Field Engineering and Technology

Review of *Electrical Engineering* unit standards

Subfield	Domain	ID
Electrical Engineering	Electrical Appliance Servicing	20591, 22763, 31729-31740
	Electrical Machines	1184, 1185, 2014, 16413, 19469- 19471, 24890, 31741-31745

The Waihanga Ara Rau Construction and Infrastructure Workforce Development Council has completed the review of the unit standards listed above.

Date new versions published

January 2025

Planned review date

December 2025

Summary

The review of these unit standards was initiated through their planned review date concurrently with the review of the New Zealand Certificate in Electrical Engineering (Electromechanical Maintenance and Repair) (Level 4) with an optional strand in Electrical Service Technician (EST) [Ref: 2565].

14 unit standards that have low usage have been checked and stakeholders have confirmed they remain fit for purpose. A deferred review date allows the completion of an investigation into the electrotechnology sector qualifications and standards which will support the development of skill standards across the sector.

Main changes

- The review date of 14 unit standards was updated to December 2025.
- Guidance information was updated for currency in unit standards 2014, 16413 and 19471.
- 13 unit standards were expired because of no usage.

Category D unit standards will expire at the end of December 2025

Ke	Key to review category				
Α	Dates changed, but no other changes are made - the new version of the standard carries the				
	same ID and a new version number				
В	Changes made, but the overall outcome remains the same - the new version of the standard				
	carries the same ID and a new version number				
С	Major changes that necessitate the registration of a replacement standard with a new ID				
D	Standard will expire and not be replaced				

Engineering and Technology> Electrical Engineering > Electrical Appliance Servicing

ID	Title	Level	Credit	Review Category
20591	Braze refrigerator pipe work in electrical appliance servicing	3	3	D
22763	Service electrical or electronic goods	4	15	Α
31729	Demonstrate knowledge of domestic systems and appliances	4	15	D
31730	Install standard and non-standard domestic systems, appliances, and equipment	4	25	D

ID	Title	Level	Credit	Review Category
31731	Restore operation and performance of domestic systems, equipment, and services	4	15	D
31732	Demonstrate knowledge of commercial systems and appliances	4	15	D
31733	Install standard and non-standard commercial systems, appliances, and equipment	4	25	D
31734	Demonstrate knowledge of consumer electronic systems and products	4	15	D
31735	Install and configure standard and non-standard consumer electronic systems, products, and equipment	4	25	D
31736	Service and repair domestic electrical appliances	4	22	D
31737	Restore operation and performance of commercial systems, equipment, and services	4	15	D
31738	Restore operation and performance of consumer electronic systems, equipment, and services	4	15	D
31739	Service and repair commercial electrical appliances	4	22	D
31740	Service and repair consumer electronic products for service technicians	4	25	D

Engineering and Technology> Electrical Engineering > Electrical Machines

ID	Title	Level	Credit	Review Category
1184	Test, locate and diagnose faults in electrical machine windings	3	2	Α
1185	Prepare electrical machines for rewinding	4	8	Α
2014	Overhaul a.c. rotating machines and control equipment	4	5	В
16413	Fault-find, repair, and test electric motors	4	8	В
19469	Demonstrate knowledge of electric machine winding	4	5	Α
19470	Rewind electric machines	4	15	Α
19471	Reassemble and test electric machines following rewinding	4	12	В
24890	Lift and transport electrical machines, and associated repair equipment within a motor rewinding workshop environment	3	5	A
31741	Demonstrate knowledge of electrical theory for electromechanical maintenance and repair	3	9	Α
31742	Demonstrate knowledge of electrical calculations and principles for electromechanical maintenance and repair	3	10	Α
31743	Demonstrate knowledge of direct current machines for electromechanical maintenance and repair	3	8	A
31744	Demonstrate knowledge of alternating current machines for electromechanical maintenance and repair	4	15	Α
31745	Demonstrate knowledge of safety in electromechanical maintenance and repair	4	8	Α