

Title	Install and programme a PLC		
Level	4	Credits	2

Purpose	<p>This unit standard covers the installation and programming of a PLC. It is intended for people wishing to qualify as electricians predominantly in the industrial sector.</p> <p>People credited with this unit standard are able to:</p> <ul style="list-style-type: none"> – establish suitability of a selected PLC and prepare a functional description report; and – install, connect, and code the PLC to create a simple application.
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Classification	Electrical Engineering > Electrical Installation and Maintenance
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Available grade	Achieved
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Guidance Information

- 1 This unit standard has been developed for learning and assessment on-job.
- 2 Definitions
 - I/O* – input output.
 - PLC* – programmable logic controller.
 - Safe and sound practice* – as it relates to the installation of electrical equipment is defined in AS/NZS 3000:2007, *Electrical Installations (known as the Australian/New Zealand Wiring Rules)*.
- 3 Range
 - a Candidates may refer to current legislation and Standards during assessment.
 - b Demonstration of safe working practices and installation in accordance with *safe and sound practice* are essential components of assessment of this unit standard.
 - c All activities and evidence presented for all outcomes and performance criteria in this unit standard must be in accordance with:
 - i legislation;
 - ii policies and procedures;
 - iii ethical codes;
 - iv Standards – may include but are not limited to those listed in Schedule 2 of the Electricity (Safety) Regulations 2010;
 - v applicable site, enterprise, and industry practice; and,
 - vi where appropriate, manufacturers' instructions, specifications, and data sheets.

Outcomes and performance criteria

Outcome 1

Establish suitability of the selected PLC and prepare a functional description report in conjunction with client.

Performance criteria

- 1.1 Ensure the selected PLC meets the requirements based on specifications and prepare a functional description of the required operation.

Outcome 2

Install, connect, and code the PLC to create a simple application.

Performance criteria

- 2.1 Connect input and output wiring to field hardware.
- 2.2 Use a basic code to develop, write, and debug PLC code to meet requirements of functional description.
- 2.3 Commission and test the PLC to confirm operation meets the functional description.
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This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	21 July 2016	31 December 2027
Review	2	24 March 2022	31 December 2027
Rollover and Revision	3	25 May 2023	31 December 2027

Consent and Moderation Requirements (CMR) reference

0003

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.