



# DIPLOMA IN APPLIED NETWORK AND CLOUD TECHNOLOGY

## LEVEL 7



**TECHSCHOOL**  
AT NZSE

[techschool.ac.nz](https://techschool.ac.nz) | 0800 99 88 11 | [techschool@nzse.ac.nz](mailto:techschool@nzse.ac.nz)

# PROGRAMME OVERVIEW

Become an expert in real-world connectivity & problem solving with our specialised & industry focused programme. Explore networking, cloud technology and cyber security in the context of today's modern biz-tech environments & work towards higher level international certifications to leverage your career opportunities.

## WHAT WILL I LEARN?

### Network and Cloud Infrastructure

- Interpret and analyse a wide variety of issues ranging from networking and operating systems to mobile devices and security
- Evaluate various concepts of cloud computing and characteristics of cloud services from a business perspective
- Compare and contrast cloud types and demonstrate technical skills in the design of steps to successful adoption of cloud
- Apply specialised skills to install, configure, maintain and troubleshoot a range of computer and network devices, and software

### Network and Cloud Administration

- Build a local area network and expand small sized networks with WAN connectivity
- Problem solve and troubleshoot for a computer or network
- Follow best practices for safety, environmental impact, communication and professionalism in network design and implementation underpinned by Te Tiriti o Waitangi/Treaty of Waitangi, tikanga, Te Ao Māori, and Mātauranga Māori
- Demonstrate advanced skills in installing, configuring and managing virtual machines and devices
- Analyse the impact of cloud computing on IT service management and identify the risks and consequences of cloud computing

### Wireless and Mobile Computing

- Adapt and apply specialised knowledge in designing and optimising wireless and mobile networks
- Select and apply data communication methods and networking protocols for wireless and mobile environments
- Critically analyse mobile and wireless networks
- Demonstrate advanced technical knowledge and skills in problem solving and critical analysis of a problem
- Apply research skills in reading, discussing, critiquing, analysing a technical problem, and articulating and presenting findings

# AT A GLANCE

Course duration:

**1 academic year**

Course credits:

**120 credits**

Campus:

**Avondale**

Tuition

Domestic: \$8,336 NZD

International: \$16,000 NZD

Entry Requirements:

**Academic Criteria:**

Applicants must have completed one of the following—

- Graduates of any Bachelor degree
- Level 6 Diploma in Information Technology or Business;
- Equivalent work experience in an Information Technology role

**English Criteria:**

IELTS Academic score of 6.0 with no band less than 5.5 or NZOEL Level 4 or equivalent.

Qualification awarded

**Diploma in Applied Network & Cloud Technologies (Level 7)**

+ Internationally recognised I.T. certifications

## What's next?

Refine Your Knowledge:

- Postgraduate Diploma in Information Technology (Level 8)
- Bachelor of Information Sciences (Massey University)

Get Employed:

- Software Applications Developer
- Software Engineer
- Database Developer
- Database Administrator
- Software Architect
- Project Manager
- Business Analyst



## Internet-of-Things (IoT)

- Apply specialised knowledge to analyse an IoT system, its architecture, components, and applications
- Analyse the IoT value chain structure (device, data, cloud)
- Critique IoT communication models and protocols in relation to the cloud
- Use advanced knowledge to administer a network with Software Defined Networking
- Design and develop a cloud-based IoT application

## Network & Cloud Security

- Analyse risks and attacks to desktop computers, servers, and mobile computing devices and recommend strategies for enhancing computer security
- Demonstrate the ability to monitor performance, review user requirements and propose and justify security systems for a multi-user computer system
- Critically analyse security issues of mobile and wireless computing systems
- Analyse and critique security solutions for distributed, networked and cloud-based systems
- Propose, justify and apply best practices for securing multiple layers of the cloud stack
- Apply advanced skills to adapt security architecture, tools, and processes for use in cloud environments

## Network + Cloud Design and Assessment

- Use specialist knowledge to select and apply appropriate tools and applications for network and cloud design and management
- Design a network for an organisation ensuring that it is integrated into the business practices

## Industry-based Project

- Critically review and contrast modern project management methodologies and their applicability in an information technology context
- Apply advanced knowledge of the key elements and concepts of the ITIL service lifecycle, IT service management (ITSM), and compliance assurance services in accomplishing project goals
- Apply advanced communication, cultural, leadership and teamwork skills in professional and applied contexts within changing environments demonstrating awareness of Te Ao Māori, tikanga, and kaupapa Māori in the context of information technology
- Adapt and integrate the different skills required to bring a project to a successful conclusion for a real-world project
- Select and justify an appropriate methodology for the project and follow an appropriate process to produce an agreed set of deliverables for the project

## Internship

- Critically review and contrast modern project management methodologies and their applicability in an information technology context
- Apply advanced knowledge of the key elements and concepts of the ITIL service lifecycle, IT service management (ITSM), and compliance assurance services in accomplishing project goals
- Apply advanced communication, cultural, leadership and teamwork skills in professional and applied contexts within changing environments demonstrating awareness of Te Ao Māori, tikanga, and kaupapa Māori in the context of information technology
- Adapt and integrate the different skills required to bring a project to a successful conclusion for a real-world project
- Carry out an analysis of the networking environment of a workplace and recommend and justify solutions to enhance business value

# INTER— NATIONAL QUALIFI— CATIONS

This programme prepares for internationally recognised certifications within or after graduation.

These include:

- CompTIA A+
- CompTIA Cloud Essentials
- CISCO CCENT
- ITIL - IT Service Management
- Microsoft certified professional - MCP 70-740 (Server 2016) / 70-532 (Azure solutions)
- CompTIA Network+
- CompTIA Cloud+
- Microsoft Azure (Developing Microsoft Azure Solutions & Configuring and Operating a Hybrid Cloud with Microsoft Azure Stack)





# TECHSCHOOL AT NZSE

0800 99 88 11 or 09 827 6100

## New Lynn Campus

3033 Great North Road  
New Lynn, Auckland  
New Zealand

## Avondale Campus

2171 Great North Road  
Avondale, Auckland  
New Zealand

## Manukau Campus

6 Osterley Way  
Manukau, Auckland  
New Zealand

## CBD Campus

Level 2 & 3  
60 Federal Street  
Auckland CBD  
New Zealand

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