



ELECTROTECHNOLOGY

Advice to the Tertiary Education Commission
for training investment in 2026

November 2024



WAIHANGA ARA RAU

**Construction and
Infrastructure**

Workforce Development Council

KEY INFORMATION – 2026 TEC INVESTMENT ADVICE

This information is part of a suite of documents relating to the Waihanga Ara Rau advice to the Tertiary Education Commission (TEC) for investment in training for 2026 it should be read in conjunction with the following:

- ▶ **Introduction to the Waihanga Ara Rau advice to TEC for investment in training for 2026.**

This document includes the methodology behind the learner forecasts and industry narrative, including context and themes related to the advice.

- ▶ **The sector-specific advice summaries for the other 11 strategic industry sectors.**

These documents include sector data snapshot, industry-specific context information, learner number profiles, and 2024 Learner and Provider snapshot.

- ▶ **The complete Waihanga Ara Rau advice to TEC for investment in training for 2026.**

INDUSTRY SNAPSHOT

39,012

workforce

2022

9,523

businesses

2022

20,500

learners

2023

15%

workforce
aged under 25

22%

workforce
<1 year in industry

ELECTROTECHNOLOGY NARRATIVE

The Electrical Workers Registration Board (EWRB) are set to introduce specialist endorsements aligned to current pathways from September 2024. This move will require more advanced courses to facilitate upskilling workers in the sector to prove competency in these specialist areas to receive the endorsement. The new endorsed classes of registration that will be introduced are mining, medical cardiac protected areas, hazardous areas, mains parallel generation systems, and supervision.

These introductions create an opportunity to review the current pathway for electrical workers and ensure corresponding suitable credentials are in place for areas of demand that are acceptable to the licence requirements. The need for advanced qualifications at Level 5 and above should also tie in with the licensing framework with endorsements aligning with any newly created advanced qualification and/or micro-credentials.

Where there is a degree of confidence that a credential or qualification will be developed because of specialist endorsements, we have included it in *New Qualifications and Credentials* on page 8. Further investigation is required to determine whether additional products may be developed in the future which may include those mentioned above.

TEC INVESTMENT ADVICE

What is our baseline year and the training narrative/forecast?

We are using **2023 learner numbers as our baseline**, as this is the latest full-year training data.

While training interventions such as apprenticeship boost and fees free were still influencing learner numbers and the five-year pipeline of work was only just coming off its all-time high of approx. \$300B total \$251B construction specific in December 2022 learner numbers were starting to fall during 2023. Learner numbers in most industry sectors have continued to fall in 2024, but we anticipate government investment indicators and a falling Official Cash Rate (OCR) will see 2024 as the bottom of the training volume trough in both the civil infrastructure and construction sectors with enrolments building in 2025.

The 2026 projected learners numbers for construction reflect an expectation that 2024 will see the bottom of the trough in learner numbers which will start to rebound in 2025 and be back to 2023 levels in 2026, as highlighted above in the Construction five-year rolling Project Pipeline value nationally (2020 – 2026). Please note that the Qualification codes and corresponding qualifications are shown in the *Investment Advice table* below.

Actual and forecast learner numbers to September 2024 year to date and three-year forecast training numbers based on workforce indicators.



TEC Investment Advice Table

Level	Code	Qualification or credential name (programme name if title unidentifiable)	Mode	Region	2023 Learners	2026 Advice Provision
3	2387	New Zealand Certificate in Electrical Engineering Theory (Level 3).	Off Job	National	855	0
	4316 ¹	New Zealand Certificate in Electrical Pre-Trade (Level 3)			1,140	2,095
	2767	New Zealand Certificate in Electrotechnology (Level 3) with strands in Installation, and Service	WBL		160	160
	3767	New Zealand Certificate in Telecommunications (Level 3) with strands in Copper Network Maintenance, Optical Fibre Network, and Transmission	Preference		945	945
4	2251	New Zealand Certificate in Industrial Measurement and Control (Practice) (Level 4)			115	115
	2252	New Zealand Certificate in Industrial Measurement and Control (Theory) (Level 4)	Off Job		125	125
	2388	New Zealand Certificate in Electrical Engineering Theory and Practice (Trade) (Level 4).	WBL		15,920	15,965
	4204 ²	New Zealand Certificate in Electrical Trade (Level 4) with strands in General Electrical, and Electricity Supply. Replaced 2388.	Preference		45	
	2565	New Zealand Certificate in Electrical Engineering (Electromechanical Maintenance and Repair) (Level 4) with optional strand in Electrical Service Technician (EST)			5	5
	2769	New Zealand Certificate in Customer Premises Systems (Level 4) with strands in Structured Cabling, Control and Automation, Signal Reception and Distribution, and Wireless Systems			0	TBD
	2981	New Zealand Certificate in Electronic Engineering (Level 4)		80	80	
	3470	New Zealand Certificate in Electrical Engineering (Switchgear Fitting) (Level 4) with optional strand in Electrical Installer		10	10	
	3818	New Zealand Certificate in Electronic Security (Level 4) with optional strands in Electrical Appliance Serviceperson (Endorsed), and Electrical Installer		60	60	
	4555	Programme: Grid-connected PV Systems, Design and Install (Micro-credential)	Off Job	55	85	
4556	Programme: Grid-connected Battery Storage Systems, Design and Install (Micro-credential)		10	40		
5	3990	NEW: New Zealand Certificate in Telecommunications (Level 4)	WBL	0	TBD	
	2253	New Zealand Certificate in Industrial Measurement and Control (Level 5) with strands in Process Control, and Process Automation	Preference	20	20	
New	5057 ³	NEW: New Zealand Certificate in Data Cabling (Level 3)		New	200	
Total					20,500	20,760

¹ Ref: 2387 was active in 2023 with the last date of assessment being 31 March 2023. The 2026 provision includes an additional 100 learners based on demand for the replacement qualification Ref:4316. This is over and above the aggregation of 2023 learners for Ref: 2387 and Ref: 4316

² Ref:4204 is mentioned in two places (here and in Electricity Supply). Ref:4204 is replacing Ref:2388 which had nearly 16,000 learners in 2023. We are not recommending an increase but want to highlight the transition of learners between Ref:2388 and Ref:4204. There will still be learners, at a decreasing level, in the [2388] programme until the end of 2027, and increasing new learners in Ref:4204. Both programmes will still need to be funded at a collective total of approximately 16,000. The last date for entry into programmes leading to Ref:2388 is 31 December 2024. The last date for assessment is 31 December 2027, when it will be discontinued.

³ Ref:5067: During the development of the qualification, analysis suggested 300-350 new technicians + gradual uptake from the existing workforce of 1,000. 2026 will be the first year of delivery.

2024 Learner Snapshot

Age		Region		Gender	
Under 25	62%	Auckland	36%	Female	7%
25 – 39	31%	Waikato	9%	Male	93%
40 plus	7%	Wellington	10%		
		Canterbury	12%		

NEW QUALIFICATIONS AND CREDENTIALS

Area of provision and/or qualification/ credential name (if known)	Level	Mode (if specific)	Qualification or micro-credential	Estimated date it will be available	Description
Electrical Supervision	TBC	TBC	TBC	2026	Developing business case.
Mains Parallel Generation Systems	TBC	TBC	TBC	2026	Developing business case.
Hazardous Areas	TBC	TBC	TBC	2026	Developing business case.
NZC in Electrical L5	TBC	TBC	Qualification	2026	Developing business case.
Ref:3970 New Zealand Certificate in Telecommunications (Level 4)	4	WBL	Qualification	2026	Qual review scheduled in 2025 to address a current barrier, forecast 100 learners when complete.