National Certificate in Industrial Measurement and Control (Level 5)

Level **5**

Credits **70**

This qualification has been **reviewed**. The last date to meet the requirements is 31 December 2019.

Transition Arrangements

This qualification has been reviewed and replaced by the New Zealand Certificate in Process Control and Automation (Level 5) with strands in Process Control and Process Automation [Ref: 2253]

The last date for entry into programmes leading to the replaced qualification is 31 December 2016.

Those currently working towards this replaced qualification may either complete the requirements by December 2019 or transfer their results to the replacement qualification.

For detailed information see Review Summaries on the NZQA website.

NZQF Registration Information

Process	Version	Date	Last Date for Assessment
Registration	1	December 2002	December 2012
Review	2	September 2009	December 2019
Review	3	February 2014	December 2019

It is the intention of The Skills Organisation that no existing trainee should be disadvantaged by these transition arrangements. Any person who considers they have been disadvantaged may appeal to The Skills Organisation using the contact details below.

Standard Setting Body

The Skills Organisation
Freepost 5164
PO Box 24469
Royal Oak
Auckland 1345

Telephone 09 525 2590
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Email reviewcomments@skills.org.nz
Website http://www.skills.org.nz

National Certificate in Industrial Measurement and Control (Level 5)

Level **5**

Credits **70**

Purpose

This qualification is for people who are working in industry associated with industrial measurement and control and wish to develop a higher level of technical competence in this field.

The qualification comprises off-job components reflecting the theory of industrial measurement and control to enhance the candidate's process knowledge, and diagnostic ability. The on-job component allows for the candidate to apply this enhanced knowledge in an actual industrial process setting.

The components represent the following theoretical and practical skills:

- safety and compliance;
- selection and specification of equipment;
- control system hardware and interfaces;
- operation, measurement, and control of an industrial process;
- process theory; and
- application of process theory.

This qualification builds on the National Certificate in Industrial Measurement and Control (Level 4) [Ref: 0410] and may lead on to the National Diploma in Engineering (Electrotechnology) (Level 6) [Ref: 1313]. Candidates may also choose to undertake further study in relevant management and leadership qualifications such as the National Certificate in Business (First Line Management) (Level 4) [Ref: 0649] or the National Diploma in Business (Level 6) [Ref: 1499].

There are also optional standards which are not required as part of the qualification, but may be needed in some employment contexts.

Special Notes

Trainees could complete this qualification in two years of part time study. They are encouraged to begin compiling evidence for the on-job Unit 19233, *Demonstrate knowledge of the operation, measurement, and control of an industrial process,* on enrolment to this qualification. It is anticipated that by the completion of all the other assessments, the evidence requirements for standard 19233 will be mostly completed.

Recommended for entry

It is recommended that candidates first attain the National Certificate in Industrial Measurement and Control (Level 4) [Ref: 0410], Trade Certificate in Industrial Instrumentation, or equivalent qualification.

Credit Range

	Compulsory	Optional
Level 5 credits	70	0-20
Total	70	0-20

Requirements for Award of Qualification

Award of NZQF 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

- A minimum of 70 credits
- Compulsory standards

Detailed Requirements

Compulsory

The following standards are required

Engineering and Technology > Industrial Measurement and Control > Industrial Measurement and Control - Maintenance

ID	Title	Level	Credit
19233	Demonstrate knowledge of the operation, measurement, and control of an industrial process	5	10

Engineering and Technology > Industrial Measurement and Control > Industrial Measurement and Control - Theory

ID	Title	Level	Credit
19241	Demonstrate knowledge of safety and compliance for industrial measurement and control systems	5	10

ID	Title	Level	Credit
25885	Demonstrate knowledge of the selection and specification of equipment for industrial measurement and control systems	5	15
25886	Demonstrate knowledge of control system hardware and interfaces for industrial measurement and control systems	5	15
25887	Demonstrate knowledge of process theory for industrial measurement and control processes and applications	5	15
25888	Demonstrate knowledge of process theory for industrial measurement and control systems	5	5

Optional standards
The following standards are optional

Engineering and Technology > Industrial Measurement and Control > Industrial Measurement and Control - Maintenance

ID	Title	Level	Credit
19234	Diagnose and correct faults in industrial measurement and control systems	5	10
19235	Maintain and manage specialist analytical equipment used in industrial processes	5	10

Transition Arrangements

Version 2

Version 2 of the qualification was issued following a major review of competency training carried out by the industrial measurement and control industry and ETITO during 2008 and 2009, which resulted in standards being updated, replaced, or removed from the qualification. The review reflected several years of training, assessment, and industry experience and took into account the anticipated future skill requirements of the industry.

Changes to structure and content

- The qualification was restructured from a compulsory section and two elective sections to a compulsory section and two optional standards.
- Standard 19237 from the compulsory section and standards 19236, 19238-19240, and 19242-19246 from elective 1 were replaced by 25885-25887 in the compulsory section – see table below.
- Standard 19241 from elective 1 and standard 25888 were added to the compulsory section.
- Standard 19234 from the compulsory section and standard 19235 from elective 1 were included as optional standards.
- Elective 2 was removed from the qualification.
- The titles of standards 19233 and 19237 were updated.
- The total credits were decreased from 90 to 70.

This qualification contains standards that have been recognised as alternatives to 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 suggested alternative standards – see table below.

Credit for	Exempt from
19243, 19244	25885
19236, 19237, 19242, 19245, 19246	25886
19238, 19239, 19240	25887

Trainees currently working towards the previous versions of this qualification may either complete the requirements for that version or transfer to version 2.

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 ElectroTechnology Industry Training Organisation (ETITO) at the address below.

Certification

This certificate will display the logos of NZQA, the ElectroTechnology Industry Training Organisation and the accredited organisation.

Classification

This qualification is classified according to the classification system listed on the Directory of Assessment Standards (DAS) and the New Zealand Standard Classification of Education (NZSCED) system as specified below.

DAS Classification		NZSCED	
Code	**Description**	**Code**	**Description**
269	Engineering and Technology > Industrial Measurement and Control	030703	Engineering and Related Technologies > Mechanical and Industrial Engineering and Technology > Industrial Engineering

Quality Management Systems
Providers and Industry Training Organisations must be granted consent to assess by a recognised Quality Assurance Body before they can register credits from assessment against standards. Organisation with consent to assess and Industry Training Organisations assessing against standards must engage with the moderation system that applies to those standards. Consent to assess requirements and the moderation system are outlined in the associated Consent and Moderation Requirements (CMR) for each standard.