

National Certificate in Electrical Engineering (Switchgear Fitter) (Level 3)

Level 3

Credits 155

This qualification has been **reviewed**. The last date to meet the requirements is 31 December 2020.

Transition Arrangements

This qualification has been replaced by the New Zealand Certificate in Electrical Engineering (Switchgear Fitting) (Level 4) with an optional Electrical Installer strand [Ref: 3470].

The last date for entry into programmes leading to this qualification is 31 December 2018. The last date for assessments to take place for this qualification is 31 December 2020, when the qualification will be discontinued.

People currently working towards this qualification may either complete the requirements by 31 December 2020, or transfer their results to the replacement qualification. This qualification contains expiring unit standards. This will not impact on candidates' ability to complete, up to the qualification expiry date.

For detailed information see [Review Summaries](#) on the NZQA website.

NZQF National Qualification Registration Information

Process	Version	Date	Last Date for Assessment
Registration	1	March 2002	December 2010
Review	2	May 2008	December 2020
Review	3	July 2016	December 2020

Standard Setting Body

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National Certificate in Electrical Engineering (Switchgear Fitter) (Level 3)

Level	3
Credits	155

Purpose

This qualification is for switchgear fitters employed in the manufacture, testing and installation of electric switchboards. It is typically gained towards the end of a two to three year traineeship. The qualification builds on the National Certificate in Electrical Engineering (Level 2) [Ref: 0174] which covers basic theory and safety practices for the electrical industry.

The qualification covers the following skills:

- knowledge of switchboard components and drawings;
- use and maintenance of specialised tools and fixings;
- assembly, wiring, and testing of switchboards;
- fabrication and installation of busbars;
- safe handling of switchboards and switchgear;
- installation of switchboard earthing systems and shrouding;
- switchboard testing.

Although this qualification is not the intended pathway to becoming an electrician, some people may wish to pursue this possibility. In that case, they will already have gained the first step, ie the National Certificate in Electrical Engineering (Level 2) [Ref: 0174]. In addition, the Level 3 switchboard standards in this qualification will satisfy the elective component of the National Certificate in Electrical Engineering (Electrician for Registration) (Level 4) [Ref: 1195].

Special Notes

Though there are Switchgear Fitter standards at Level 4 registered on the National Qualifications Framework, there is no Level 4 Switchgear Fitter qualification. Those Level 4 standards can be used as electives in other qualifications such as the National Certificate in Electrical Engineering (Electrician for Registration) (Level 4) [Ref: 1195] or the National Diploma in Engineering (Electrotechnology) (Level 6) [Ref: 1313], or as standalone optional or special purpose standards for candidates who require the additional skills and knowledge.

Prerequisite

National Certificate in Electrical Engineering (Level 2) [Ref: 0174], or equivalent recognised qualification.

Credit Range

Level 3 credits	155
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Requirements for Award of Qualification

Award of NZQF National Qualifications

Credit gained for a standard may be used only once to meet the requirements of this qualification.

Unit standards and achievement standards that are equivalent in outcome are mutually exclusive for the purpose of award. The table of mutually exclusive standards is provided on the New Zealand Qualifications Authority (NZQA) website: <http://www.nzqa.govt.nz/qualifications-standards/standards/standards-exclusion-list/>.

Reviewed standards that continue to recognise the same overall outcome are registered as new versions and retain their identification number (ID). Any version of a standard with the same ID may be used to meet qualification requirements that list the ID and/or that specify the past or current classification of the standard.

Summary of Requirements

- Compulsory standards

Detailed Requirements

Compulsory

The following standards are required

Engineering and Technology > Electrical Engineering > Electric Switchboards

ID	Title	Level	Credit
14970	Demonstrate knowledge of electric switchboard components and their representation on drawings	3	30
14971	Use and maintain specialised tools and fixings for electric switchboard manufacture	3	20
14972	Assemble electric switchboards	3	30
14973	Wire electric switchboards	3	30
14974	Fabricate and install busbars in electric switchboards	3	20
14975	Install earthing systems and shrouding on electric switchboards	3	15
24608	Test electric switchboards	3	5
24611	Handle switchgear equipment and switchboards in a safe manner	3	5

Transition Arrangements

Version 2

Version 2 of the qualification was issued following the review of the Electric Switchboards standards by the industry. The review reflected the experience of several years of training, assessment, and industry experience. It also took into account the anticipated future skill requirements of the industry.

Changes to structure and content

- standard 24608 was added
- standard 24611 replaced standard 14976
- the credit total changed from 160 to 155.

For detailed information see [Review Summaries](#) on the NZQA website.

This qualification contains standards that replace earlier standards. For the purposes of this qualification, people who have gained credit for the expiring standards are exempt from the requirement to gain credit for the replacement standards – see table below.

Credit for	Exempt from
14976	24611
14980	24608

Existing trainees may either complete the requirements of version 1 or transfer to version 2. All new trainees will be enrolled in programmes leading to version 2 of the qualification.

It is not intended that anyone be disadvantaged by this review, and the above arrangements have been designed for a smooth transition. However, anyone who feels they have been disadvantaged may appeal to The Skills Organisation at the address below.

Previous versions of the qualification

Version 1 of the qualification was registered to accommodate the training requirements of people working in the Switchgear Fitting industry.

Certification

The certificate will display the logos of NZQA, the provider and The Skills Organisation.

Classification

This qualification is classified according to the NQF classification system and the New Zealand Standard Classification of Education (NZSCED) system as specified below.

NQF Classification		NZSCED	
Code	Description	Code	Description
204	Engineering and Technology > Electrical Engineering	031399	Engineering and Related Technologies > Electrical and Electronic Engineering and Technology > Electrical and Electronic Engineering and Technology not elsewhere classified

Quality Management Systems

Providers and Industry Training Organisations must be accredited by a recognised Quality Assurance Body before they can register credits from assessment against standards. Accredited providers and Industry Training Organisations assessing against standards must engage with the moderation system that applies to those standards. Accreditation requirements and the moderation system are outlined in the associated Accreditation and Moderation Action Plan (AMAP) for each standard.

REVIEWED