

## 40243 Maintain analytical measuring equipment in an industrial context

<b>Kaupae   Level</b>	4
<b>Whiwhinga   Credit</b>	8
<b>Whāinga   Purpose</b>	<p>This skill standard recognises the skills required to maintain analytical measuring equipment in an industrial environment.</p> <p>This skill standard may contribute to the New Zealand Certificate in Industrial Measurement and Control (Practice) (Level 4) [Ref: 2251].</p>

### Hua o te ako me Paearu aromatawai | Learning outcomes and assessment criteria

Hua o te ako   Learning outcomes	Paearu aromatawai   Assessment criteria
1. Maintain analytical measuring equipment in an industrial context.	a. Technical information is applied to service or repair equipment.
	b. Cause, type, and symptoms of typical errors are identified and explained.
	c. Measuring equipment is serviced or repaired to ensure correct operation in accordance with industry requirements.
	d. Performance of equipment is verified using appropriate reference measurement standards.
	e. Results of acceptance testing are documented in accordance with industry requirements.

### Pārongo aromatawai me te taumata paearu | Assessment information and grade criteria

#### Assessment specifications:

Assessment must include **two** different types of analytical measuring equipment. Examples of analysis include:

- Air or gas analysis: IR or UV absorption, oxygen, combustion gases, gas chromatography, humidity, dewpoint, particle size, carbon dioxide, total volatile organic compounds.
- Liquids analysis: conductivity, turbidity, refractometry, potentiometry, voltammetry, amperometry, coulometry.

To achieve this standard the candidate must be capable of consistently:

- performing the skill to the required industry standard
- repeating the skill on demand
- performing the skill without supervision
- applying the skill to other work.

*Industry requirements* refer to all asset owner requirements; manufacturers' specifications; enterprise requirements which cover the documented workplace policies, procedures, specifications, and business requirements; and quality management requirements relevant to the workplace.

### Ngā momo whiwhinga | Grades available

Achieved

### Ihirangi waitohu | Indicative content

- Safe work procedures and practices.
- Types of analytical measuring equipment and their principles of measurement.
- Cause, type, and symptoms of typical errors in analytical measuring equipment.
- Service and repair procedures.
- Verification procedures.

### Rauemi | Resources

- Programme guidance available from [qualifications@waihangaararau.nz](mailto:qualifications@waihangaararau.nz).
- Manufacturers' instructions and device specification sheets relevant to the equipment used for the task.
- Electricity Act 1992.
- Electricity (Safety) Regulations 2010.
- All vocabulary will align to the IEC 60050 International Electrotechnical Vocabulary (IEV) available at [IEC 60050 - International Electrotechnical Vocabulary](#).

### Pārongo Whakaū Kouna | Quality assurance information

<b>Ngā rōpū whakatau-paerewa  </b> Standard Setting Body	Waihanga Ara Rau Construction and Infrastructure Workforce Development Council
<b>Whakaritenga Rārangi Paetae Aromatawai  </b> DASS classification	Engineering and Technology > Industrial Measurement and Control > Industrial Measurement and Control - Maintenance
<b>Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga  </b> CMR	0003

Hātepe   Process	Putanga   Version	Rā whakaputa   Review Date	Rā whakamutunga mō te aromatawai   Last date for assessment
Rēhitatanga   Registration	1	30 January 2025	N/A
Kōrero whakakapinga   Replacement information	N/A		
Rā arotake   Planned review date	31 December 2029		

Please contact Waihanga Ara Rau Construction and Infrastructure Workforce Development Council [qualifications@waihangaararau.nz](mailto:qualifications@waihangaararau.nz) to suggest changes to the content of this skill standard.