

Field Engineering and Technology**Review of *Electrical Engineering* unit standards**

Subfield	Domain	ID
Electrical Engineering	Electric Switchboards	14970-14975,14977-14979, 14981, 24608-24611
	Electrical Standards and Statutes	27353

The Skills Organisation (Skills) has completed the review of the unit standards listed above.

Date new versions published

November 2016

Planned review date

31 December 2021

Summary

The unit standards were reviewed to ensure they are fit for purpose, relevant to the Switchgear and Electrotechnology industries, and aligned with the graduate profile outcomes of the New Zealand Certificate in Electrical Engineering (Switchgear Fitting) (Level 4) with an optional Electrical Installer strand [Ref: 3470].

Industry representatives from the Qualification Development Group were involved in the review and writing of these unit standards, and provided feedback on them.

Main changes

- Changes were made to accurately reflect industry terminology, practice, and evidence requirements.
- 11 unit standards have been designated expiring and replaced by 10 new unit standards.
- Four new unit standards have been developed.

The last date for assessment of superseded versions of these standards is 31 December 2020. Results will not be accepted where the assessment date is after the last date for assessment of the superseded version of the standard.

Category C unit standards will expire at the end of December 2021**Detailed list of unit standards – classification, title, level, and credits**

All changes are in **bold**.

Key to review category	
A	Dates changed, but no other changes are made - the new version of the standard carries the same ID and a new version number
B	Changes made, but the overall outcome remains the same - the new version of the standard carries the same ID and a new version number
C	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 > Electric Switchboards

ID	Title	Level	Credit	Review Category
14970	Demonstrate knowledge of electric switchboard components and their representation on drawings	3	30	C
29755	Demonstrate and apply knowledge of switchboard components and their representation in documentation	4	12	
14971	Use and maintain specialised tools and fixings for electric switchboard manufacture	3	20	C
29756	Use and maintain specialised tools for switchboard assembly and demonstrate mechanical fabrication skills	4	7	
14972	Assemble electric switchboards	3	30	C
29757	Demonstrate and apply knowledge to assemble switchboards	4	13	
14973	Wire electric switchboards	3	30	C
29758	Select, install and terminate cables and wires in switchboards	4	13	
14974	Fabricate and install busbars in electric switchboards	3	20	C
29759	Fabricate and install busbars in switchboards	4	14	
14975	Install earthing systems and shrouding on electric switchboards	3	15	C
29760	Demonstrate and apply knowledge of earthing systems, bonding, shrouding, and access control for switchboards	4	11	
14977	Demonstrate knowledge of regulations relevant to the switchboard industry	3	3	C
29761	Demonstrate and apply knowledge of regulations and ethical practices relevant to the switchboard industry	4	5	
14978	Demonstrate knowledge of electric switchboard testing	4	3	C
29762	Demonstrate and apply knowledge of testing switchboards	4	4	
14979	Demonstrate knowledge of electric switchboard circuits	4	5	B
	Demonstrate knowledge of switchboard circuits		4	
14981	Modify installed electric switchboards	4	15	B
	Modify installed switchboards		5	
24608	Test electric switchboards	3	5	C
24609	Perform compliance testing of electric switchboards	4	20	C
29751	Carry out switchboard tests	4	9	
24610	Demonstrate knowledge of busbar system design	4	10	B
	Demonstrate knowledge of busbar design		5	
24611	Handle switchgear equipment and switchboards in a safe manner	3	5	C
29752	Manage switchgear equipment and switchboards in a safe manner	4	3	

ID	Title	Level	Credit	Review Category
29750	Install automation and control systems in switchboards	4	3	New

Engineering and Technology > Electrical Engineering > Electrical Standards and Statues

ID	Title	Level	Credit	Review Category
27353	Demonstrate knowledge of theory for registration of electrical installers	3	3	B
29749	Demonstrate and apply knowledge of theory and practice for registration of electrical workers (stage 1)	4	2	New
29753	Demonstrate and apply knowledge of theory and practice for registration of electrical workers (stage 2)	4	2	New
29754	Demonstrate and apply knowledge of theory and practice for registration of electrical workers (stage 3)	4	3	New