

Title	Demonstrate knowledge of the development of an electronic product typically undertaken by a manufacturing company		
Level	3	Credits	3

Purpose	<p>This unit standard is intended for use in a senior secondary school environment, pre-employment electronics courses, or for electronics technicians.</p> <p>People credited with this unit standard are able to:</p> <ul style="list-style-type: none"> – demonstrate knowledge of the development of an electronic product typically undertaken by a manufacturing company.
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Classification	Electronic Engineering > Electronics Technology
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Available grade	Achieved, Merit, and Excellence
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Criteria for Merit	The candidate must provide an in-depth description of the key stages in developing an electronic product that includes reasons for each key stage, and consequences of not undertaking key stages.
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Criteria for Excellence	The candidate must provide a comprehensive description of the key stages in the development of an electronic product that includes a description of the role of international manufacturing standards in the prototyping, manufacturing, and testing stages of product development.
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Guidance Information

- 1 This unit standard can be awarded with Achieved, Merit, or Excellence. For the Achieved grade to be awarded, the outcome must be achieved as specified in the outcome statement. For Merit or Excellence to be awarded, the candidate must meet the Merit or Excellence criteria specified above.
- 2 Definitions
 - Development of an electronic product* – refers to all stages of the development cycle.
 - Electronic product* – a functional device produced for sale that incorporates both hardware and embedded software.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of the development of an electronic product typically undertaken by a manufacturing company.

Performance criteria

1.1 Describe the development of an electronic product in terms of key stages in the process.

Range key stages include –
 development of a business case – concept development, market research, technical research, design, feasibility study;
 development of a prototype – development of technical solution, building, testing;
 manufacture – plant requirements, parts procurement and storage, assembly stages, product testing;
 marketing – advertising, sales, distribution, technical support, customer support.

1.2 Describe how teams work together at each stage of the development process, in terms of their function or role.

Range function or role may include but is not limited to – software development, hardware development, mechanical engineering, electronic manufacturing, quality control, technician engineer, electronics engineer, mechanical engineer, test technician, production manager, software engineer, marketing manager, technical writer, accounting manager, board member;
 evidence of three functions or roles per stage is required.

Planned review date	31 December 2025
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	20 December 1996	31 December 2012
Revision	2	3 April 2001	31 December 2012
Review	3	26 July 2004	31 December 2012
Review	4	25 May 2007	31 December 2012
Review	5	16 April 2010	31 December 2012
Review	6	15 April 2011	31 December 2024
Rollover and Revision	7	15 March 2012	31 December 2024
Revision	8	15 January 2014	31 December 2024
Rollover	9	27 January 2015	31 December 2024
Review	10	24 June 2021	N/A

Consent and Moderation Requirements (CMR) reference

0003

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

Comments on this unit standard

Please contact The Skills Organisation reviewcomments@skills.org.nz if you wish to suggest changes to the content of this unit standard.