

Achievement Standard

Subject Reference	Digital Technologies 1.1		
Title	Create a computer program		
Level	1	Credits	5
		Assessment	Internal
Subfield	Technology		
Domain	Digital Technologies		
Status	Approved	Status date	March 2023
Planned review date	December 2028	Date version published	March 2023

Purpose Statement

Students are able to create a computer program.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
<ul style="list-style-type: none"> Create a computer program 	<ul style="list-style-type: none"> Create a well-structured computer program 	<ul style="list-style-type: none"> Create a flexible and robust computer program

Explanatory Notes

1 *Create a computer program* involves:

- using a suitable programming language to construct a program that performs a specified task
- testing and debugging the program to ensure it works on expected cases
- documenting the program with comments.

Create a well-structured computer program involves:

- using succinct and descriptive variable names
- documenting the program with comments that clarify the purpose of code sections
- testing and debugging the program to ensure it works on expected and boundary cases.

Create a flexible and robust computer program involves:

- using conditions and control structures effectively
- using constants, variables, or derived values in place of literals to make the program flexible
- testing and debugging the program to ensure it works on expected, boundary, and invalid cases.

- 2 The computer program must:
 - store at least two types of data in variables
 - take input from a user, sensor, or another external source
 - produce output
 - use sequence, selection, and iteration control structures
 - use data stored in a collection.
 - 3 The *programming language* used must support the programming constructs assessed within the achievement standard. It may be text-based or graphical.
 - 4 Refer to the NCEA [glossary](#) for Māori, Pacific, and further subject-specific terms and concepts.
 - 5 This achievement standard is derived from the Technology Learning Area at Level 6 of *The New Zealand Curriculum: Learning Media*, Ministry of Education, 2007.
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Replacement Information

This achievement standard and AS92005-AS92007 replaced AS91877-AS91887.

Quality Assurance

- 1 Schools and institutions must have been granted consent to assess by NZQA before they can register credits from assessment against achievement standards.
- 2 Schools and institutions with consent to assess must engage with the moderation system that applies to those achievement standards.

Consent and Moderation Requirements (CMR) reference 0233
