

**Field**      **Engineering and Technology**

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

<b>Subfield</b>	<b>Domain</b>	<b>ID</b>
Electrical Engineering	Electrotechnology	27480-27482
Electronic Engineering	Electronics Technology	9221, 18239-18243, 26119-26123

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

**Date new versions published**

**June 2021**

**Planned review date**

**December 2025**

**Summary**

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

Electrotechnology unit standards

The three Electrotechnology unit standards were reviewed from October to December 2020. These unit standards form part of the programme leading to the award of the New Zealand Diploma in Engineering Practice (Level 6), Electrical Engineering strand [Qual Ref: 1714]. The only stakeholder for these unit standards is the New Zealand Board for Engineering Diplomas (Board), which is made up industry representatives, providers, and relevant industry training organisations. Consultation occurred via email, and the result is to make minor changes for clarity. The changes were discussed and approved by the Board at their meeting in December 2020.

Electronics Technology unit standards

The review of 11x Electronics Technology unit standards was conducted from August to December 2020 through survey, emails and 1-on-1 video or phone consultations. The consultation document was sent to organisations with consent to assess and copied to the Ministry of Education. The primary stakeholders are high school technology teachers who are the primary users of these unit standards. The result of the review is that these unit standards remain useful and only need minor revisions for clarity.

**Main changes**

- The unit standards were updated to the latest template.
- References, definitions, and terminologies were updated where applicable for clarity.
- Some outcomes and performance criteria were amended for clarity and to remove duplication.

**The last date for assessment of superseded versions of Category B unit standards are:**

- *Electrotechnology* domain – December 2023.
- *Electronics Technology* domain – December 2024.

**Detailed list of unit standards – classification, title, level, and credits**

All changes are in **bold**.

<b>Key to review category</b>	
<b>A</b>	Dates changed, but no other changes are made - the new version of the standard carries the same ID and a new version number
<b>B</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
<b>C</b>	Major changes that necessitate the registration of a replacement standard with a new ID
<b>D</b>	Standard will expire and not be replaced

Engineering and Technology > Electrical Engineering > Electrotechnology

<b>ID</b>	<b>Title</b>	<b>Level</b>	<b>Credit</b>	<b>Review Category</b>
27480	Develop, implement, and evaluate solutions for well-defined electrical engineering problems	6	15	B
27481	Apply risk management to well-defined electrical engineering problems	6	15	B
27482	Identify and analyse well-defined electrical engineering problems <b>Define, investigate, and analyse well-defined electrical engineering problems</b>	6	15	B

Engineering and Technology > Electronic Engineering > Electronics Technology

<b>ID</b>	<b>Title</b>	<b>Level</b>	<b>Credit</b>	<b>Review Category</b>
9221	Demonstrate knowledge of the development of an electronic product <b>Demonstrate knowledge of the development of an electronic product typically undertaken by a manufacturing company</b>	3	3	B
18239	Demonstrate introductory knowledge of circuit concepts and measurements for electronics	2	5	B
18240	Demonstrate knowledge of basic electronic components	2	5	B
18241	Demonstrate knowledge of basic electronic systems	2	5	B
18242	Construct a simple printed circuit	2	3	B
18243	Construct a simple electronic product from a supplied circuit schematic	2	6	B
26119	Construct, and report on the performance of, a simple electronic programmable circuit <b>Construct, and describe the performance of, a simple electronic programmable circuit</b>	3	4	B
26120	Describe and construct circuits to demonstrate the operation and properties of electronic devices	3	3	B
26121	Plan, construct, modify, and report on an electronic prototype <b>Plan, construct, and modify an electronic prototype</b>	3	6	B
26122	Demonstrate knowledge of and build circuits using digital electronic devices that interface with ADC and DAC functions	3	3	B
26123	Demonstrate knowledge of the practical applications of logic circuits <b>Demonstrate knowledge of logic circuit functions and their applications</b>	3	3	B