New Zealand Certificate in Electrical Pre-Trade (Level 3)

Domestic Fees
$8,019.00

Duration
1 year full-time

witt.ac.nz

WITT
WESTERN INSTITUTE OF TECHNOLOGY AT TARANAKI
TE KURA MATATINI O TARANAKI

New Zealand Certificate in Electrical Pre-Trade (Level 3)

Gain theory and practical electrical engineering and related subjects – equivalent to the first 18 months theory of an apprenticeship – that will equip you with the knowledge and skills necessary for employment in the electrical or instrumentation trades.

You will learn how to:

- apply knowledge and principles of electrical theory and practice to basic electrical tasks.
- apply safe working procedures and practices to electrical tasks, including first aid and CPR as needed.
- operate within legal limitations of electrical and relevant non-electrical legislation.
- select and use products, tools, and equipment suitable for use in the electrical industry.
- install cables and electrical equipment.
- use testing techniques to test for electrical safety, and to identify and diagnose electrical faults.
- demonstrate behaviour suitable for the workplace, follow instructions, and complete basic workplace documentation.

Courses

CEE3.101

Workplace Skills and Safety

Students will be able to apply electrical workplace standards and health and safety practices. They will also achieve/maintain a first aid certificate. Units 6401 and 6402

CEE3.102

DC Fundamentals

Students will apply fundamental theory and principles of Direct Current (DC) circuits and systems.

CEE3.103

AC Fundamentals

Students will apply fundamental theory and principles of magnetism and electromagnetism to AC theory. Students will safely use the tools and equipment used in an electrical workplace.

CEE3.104

Cables, Fittings and Testing

Students will install, test and fault-find electrical cords, cables, and equipment.

CEE3.105

Supply systems

Students will apply knowledge of the New Zealand electricity supply system and methods used to ensure the protection of users and installations.

CEE3.106

Protection, Plans and Circuits

Students will apply knowledge of circuit protection, electrical drawing conventions, switching circuits and lighting.

CEE3.107

Installations

Students will apply knowledge of cable and wiring systems including damp situations.

CEE3.108

Transformers, Electrical Machines and Isolation

Students will be able to demonstrate knowledge of theories underpinning the operation of transformers, electrical machines, and isolation procedures.

WITT
WESTERN INSTITUTE OF TECHNOLOGY AT TARANAKI
TE KURA MATATINI O TARANAKI

Last updated: 14 August 2025

New Zealand Certificate in Electrical Pre-Trade (Level 3)

CEE3.109

Capstone Assessment

Learners will demonstrate the knowledge of theory and practice for electrical workers in accordance with EWRB final closed-book examination (capstone assessment).

Programme Specific Information

The purpose of this qualification is to equip people with underpinning electrical knowledge and basic practical skills to enter further training or entry-level employment, such as an apprenticeship, within the electrical industry and related electrical fields.

Graduates will be able to apply these skills under supervision by a licenced electrical worker, in accordance with the Electricity Act 1992 and any subsequent amendments.

Entry Requirements

- Candidates must have achieved NCEA (Level 1) with Mathematics and English subjects; or equivalent knowledge and skills for entry into this programme.

Career Options

Graduates will be able to enter an electrical apprenticeship as a first-year apprentice.

Graduates may be employed in entry-level positions in trades relevant to the Electrical Workers Registration Board (EWRB) registration classes, other electrical fields such as switchgear fitting, electronics, electricity supply industry, manufacturing, electrical wholesaling or retailing.

Click here to discover what it's like to be an electrician.

Further Study Options

Further study options include New Zealand Certificate in Electrical Trade (Level 4) with strands in General Electrical and Electricity Supply [Ref: 4204]

Additional Course Related Costs

- Tablet or basic laptop (recommended)
- Stationery: black/blue pens, pencils, ruler, eraser, correction tape (required)
- Stand-alone scientific calculator, preferably Casio FX82 (Scientific Calculator) range or equivalent (required). A calculator application on a digital device is not acceptable for use as a scientific calculator

Please note

- Personal protection equipment (PPE) is mandatory for certain tasks. Students are encouraged to purchase their own; otherwise, shared PPE will be available for use. Other electrical tools will be provided, but you may prefer to purchase your own.
- You may be able to get a Student Loan for these course-related costs. This list of tools can be discussed with your tutor.
- Security provisions and insurance cover are the responsibility of the students. WITT accepts no responsibility for the loss or damage of personal tools and equipment.

WITT
WESTERN INSTITUTE OF TECHNOLOGY AT TARANAKI
TE KURA MATATINI O TARANAKI

Last updated: 14 August 2025