

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

Subfield	Domain	ID
Mechanical Engineering	Engineering Core Skills	22899
	Engineering - Fabrication	25704
	Engineering - Measurement	4433, 4435, 4436, 4438
	Maintenance and Diagnostics in Mechanical Engineering	2401, 19873
	Welding	25783

Competenz has completed the review of the unit standards listed above.

Date new versions published

March 2017

Planned review date

December 2022

Summary

The unit standards were reviewed to align with the recently registered New Zealand Certificates in Mechanical Engineering and to meet Competenz's ongoing unit standard review schedule.

The review was carried out in consultation with mechanical engineering industry technical experts and the changes were endorsed by the industry technical group.

Main changes

- Changes were made to outcome statements, evidence requirements, and range statements to clarify assessment requirements, ensure alignment with current industry requirements, and to correct grammatical errors.
- A last date for assessment of the most recent superseded version of these standards was specified.

The last date for assessment of the most recent superseded versions of Category B unit standards is December 2021

Impact on existing organisations with consent to assess

Current consent for			Consent extended to		
Nature of consent	Classification or ID	Level	Nature of consent	Classification or ID	Level
Subfield	Mechanical Engineering	2	Standards	4438	3
Domain	Engineering - Measurement	2	Standard	4438	3

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 > Mechanical Engineering > Engineering Core Skills

ID	Title	Level	Credit	Review Category
22899	Demonstrate knowledge of mechanical power transmission	3	3 6	B

Engineering and Technology > Mechanical Engineering > Engineering - Fabrication

ID	Title	Level	Credit	Review Category
25704	Develop fabrication patterns for simple three-dimensional objects Develop fabrication patterns manually for simple three-dimensional objects	3	10	B

Engineering and Technology > Mechanical Engineering > Engineering - Measurement

ID	Title	Level	Credit	Review Category
4433	Select, use, and care for simple measuring devices used in engineering	1	2	B
4435	Select, use, and care for engineering dimensional measuring equipment	2	3	B
4436	Select, use, and care for engineering marking-out equipment	2	4 3	B
4438	Demonstrate knowledge of fits, limits, and tolerances in engineering	2 3	2	B

Engineering and Technology > Mechanical Engineering > Maintenance and Diagnostics in Mechanical Engineering

ID	Title	Level	Credit	Review Category
2401	Safely shut down and isolate machines and equipment Shut down, isolate and start-up machines and equipment	3	3	B
19873	Demonstrate knowledge of bearings used in machines and equipment	3	8 5	B

Engineering and Technology > Mechanical Engineering > Welding

ID	Title	Level	Credit	Review Category
25783	Demonstrate knowledge of metal cutting and gouging processes Demonstrate knowledge of and apply metal cutting and gouging processes	3	2	B