete to be the best of the best in New Zealand. An invaluable opportunity to spotlight the industry, underscore the importance of electricity safety, and encourage young talents to explore careers in the electricity supply sector.

Learn more at www.annualconnection.co.nz

CONNEXIS
INFRASTRUCTURE TRAINING

Energy & Telco Career

PROGRESSION PATHWAYS

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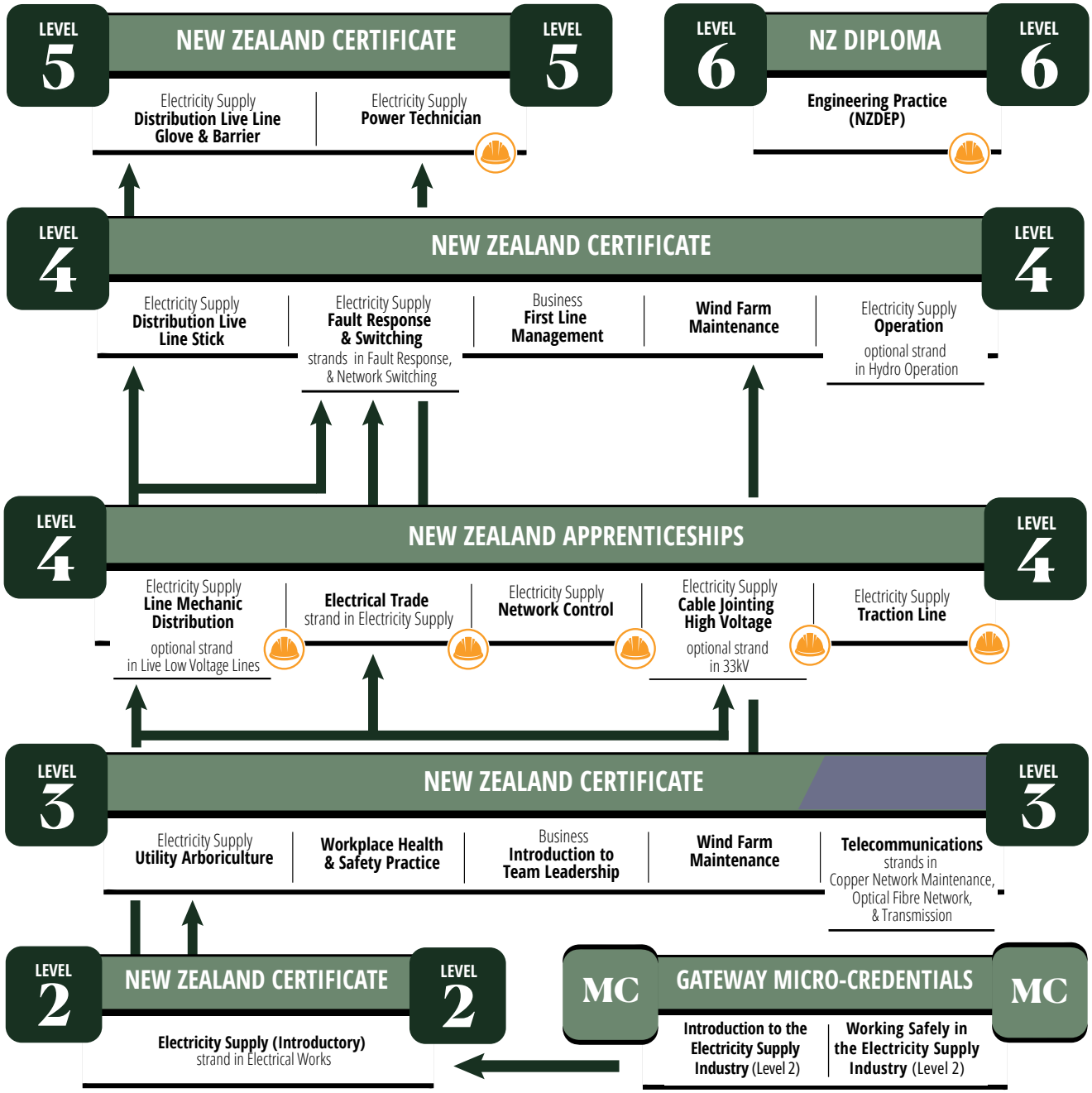

Valid as of November 2024

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CONNEXIS
INFRASTRUCTURE TRAINING

Energy Apprenticeships

NEW ZEALAND APPRENTICESHIPS

Our energy apprenticeships are great for those starting their career in the industry. They are also available to recognise the skills and knowledge of more experienced people for those wanting to skill-up, or who are looking for a career change.

Cable Jointing (Level 4)

◆	NZ Apprenticeship in Electricity Supply (Cable Jointing High Voltage) with an optional strand in 33kW
◔	Duration: 25-30 months
☑	Credits: 157-192
🔍	NZQA: 2227-3

ADVANCED APA AVAILABLE PORTFOLIO ASSESMENT

Skills Covered:

- Applying knowledge of electrical theory to the construction and preparation of cables.
- Learning best practice to ensure the duties of a cable jointer are done safely and without disrupting electricity supply.
- Undertaking testing and commissioning procedures on power cables up to 22kV.
- Applying codes, legislation and industry standards and procedures to the jointing and termination of live power cables up to 22kV.

Graduates of the optional strand will be able to apply industry standards and procedures when performing the duties of a cable jointer undertaking work on power cables up to 33kV.

Electrical Trade (Level 4)

◆	NZ Apprenticeship in Electrical Trade with strand in Electricity Supply
◔	Duration: 42 months
☑	Credits: 250
🔍	NZQA: 4204

Skills Covered:

- Applying knowledge of electrical theory, systems, equipment, machines, and electrical protection in an electrical environment.
- Complying with electrical and relevant non-electrical legislation governing the work of electricians.
- Communicating with stakeholders on electrical matters.
- Installing, commissioning, and maintaining electrical services associated with distribution networks, power stations, and substations.
- Carrying out fault diagnosis and testing of electrical services associated with distribution networks, power stations, and substations.
- Carrying out installation and maintenance of electrical equipment.

Energy Apprenticeships

NEW ZEALAND APPRENTICESHIPS

Line Mechanic (Level 4)

- NZ Apprenticeship in Electricity Supply (Line Mechanic Distribution) with an optional strand in Live Low Voltage Lines
- Duration: 27 months
- Credits: 169-179
- NZQA: 2197-2

ADVANCED APA AVAILABLE PORTFOLIO ASSESMENT

Skills Covered:

- Working in the electricity supply industry as a Line Mechanic in the distribution sector.
- Installing, maintaining and replacing equipment at an intermediate level.
- Communicating effectively within your team.
- Learning how to apply knowledge of electrical theory, and industry standards and procedures.

Graduates of the optional strand will also be able to install and replace hardware associated with live low voltage lines.

Network Control (Level 4)

- NZ Apprenticeship in Electricity Supply (Network Control)
- Duration: 23 months
- Credits: 146
- NZQA: 3721-2

ADVANCED APA AVAILABLE PORTFOLIO ASSESMENT

Skills Covered:

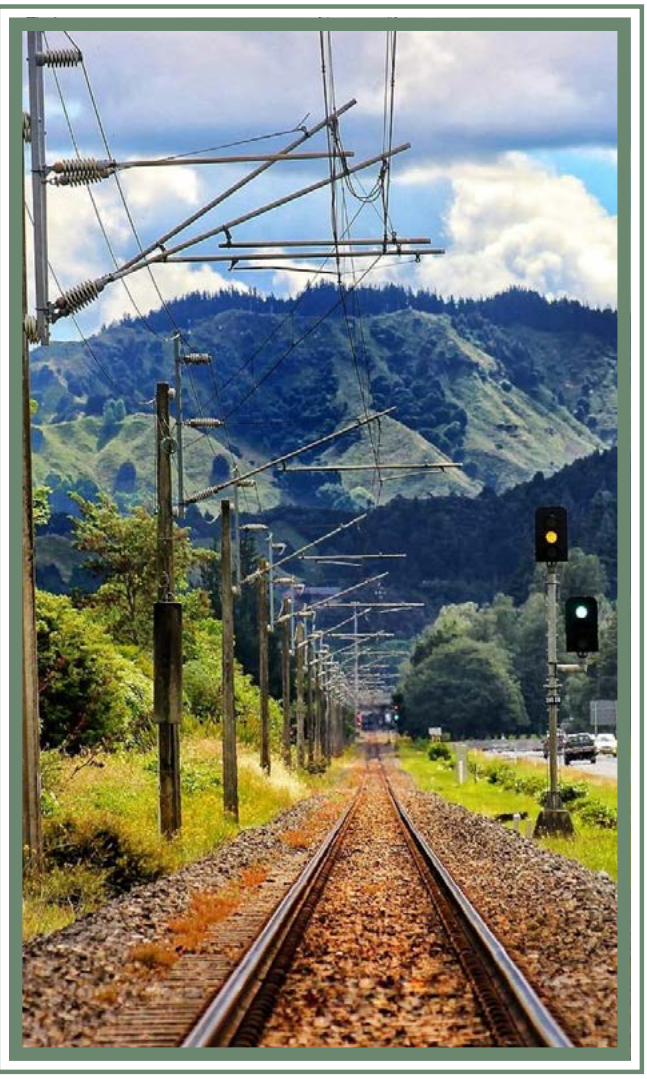
- Operating equipment to isolate, connect, control and monitor the electricity grid and distribution system.
- Ensuring asset owners' specifications are met during network plant operations.
- Monitoring and responding to unforeseen, abnormal fault events.
- Meeting network company and customer performance standards.
- Planning network shutdowns.
- Operating SCADA and Load Control systems.
- Communicating with Transpower and customers.

Traction Line (Level 4)

- NZ Apprenticeship in Electricity Supply (Traction Line)
- Duration: 21 months
- Credits: 131
- NZQA: 3988

Skills Covered:

- Integrating health and safety procedures into workplace practices when carrying out work on traction line networks.
- Applying knowledge of codes of practice, industry standards and operating procedures, and complying with asset-owner requirements when installing, maintaining or repairing traction line networks.



Energy Qualifications

We offer a wide range of energy training programmes from entry-level to management level.

Electricity Supply Introductory (Level 2)

- NZ Certificate in Electricity Supply (Introductory) with a strand in Electrical Works
- Duration: 7 months
- Credits: 40
- NZQA: 2136-3

Skills Covered:

- Working safely and keeping surrounding colleagues safe on an electricity supply worksite.
- Understanding how the Electricity Act, regulations and Industry rules and guides govern best practice.
- Working under direct supervision, in a team, to competently and safely complete tasks.

The Electrical Works strand covers applying knowledge of the principles of electricity supply, legislation, and industry standards to work.

Utility Arboriculture (Level 3)

- NZ Certificate in Electricity Supply (Utility Arboriculture)
- Duration: 7 months
- Credits: 42
- NZQA: 4243

Skills Covered:

- Working safely and to regulatory and legislative requirements when maintaining vegetation around electricity supply power lines and cables.
- Using insulating tools and plant equipment to ensure safety when necessary.

Wind Farm Maintenance (Level 3)

- NZ Certificate in Wind Farm Maintenance
- Duration: 9 months
- Credits: 60
- NZQA: 4261

Skills Covered:

- Working safely and effectively in a wind farm environment in accordance with workplace policies, procedures and relevant regulations.
- Operating and maintaining electrical, mechanical and hydraulic systems used in wind turbines to comply with manufacturer's and asset owner's specifications.

Fault Response and Switching (Level 4)

- NZ Certificate in Electricity Supply (Fault Response and Switching) with strands in Fault Response, and Network Switching
- Duration: 12-18 months
- Credits: 83-109
- NZQA: 3586-2

Skills Covered:

- Interpreting and applying knowledge of electrical codes of practice, and industry standards, when carrying out fault response or switching operations on electricity supply networks.

Graduates of the Fault Response strand will also be able to apply knowledge of fault finding, and carry out restoration of supply on distribution networks.

Graduates of the Network Switching strand will also be able to apply knowledge of complex network switching to work on distribution networks.

Energy Qualifications

Distribution Live Line Stick (Level 4)

◆	NZ Certificate in Electricity Supply (Distribution Live line Stick)
⏱	Duration: 10 months
☑	Credits: 66
🔍	NZQA: 4281

Skills Covered:

- Make or break high voltage connections up to 33kV using live line hot stick procedures.
- Inspect, test, and clean live line tools and equipment.
- Demonstrate knowledge of live line theory and procedures.
- Remove and install line hardware and equipment on structures using live line stick up to 66kV.
- Remove and install electricity network pole structures using live line stick up to 66kV.

Wind Farm Maintenance (Level 4)

◆	NZ Certificate in Wind Farm Maintenance
⏱	Duration: 12 months
☑	Credits: 80
🔍	NZQA: 3793-2

Skills Covered:

- Monitoring the workplace and responding to issues as required to maintain a safe and effective workplace in a wind farm environment.
- Diagnosing and repairing faults in electrical, mechanical and hydraulic systems used in wind turbines to comply with manufacturer's and asset owner's specifications.

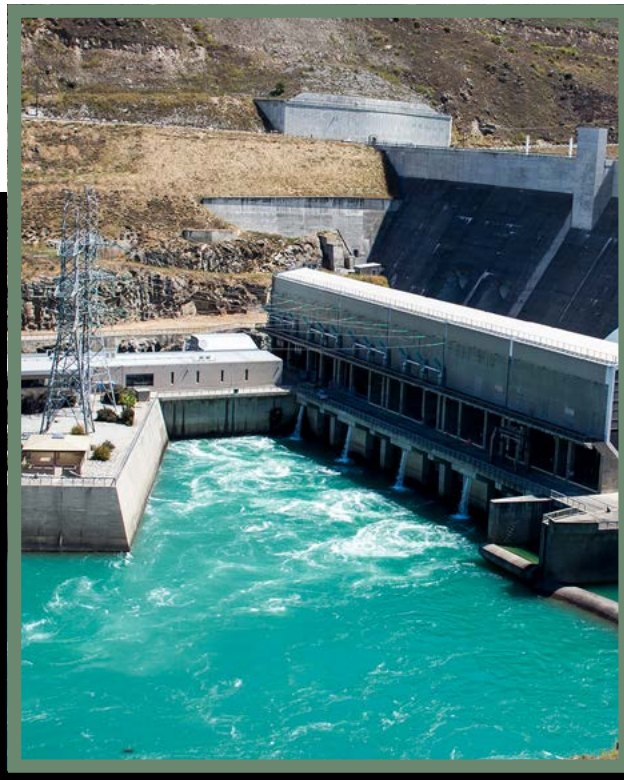
Operation (Level 4)

◆	NZ Certificate in Electricity Supply (Operation) with an optional strand in Hydro Operation
⏱	Duration: 13-16 months
☑	Credits: 86-106
🔍	NZQA: 3687

Skills Covered:

- Applying knowledge of the electricity generation sector in New Zealand and electricity supply core theory while working as an electricity generation plant control room operator.
- Operating equipment to isolate and connect electricity systems in compliance with industry standards and asset owner's specifications.
- Managing electricity supply system generation equipment as a control room operator.
- Ensuring that health and safety requirements are met while carrying out plant control room operations in the electricity supply industry.

Graduates of the Hydro Operation strand will also be able to use prime movers in hydro-electric generation plants, and manage water resources as a hydro-electric control room operator.



Telecommunications & Energy Qualifications

Distribution Live Line Glove and Barrier (Level 5)

NZ Certificate in Electricity Supply (Distribution Live Line Glove and Barrier)

Duration: 10 months

Credits: 60

NZQA: 4282

Skills Covered:

- Making and breaking high voltage connections up to 33kV using live line glove and barrier procedures.
- Replacing and installing hardware on structures using live line glove and barrier procedures up to 33kV.
- Removing and installing pole structures using live line glove and barrier procedures up to 33kV.
- Applying knowledge of electrical codes of practice, electricity supply industry standards and operating procedures when carrying out work on live lines up to 33kV.
- Replacing pole structures on live lines to meet electricity supply industry standards using glove and barrier procedures.

Power Technician (Level 5)

NZ Certificate in Electricity Supply (Power Technician)

Duration: 24 months

Credits: 135

NZQA: 3535-2

Skills Covered:

- Applying power engineering, protection theory and power system principles.
- Using theory, codes, legislation, and industry procedures for wiring, testing and commissioning of Energy Industry assets.
- Ensuring health and safety requirements are met while completing work.

Electrical Engineering Practice (Level 6)

NZ Diploma in Engineering Practice (Electrical)

Duration: 21 months

Credits: 120

NZQA: 1714-2

Skills Covered:

- Applying detailed engineering knowledge and best practice to specialist field.
- Managing engineering activities.
- Responsibility for making decisions on engineering activities.

Telecommunication (Level 3)

NZ Certificate in Telecommunications with strands in Copper Network Maintenance, Optical Fibre Network, and Transmission

Duration: 14 months

Credits: 93

NZQA: 3767-2

ADVANCED APA AVAILABLE PORTFOLIO ASSESMENT

Skills Covered:

- Co-ordinating and scoping telecommunication sites while managing stakeholder and client expectations and relationships.
- Applying safe work practices and meeting industry standards when working on telecommunications networks.

Graduates of the Copper Network Maintenance strand will be able to install, locate, test and service copper networks and apply knowledge during transmission and repair.

Graduates of the Optical Fibre Network strand will also be able to install, locate, test and service fibre access networks and apply knowledge during building, provisioning and repair of access networks.

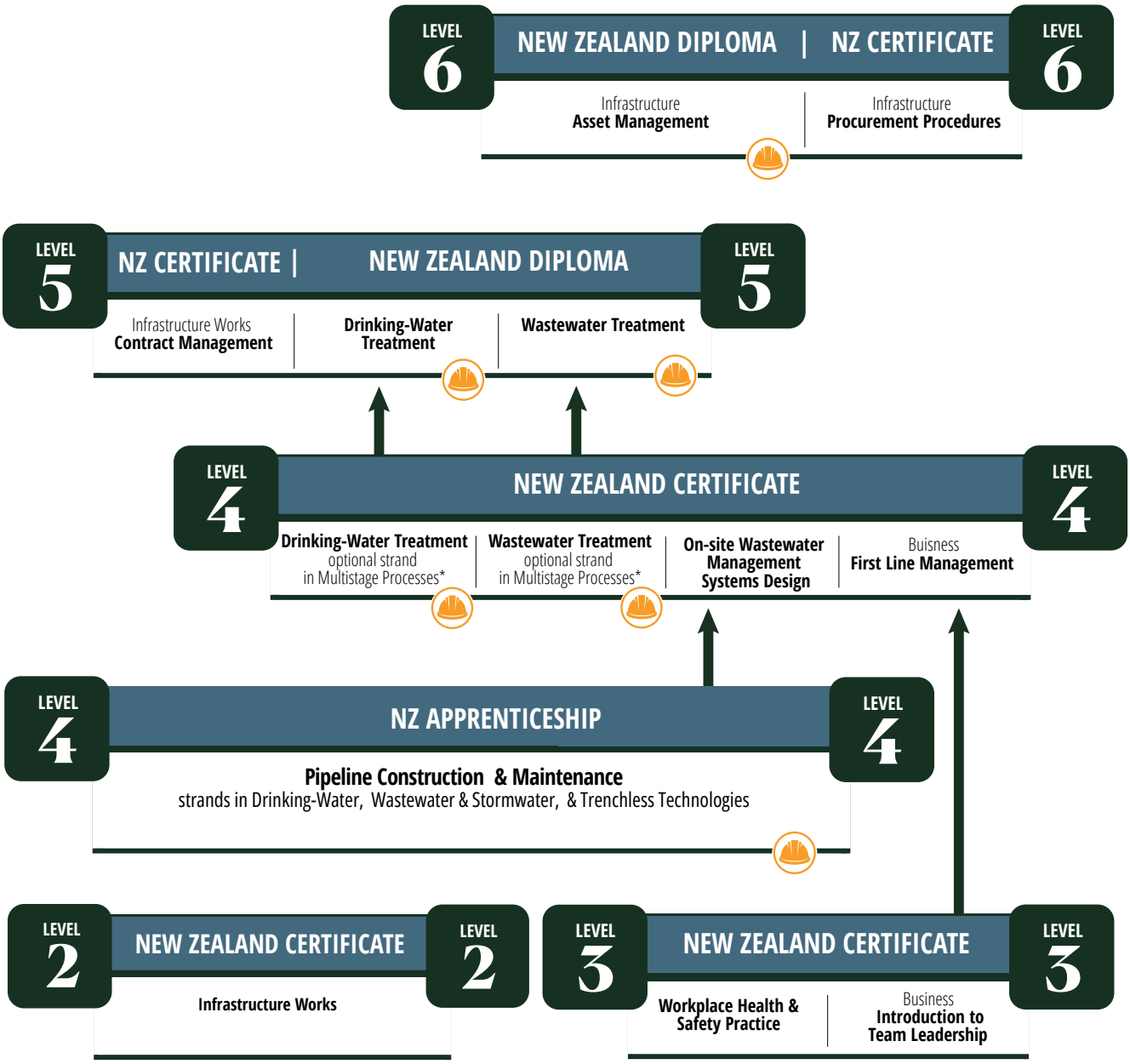
Graduates of the Transmission strand will also be able to apply optical Ethernet, wireless technology, radio theory and practices for installation and repair of transmission infrastructure.

Water Career

PROGRESSION PATHWAYS

FEES FREE. govt.nz

VISIT THE FEES FREE WEBSITE TO CHECK YOUR ELIGIBILITY



*This programme is recognised as an NZ Apprenticeship when the optional strand is completed

Valid as of November 2024

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PWW01

CONNEXIS INFRASTRUCTURE TRAINING

Water Apprenticeships

NEW ZEALAND APPRENTICESHIPS

Our water apprenticeships are great for those looking to become a skilled water tradesperson, or to get their existing skills recognised.

Drinking-Water Treatment with Multistage Processess strand (Level 4)

◆	NZ Apprenticeship in Drinking-Water Treatment with strand in Multistage Processes
	Duration: 22 months
☑	Credits: 120
	NZQA: 4138

Skills Covered:

- Protecting public health and the environment.
- Implementing, monitoring and communicating health and safety requirements.
- Operating a drinking-water treatment plant to meet organisational and regulatory requirements.
- Monitoring drinking-water treatment plant operation and interpreting compliance and operational data.
- Sampling, testing and reporting drinking-water procedures for drinking-water treatment.

The Multistage Processes strand covers:

- Operating a drinking-water treatment plant with a combination of multistage processes to meet organisational and regulatory requirements.

Wastewater Treatment with Multistage Processess strand (Level 4)

◆	NZ Apprenticeship in Wastewater Treatment with strand in Multistage Processes
	Duration: 22 months
☑	Credits: 120
	NZQA: 4142

Skills Covered:

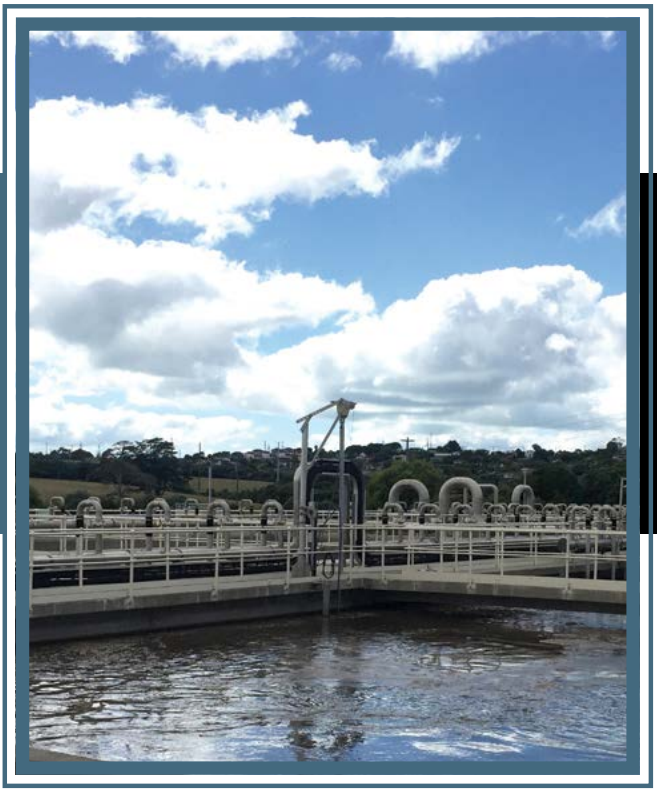
- Protecting public health and the environment.
- Implementing, monitoring and communicating health and safety requirements.
- Operating a wastewater treatment plant to meet organisational and regulatory requirements.
- Monitoring wastewater treatment plant operation and interpreting compliance and operational data.
- Sampling, testing and reporting wastewater procedures for wastewater treatment.

The Multistage Processes strand covers:

- Operating a wastewater treatment plant with a combination of multistage processes to meet organisational and regulatory requirements.

Water Qualifications

We offer a wide range of energy training programmes from entry-level to management level.



Drinking-Water Treatment (Level 4)

- NZ Certificate in Drinking-Water Treatment
- Duration: 12 months
- Credits: 70
- NZQA: 4138

Skills Covered:

- Protecting public health and the environment.
- Implementing, monitoring and communicating health and safety requirements.
- Operating a drinking-water treatment plant to meet organisational and regulatory requirements.
- Monitoring drinking-water treatment plant operation and interpreting compliance and operational data.
- Sampling, testing and reporting drinking-water procedures for drinking-water treatment.

Wastewater Treatment (Level 4)

- NZ Certificate in Wastewater Treatment
- Duration: 12 months
- Credits: 70
- NZQA: 4142

Skills Covered:

- Protecting public health and the environment.
- Implementing, monitoring and communicating health and safety requirements.
- Operating a wastewater treatment plant to meet organisational and regulatory requirements.
- Monitoring wastewater treatment plant operation and interpreting compliance and operational data.
- Sampling, testing and reporting wastewater procedures for wastewater treatment.

On-site Wastewater System Design (Level 4)

- NZ Certificate in On-site Wastewater Management System Design
- Duration: 12 months
- Credits: 75
- NZQA: 4216

Skills Covered:

- Communicate with stakeholders to develop a brief for the design of an on-site wastewater management system.
- Evaluate site and soil characteristics.
- Prepare risk management plans for a specific site.
- Apply knowledge of regulatory requirements and domestic wastewater treatment processes to the selection and design of an on-site wastewater management system.
- Communicate requirements for operation, monitoring and maintenance to a range of stakeholders.
- Review designs for, and inspect, on-site wastewater management systems.

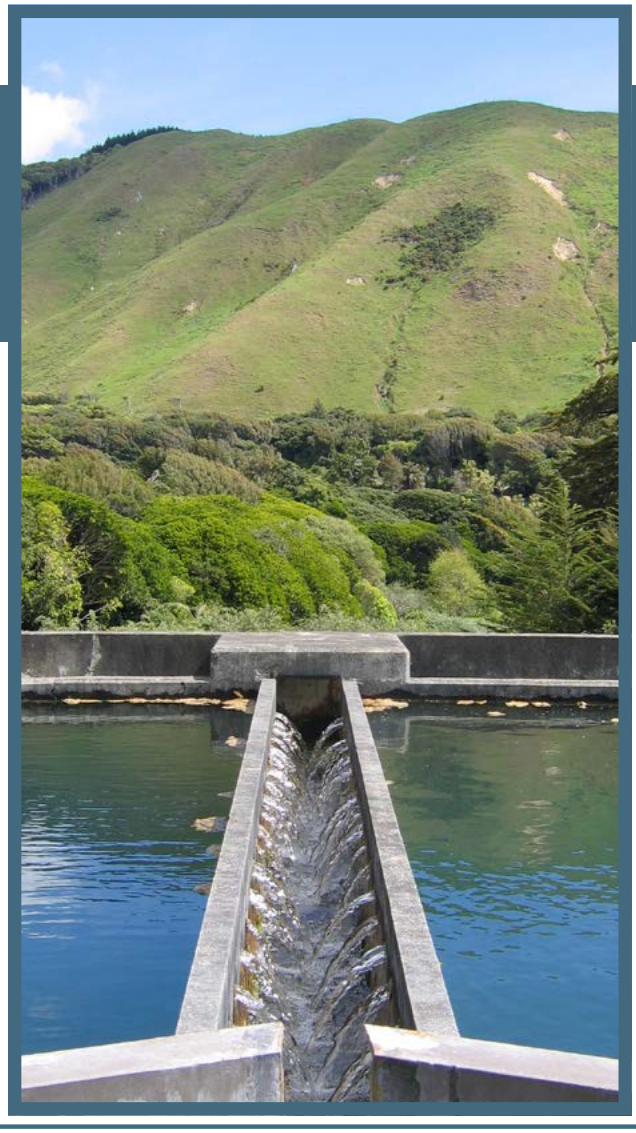
Water Qualifications

Drinking-Water Treatment (Level 5)

◆	NZ Diploma in Drinking-Water Treatment
⏱	Duration: 22 months
☑	Credits: 120
🔍	NZQA: 4139

Skills Covered:

- Managing and optimising drinking-water treatment plant operations to ensure compliance with regulatory requirements.
- Implementing, monitoring and communicating health and safety requirements for a drinking-water treatment plant.



Wastewater Treatment (Level 5)

◆	NZ Diploma in Wastewater Treatment
⏱	Duration: 22 months
☑	Credits: 120
🔍	NZQA: 4143

Skills Covered:

- Managing and optimising wastewater treatment plant operations to ensure compliance with regulatory requirements.
- Implementing, monitoring and communicating health and safety requirements for a wastewater treatment plant.

General Qualifications

We offer a wide range of cross-sector training programmes that can be applied to a number of infrastructure roles.

Health and Safety Practice (Level 3)

◆	NZ Certificate in Workplace Health and Safety Practice
◔	Duration: 7 months
☑	Credits: 40
🔍	NZQA: 3533

Skills Covered:

- Applying knowledge of legal requirements and health and safety practices to the workplace.
- Communicating workplace health and safety requirements.
- Completing health and safety risk assessments.
- Understanding the importance of good health and safety practices.
- Applying the Health and Safety at Work Act 2015, Codes of Practice, and infrastructure industry best practice to embed a healthier, safer workplace.

General Qualifications

Contract Management (Level 5)

◆	NZ Certificate in Infrastructure Works (Contract Management)
⏱	Duration: 7 months
☑	Credits: 46
🔍	NZQA: 2618-2

Skills Covered:

- Applying the requirements from the contract, tendering, and estimating processes to implement infrastructure works contracts.
- Managing infrastructure works contractual requirements for the duration of a contract.

Procurement Procedures (Level 6)

◆	NZ Certificate in Infrastructure Procurement Procedures
⏱	Duration: 14 months
☑	Credits: 80
🔍	NZQA: 3179-2

Skills Covered:

- Creating a procurement plan
- Preparing RFx documents
- Managing procurement processes
- Evaluating tenders
- Applying legal and ethical standards to tendering processes
- All learners need to complete the requirements in accordance with the Government.
- Procurement rules.

Asset Management (Level 6)

◆	NZ Diploma in Infrastructure Asset Management
⏱	Duration: 30 months
☑	Credits: 140
🔍	NZQA: 3180-2

Skills Covered:

- Applying the essential components of good asset management practice in the infrastructure sector.
- Contributing to the preparation, implementation and review of infrastructure asset management planning for an organisation.
- Developing an infrastructure risk management plan for an organisation.
- Developing the asset lifecycle management plan for an organisation.
- Completing an optimisation process to enhance outcomes for an infrastructure project in an organisation.

Temporary Traffic Management

We offer a range of Temporary Traffic Management training programmes to suit all types of roles within the infrastructure industry.

Micro-credential | Temporary Traffic Management Risk Assessment (Level 4)

◆	Micro-credential in Temporary Traffic Management Risk Assessment
⏱	Duration: 2 months
☑	Credits: 15
🔍	NZQA: 4923

Skills Covered:

On completion of this micro-credential, learners will be able to show an understanding of Temporary Traffic Management Risk Assessment including:

- Describing the principles and process for managing risk for an activity requiring temporary traffic management.
- Complete a risk assessment for an activity requiring temporary traffic management.

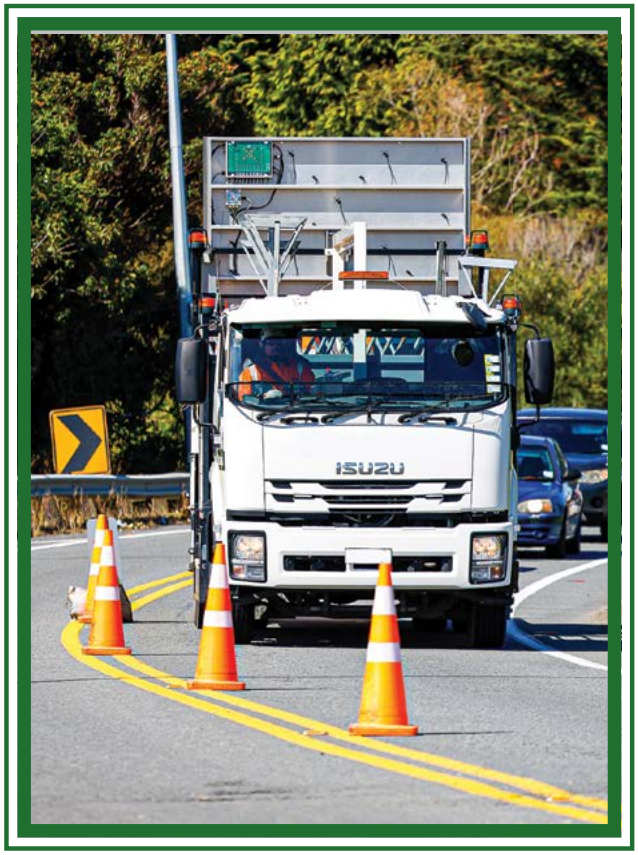


Image credit: Danny Wood, NZTA.

Micro-credential | Temporary Traffic Management Design (Level 4)

◆	Micro-credential in Temporary Traffic Management Design
⏱	Duration: 3 months
☑	Credits: 20
🔍	NZQA: 4922

Skills Covered:

Once successfully completed, learners will have the knowledge and skills required to develop a traffic management plan for an activity requiring temporary traffic management, including:

- Compiling a solution for an activity requiring temporary traffic management.
- Preparing traffic management plan information for an activity.
- Consulting with relevant stakeholders who carry out the requirements of the traffic management plan.

INFRASTRUCTURE TRAINING

GIRLS WITH HI-VIS®

CONNEXIS

CIVIL
ENERGY
TELCO
WATER

INDUSTRY EXPERIENCE DAY

Girls with Hi-Vis® is an initiative developed with industry, to increase female participation in trade roles in infrastructure. The initiative works by giving women the opportunity to spend the day with a local employer to gain 'hands on' experience and find out about career opportunities in the industry.

Learn more at www.connexis.org.nz/girls-with-hi-vis

CONNEXIS
INFRASTRUCTURE TRAINING

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Connexis National Coverage

Connexis has coverage across New Zealand with local Customer Service Account Managers to support you. Contact us on **0800 486 626** or **askus@connexis.org.nz**.

www.connexis.org.nz

ConnexisITO

#InfrastructureApprenticeships
#IndustryTrainingNZ