



**TOI MAI**

Workforce  
Development  
Council

**PROGRAMME GUIDANCE**  
**for**  
**New Zealand Certificate in Information**  
**Technology Essentials**  
**(Level 4) (ref 2594 v2)**  
**September 2022**

This guidance has been developed to aid providers developing programmes leading to this qualification and provides a list of suggested unit standards that have been aligned to the qualification's Graduate Profile Outcomes (GPOs).

## Strategic Purpose

The purpose of this qualification is to provide Aotearoa New Zealand with people who have the essential skills to proceed to further study in a related IT field, work in the field of Information Technology (IT) as a profession under broad guidance in a range of IT entry level support roles, and to communicate with relevant stakeholders in a professional manner. Organisations and communities will benefit from having IT graduates who have gained industry relevant transferable skills and knowledge across a range of disciplines within IT, enabling them to contribute to society, supporting digital proficiency and capability in a range of community and voluntary areas.

## General Conditions for Programme

### Programme design

Programmes must

- integrate the assessment of core skills (outcomes 5-7) with the essential knowledge and concepts of the technical skills (outcomes 1-4).
- involve experiential learning to engage the learners in the field of IT, and be designed to encourage learners to prepare for further study in IT.
- incorporate applicable current and emerging technologies; and current development approaches and methodologies including Agile, DevOps and design thinking.
- incorporate a focus on security concepts, tools, and techniques.
- reflect relevant codes of ethics and professional practice.
- include the role of regulators/Governments, and reflect the implications of laws, regulations, and international treaties applicable to a particular IT situation.
- reflect quality industry practice and maintain currency with amendments to, and replacements of, relevant legislation, regulations, Australia/New Zealand standards (AS/NZS), and security responsibilities including cyber safety.

### Diversity and inclusion

Programme design must consider bicultural, multicultural, gender and accessibility perspectives. Programme design must also consider ngā kaupapa o te Tiriti o Waitangi (the principles of the Treaty of Waitangi).

### Professional practice

Professional practice must be an integral part of the programme and delivery. Professional practice includes the core 'soft skills' of communication, collaboration, interpersonal skills, self-management, problem solving, reflection and ethical principles and practices.

It also includes the awareness of implications of complying with legal and regulatory requirements (e.g. health and safety, copyright, intellectual property, spamming, software licensing, privacy); and observing security responsibilities relevant to an organisational environment.

### Practical experience

Practical experience is essential, and it is recommended that learners complete at least half of their programme in real or realistic practical settings such as workplaces, labs or other simulated environments, or table-top walk-through exercises.

## Suggested unit standards

The following list of standards aligned to each GPO was developed as part of the 2021 review of Computing and Information Technology unit standards and follows the 2020 review of this qualification.

<b>Suggested unit standards for NZ Certificate in IT Essentials (Level 4) [Ref: 2594] (60 credits)</b>				
<b>Qualification GPO</b>	<b>Unit</b>	<b>Title</b>	<b>Level</b>	<b>Credits</b>
<b>GPO1</b> Apply knowledge of computer hardware, operating systems, applications, networks, storage and security to provide support for hardware and software resources and a foundation for infrastructure in the IT Profession. <b>(12 credits)</b>	<b>32943</b>	Apply IT technical knowledge and professional practice to provide support of a computer's hardware, software and network.	4	15
<b>GPO2</b> Apply knowledge of database design, development, queries and management, to support organisational information systems requirements. <b>(6 credits)</b>	<b>32944</b>	Design, develop and test a relational database solution using professional practice and project management methodologies-	4	15
<b>GPO3</b> Apply knowledge and concepts of business analysis, user experience and interface design, to create interactive digital media. <b>(12 credits)</b>	<b>32945</b>	Apply knowledge of business analysis, user experience and interface design, to create and test interactive digital media.	4	15
<b>GPO4</b> Apply knowledge of programming fundamentals, mathematical and logical concepts that underpin computational thinking, and concepts of software development to write code and create simple applications. <b>(15 credits)</b>	<b>32946</b>	Apply knowledge and concepts of software development to create applications.	4	15

<b>GPO5</b> Apply industry relevant project management and planning tools and methodologies to meet the requirements of specified briefs. <b>(5 credits)</b>	GPO covered by content in 32944 and 32946
<b>GPO6</b> Apply appropriate professional and ethical principles and practices to comply with essential legal and organisational requirements in a range of contexts within the IT industry. <b>(5 credits)</b>	GPO covered by content in 32943, 32944, and 32945
<b>GPO7</b> Communicate and collaborate clearly and professionally to maintain relationships and achieve objectives in a range of contexts within the IT industry. <b>(5 credits)</b>	GPO covered by content in 32944 and 32945

For further information and questions on this guidance, please contact us at [qualifications@toimai.nz](mailto:qualifications@toimai.nz).