

# CAPL Degree Application

## Bachelor of Information and Communication Technologies

*BICT*

CH3866

*With pathways in:*

- Networking and Infrastructure
- Information Systems
- Software Development

This application pack should be read in conjunction with the CAPL Degree Information brochure.

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## About the Bachelor of Information and Communication Technologies

The programme enables students to: apply knowledge, skills and capabilities to analyse, design, develop, implement and maintain information systems across a variety of industries, business environments, and community organisations; and interact with clients, formulate technology projects, manage projects, and communicate developments effectively throughout the design and development of solutions. Integral to the ICT profession, and this degree are communication skills, problem solving, critical thinking and professional and ethical practice.

Graduates are employed in a large variety of professional roles, ranging from the very technical to the very business oriented. They may include: infrastructure management - network operations, network design or network management positions; solution deployment for enterprises - enterprise solutions analyst, information system quality and security manager, IT business analyst; or solution building roles - test analysts, systems analysts, application developer, and other roles that require solution and application building skills.

# Graduate Profile

## To be assessed for the whole qualification you will be able to:

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- Apply specialist technical Information Communication Technology (ICT) knowledge and skills to provide business solutions.
- Employ critical, systematic and strategic thinking and analytical skills to evaluate and solve complex business problems in a changing global environment.
- Apply ethical dimensions for decision making to uphold social responsibility and sustainable practice.
- Advise on technology deployment decision making in a range of organisational, professional, social, and multi-cultural contexts.
- Apply self-directed learning and research to maintain currency and lead future development.
- Communicate effectively in a professional manner with stakeholders, colleagues, and clients.
- Work effectively, both independently and across teams, in diverse cultural contexts.
- Demonstrate knowledge of the Treaty of Waitangi/Te Tiriti o Waitangi and its relevance throughout the deployment and application of technology solutions in realising New Zealand/Aotearoa cultural aspirations.

# Year 2 Profile

## To be assessed for the first two years of the qualification you will be able to:

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- Apply technical Information Communication Technology (ICT) knowledge and skills to propose business solutions.
- Use critical thinking and analytical skills to evaluate and solve ICT based business problems.
- Apply ethical dimensions for decision making.
- Advise on technology deployment decision making in a range of organisational, professional, social, and multi-cultural contexts.
- Apply self-directed learning and research to maintain currency and support future development.
- Communicate effectively in a professional manner with stakeholders, colleagues, and clients.
- Work effectively, both independently and across teams, in diverse cultural contexts.
- Demonstrate knowledge of the Treaty of Waitangi/Te Tiriti o Waitangi and its relevance throughout the deployment and application of technology solutions.

# Year 1 Profile

## To be assessed for the first year of the qualification you will be able to:

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- Apply technical Information Communication Technology (ICT) knowledge and skills to work on business solutions.
- Evaluate and solve ICT business problems within defined parameters.
- Apply ethical dimensions for decision making.
- Apply learning and research to maintain currency and understand future development.
- Communicate effectively in a professional manner with stakeholders, colleagues, and clients.
- Work effectively, across teams, in diverse cultural contexts.
- Demonstrate knowledge of the Treaty of Waitangi/Te Tiriti o Waitangi and its relevance throughout the deployment and application of technology solutions.

## Core knowledge and skills required

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The core courses reflect industry requirements for high-level analytical skills, business awareness, technology deployment governance and risk management within complex technological settings.

### Level 5

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#### IT Practitioner Fundamentals

You understand and can apply the core concepts, skills and techniques relevant to being a practitioner in the IT industry in New Zealand and in the global community.

#### Introduction to Programing

You can develop basic software

You can analyse and explain requirements and design software, code and debug software from designs, and apply knowledge of standards and tools to build, test and document systems.

#### ComputerSystems Architecture

You can meet organisational requirements in relation to IT hardware installation and configuration.

#### Operating Systems

You can configure and administer systems and applications to meet typical organisational IT support requirements.

#### Computational Methods

You have the capability to tackle moderately complex computational problems and analyse big sets of data.

#### Introduction to Software Engineering

You can design and engineer scalable software solutions.

#### Database Design

You can specify, design and maintain mechanisms for storage and access to both structured and unstructured information, in support of business information.

#### Introduction to Networks

You can apply fundamental networking concepts, technologies and network theory to implement a simple network.

### Level 6

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#### Enterprise Solutions Deployment

You have knowledge of, and can apply various methods of deploying information technology solutions including methodologies for integrating IT solutions development and deployment in a New Zealand and the wider global context.

#### IT Service Management

You can apply both service and project management tools and techniques to implement change within the context of information technology (IT) environment in New Zealand and globally.

### Level 7

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#### Information Technology Governance

You can apply the processes that ensure the effective evaluation, selection, prioritisation, and funding of competing IT investments; oversee their implementation, and extract (measurable) business benefits in a New Zealand and global context.

#### Managing Information and Cybersecurity

You have the knowledge to be able to critically evaluate the key concepts for managing confidentiality, privacy, and security of IT systems and solutions.

## Specialised pathway knowledge and skills – specific requirements

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### *Information Systems Pathway*

#### **BCIS211 Research for Information Solutions**

You can apply appropriate research methodologies to identify and solve a business related problem using key analytical tools.

#### **BCIS212 Introduction to Enterprise Solutions Architecture**

You can identify and translate enterprise objectives into the design and/or evaluation and implementation of an effective IT solution in New Zealand and global contexts.

#### **BCIS213 Introduction to Enterprise Intelligence and Analytics**

You can develop strategies and processes for managing the information assets of an enterprise New Zealand and global enterprises to enhance organisational efficiency.

#### **BCIS312 Enterprise Solutions Architecture**

You are able to explore, evaluate and apply technical aspects of various layers in the ecosystem of New Zealand and global enterprise solutions required to change the functionality of an existing enterprise solution.

#### **BCIS313 Enterprise Intelligence and Analytics**

You can use data mining methods and applications to identify relationships in large, multidimensional data sets within New Zealand and global enterprises to facilitate effective decision-making processes

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### *Networking and Infrastructure Pathway*

#### **BCCS254 System Infrastructure**

You can implement data storage, messaging and a high-availability server-based virtualisation infrastructure.

#### **BCCS293 Scaling Networks**

You can apply switch and routing configurations and troubleshooting techniques to implement and complex networks.

#### **BCCS283 Network Infrastructure**

You can implement and manage a network infrastructure, with associated services and protocols.

#### **BCCS292 Routing and Switching Essentials**

You can apply routing configurations and troubleshooting techniques to implement and maintain networks.

#### **BCCS355 Cloud Services**

You can plan, implement and maintain corporate cloud services.

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### *Software Development Pathway*

#### **BCDE211 Best Programming Practices (Web and Mobile Development)**

You have competency in a programming language to an industry-recognised standard, and can produce commercially viable software.

#### **BCDE213 Interactive Media Development**

To can develop interactive media products for use in New Zealand and a wider global context.

#### **BCDE214 Database Administration**

You can install, configure, upgrade, administer, monitor and maintain databases to meet typical organisational data storage and retrieval requirements.

#### **BCDE215 Web Development**

You can develop and administer moderately complex websites.

#### **BCDE311 Software Development Project**

You can manage and complete all stages of a software development project.

# How do I apply?

To make a CAPL application you need to send us:

	Your Checklist
1 A completed <b>Ara Admission &amp; Enrolment form</b> (leave Section 2 blank) <i>(Please note: A student loan via StudyLink is not a payment option for the CAPL process, but please talk to us about our interest free instalment payment plan*).</i>	<input type="checkbox"/>
2 Your current and detailed <b>Curriculum Vitae (CV)</b> which should contain: <ul style="list-style-type: none"><li>• Relevant work history including your positions, tasks and responsibilities</li><li>• Knowledge and skills required for you to carry out your job</li><li>• Formal qualifications eg school, polytechnic, university, trade certificates</li><li>• Informal qualifications eg 'in house' workplace training workshops</li><li>• Relevant life experience eg working in teams, managing stress etc</li></ul> <p>Your CV may be quite different from this. Please use whatever format is understood by your industry but in depth enough to show your level of skills across your specialisation, with emphasis on the critical thinking/research required.</p>	<input type="checkbox"/>
3 <b>A personal statement</b> which summarises your experience and learning, and which supports this application.	<input type="checkbox"/>
4 <b>Examples of your work</b> (a few only as you are not being assessed at this stage). If sending files electronically they must be in a easily readable format (pdf, jpg, rep3, etc, and if large, need to be sent by Drop Box, OneDrive, Google Drive or equivalent, or by CD or DVD).	<input type="checkbox"/>

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*\* Conditional on a credit check undertaken by Ara and approved. No results are released until all fees have been paid.*

Please email your application to [capl@ara.ac.nz](mailto:capl@ara.ac.nz)  
or post it to:

**CAPL**  
**Academic Services Division**  
**Ara**  
**PO BOX 540**  
**Christchurch 8140**