## Field Engineering and Technology

### Review of Industrial Measurement and Control unit standards

Subfield	Domain	ID
Industrial Measurement	Industrial Measurement	2631, 2633, 2635, 2637, 2639,
and Control	and Control - Maintenance	2640, 2642-2648, 2657, 2664,
		2667, 4356-4357, 9180, 19234,
		24884

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

Date new versions published Month 2013

Planned review date December 2017

## **Summary**

These standards constitute the Level 3 and Level 4 standards in the Industrial Measurement and Control - Maintenance domain, with the addition of the Level 5 standard 19234. The review was conducted in conjunction with the development of two proposed New Zealand Certificates in Industrial Measurement and Control at Level 4 and 5 to ensure that the standards reflect industry best practice. The review group consisted of industry experts and training providers, with additional input occurring via a wider email network consultation group. There are further unit standards in the Industrial Measurement and Control subfield under development.

#### Main changes

- Standards 2631, 2635, and 2639 have been changed from Level 3 to Level 4 to more
  accurately indicate the complexity of the skills and knowledge required. The scope of
  these standards has broadened to include testing of systems as well as discreet
  devices.
- Purpose statements of, and the corresponding outcome, evidence requirements and ranges in, standards 2631 and 2635 have changed where required to include testing of systems as well as discreet components.
- The purpose statement and the corresponding outcome, evidence requirements and ranges in, standards in standard 19234 have been amended.
- The evidence requirements of all standards have been rewritten in active voice to improve clarity of the statements.
- Unit standard 9180 has been moved to the Industrial Measurement and Control -Installation domain as this better indicates the content and assessment requirements of the unit standard.
- Entry information has been updated in standards 2631, 2637, 2642-2648, 2664, 2667, 4356, 9180 to align with the reviewed Industrial Measurement and Control Theory unit standards.
- The context for learning and assessment of the unit standards has been modified in the explanatory notes to refer to 'workplace environment' so as to make the unit standards achievable in a wider range of contexts.
- References in the explanatory notes have been updated where required.
- Last date of assessment of 31 December 2017 has been added the last superseded version of each standard, and 31 December 2013 to all previous versions.

# Impact on existing organisations with consent to assess

Current consent for			Consent extended to		
Nature of Classification or ID		Level	Nature of	Classification or ID	Level
consent			consent		
Standard	2631, 2635, 2639	3	Standard	2631, 2635, 2639	4
Domain	Industrial	4	Standard	9180	4
	Measurement and				
	Control - Maintenance				

## Impact on registered qualifications

Key to type of impact				
Affected	The qualification lists a reviewed classification (domain or subfield) in an elective set			
	The qualification lists a standard that has changes to level or credits			
	The qualification lists a C or D category standard			
Not materially affected	The qualification lists a standard that has a new title			
	The qualification lists a standard that has a new classification			

The following Skills Organisation qualification is impacted by the outcome of this review and is currently under review. The standards that generated the status *Affected* are listed in **bold**.

Ref	Qualification Title	Classification or ID
0410	National Certificate in Industrial Measurement and Control	2631, 2635, 2639
	(Level 4)	

# Detailed list of unit standards - classification, title, level, and credits

All changes are in **bold**.

Ke	ey 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
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 > Industrial Measurement and Control > Industrial Measurement and Control - Maintenance

ID	Title	Level	Credit	Review Category
2631	Maintain pressure measurement devices	3 <b>4</b>	10	В
2633	Maintain level measurement devices used in industry	3	10	В
2635	Maintain temperature measurement devices used in industry	3 <b>4</b>	10	В
2637	Maintain flow measurement devices used in industry	3	10	В
2639	Maintain and service control valves in accordance with industry requirements	3 <b>4</b>	10	В
2640	Maintain control valve actuators and positioners	3	5	В
2642	Maintain a pH measuring system for chemical analysis	4	4	В
2643	Maintain a conductivity measuring system	4	4	В
2644	Maintain a dissolved oxygen measuring system	4	4	В
2645	Maintain a consistency or a viscosity measuring system	4	4	В
2646	Maintain analytical monitoring equipment	4	4	В
2647	Maintain humidity or dewpoint monitoring equipment	4	4	В
2648	Maintain and calibrate density monitoring equipment	4	4	В
2657	Maintain pneumatic controllers	4	5	В
2664	Maintain hydraulic or electro-hydraulic equipment	3	3	В
2667	Install and service pneumatic or electro-pneumatic equipment	3	5	В
4356	Maintain chromatographs	4	4	В
4357	Tune or adjust a plant control loop	4	2	В
19234	Diagnose and correct faults in industrial measurement and control systems	5	10	В
24884	Maintain conditioning modules and electronic or microprocessor based controllers	4	6	В

### Engineering and Technology > Industrial Measurement and Control

ID	Domain	Title	Level	Credit	Review Category
9180	Industrial Measurement and Control - Maintenance Industrial Measurement and Control - Installation	Install or replace, test, and commission industrial instrumentation	4	10	В