

# IT Technical Support and Networking

Auckland CBD | West Auckland | South Auckland | Hamilton  
nzse.ac.nz | 0800 99 88 11

# Information Technology

Take your opportunity to drive the future success of New Zealand in technology. Go further with a fulfilling career in IT - start here, go anywhere.

NZ Certificate in Information Technology Essentials (Level 4) 17 weeks	
NZ Diploma in Information Technology Technical Support (Level 5) 1 academic year	
NZ Diploma in Networking (Level 6) 1 academic year	Diploma in Information Technology Software Development (Level 6) 2 academic years
Bachelor of Computer and Information Sciences (AUT)*	Bachelor of Information Sciences (Massey University)*
Master of Computer and Information Sciences (AUT)*	Master of Information Sciences (Massey University)*

\*Conditions apply - go to our website or get in contact with us to discuss



AUT is the second largest university in New Zealand with campuses serving major parts of Auckland and an specialised high-performance sports institute. AUT has an excellent reputation for design, science, technology and research and has tech facilities that rival industry those in industry.



For more than 80 years, Massey University has helped shape the lives and communities of people in New Zealand and the world through its forward-thinking spirit, teaching, and research led methodology.

## Our Industry Partners



# New Zealand Certificate in Information Technology Essentials (Level 4)

<b>Duration</b>	17 weeks
<b>Campus</b>	West and South Auckland
<b>Credits</b>	60 credits

This programme equips learners with essential knowledge and skills in the area of computer hardware, operating systems, applications, and networks to provide support for hardware and software resources. Learners will also develop introductory knowledge and skills in the concepts of software development, database, and information systems.

## Entry Requirements

- Open entry to students with interview
- Preference will be given to students with qualifications in Information Technology Level 3, and/or NCEA level 2/3 OR overseas high school certificate

## What Will I Learn?

- Principles of ICT Infrastructure
- Solution Design
- IT Projects in Business
- Solution Development

## What's Next?

### Study Further

- NZ Diploma in IT Technical Support (Level 5)

### Get Employed

- Administrator Assistant (Entry Level)
- Computer Retail

NZSE is a Category One NZQA accredited tertiary provider with 4 campuses across Auckland and Hamilton.

Whatever career path you choose at NZSE, you will get the benefits of practical experience, industry connections and internationally recognised qualifications. Our General Studies programmes offers a high level of practical learning and industry connections to enter varying employment opportunities in the business, retail, security and hospitality sector.

## Career Services at New Zealand School of Education

Our vision is to support you in unlocking your career potential. We do this by helping you navigate your education and career journey through:

- One-on-one career coaching
- CV and interview skills workshop
- Engagement with employers and guest speakers
- Support with securing work experience and volunteering opportunities
- Support with securing part and full-time employment

# New Zealand Diploma in Information Technology Technical Support (Level 5)

**Duration** 1 academic year  
**Campus** Auckland CBD and South Auckland  
**Credits** 120 credits

Develop broad understanding of core concepts and practical skills in the area of Information Technology, with a technical support focus. Graduates will have an awareness of the IT environment, appreciate the needs of users, and be able to operate within the applicable professional standards and practice, as part of a team, or independently with a broad level of supervision. **This programme embeds the New Zealand Certificate in Information Technology (Level 5).**

## Entry Requirements

- Open entry to students with interview
- Preference will be given to students with qualifications in Information Technology Level 3/4 and above, and/or NCEA level 2/3 OR overseas high school certificate

## What Will I Learn?

- ICT Technical Infrastructure
- Introduction to Programming and Database
- ICT in Business
- ICT in Society
- Hardware and Application Administration
- Computer Network Principles
- Operating Systems
- IT Service Provision

## What's Next?

### Study Further

- Diploma in IT Software Development (Level 6)\*
- NZ Diploma in Networking (Level 6)\*

### Get Employed

- Help Desk Technical Support
- Network/System Administrator (Entry Level)

## International Certifications

This programme prepares students towards the following certifications:

- CompTIA A+
- ITIL Foundation
- Cisco CCENT

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# Course Descriptors

## ICT Technical Infrastructure (15 credits)

- Provides an introduction to IT infrastructure concepts in order to enable students to understand computer systems architecture for effective configuration and use. Concepts of single user, multi-user, and centralised operating systems are covered, along with applications and end-user computing.

## Introduction to Programming and Database (15 credits)

- To provide students with the basic and intermediate knowledge of programming and database. Basic understanding of concepts and application of Object Oriented Programming techniques, the software development life-cycle, principles of software engineering, development of software solutions for business applications including file handling and graphical interface applications, concepts and organization of databases, design and creation of simple relational databases, SQL.

## ICT in Business (15 credits)

- To provide students with an understanding of how information systems are used to support business. Students will learn about the legal, and ethical issues that impact on the provision of Information Technology services and systems. Internet services and methods for protecting organisational data and systems together with practices for ensuring business continuity will be covered. Students will apply design principles in the creation of media and websites.

## ICT in Society (15 credits)

- Provides a wide-ranging, multidisciplinary introduction to the evolution and application of increasingly complex and powerful computer systems (and other forms of digital technology) with particular emphasis on their impact on society.

## Hardware and Application Administration (15 credits)

- Students are introduced to the concepts underlying systems and application configuration and administration covering a range of application types. Students build on their SQL skills learning to create complex queries, as well as learning about DBMS system optimisation and configuration, backup and security.

## Computer Network Principles (15 credits)

- To provide the knowledge and skills required to build a scalable switched and routed computer network.

## Operating Systems (15 credits)

- Provides students with the skills and knowledge to select, install, configure and secure systems to meet organisation requirements. Students learn about different types of operating systems, both proprietary and open source.

## IT Service Provision (15 credits)

- Provides students with an understanding of and a framework for the processes and procedures involved in providing IT Services. Students will apply these processes and procedures in troubleshooting and resolving a range of common problems.

# New Zealand Diploma in Networking (Level 6)

<b>Duration</b>	1 academic year
<b>Campus</b>	Auckland CBD
<b>Credits</b>	120 credits

Be immersed in the field of networking and gain a thorough understanding of planning, configuring, deploying, testing and maintenance on a variety of platforms. Build on the core skills in the areas of communication, professional and ethical practice, problem solving and decision making.

## Entry Requirements

- It is recommended that you hold a qualification in Information Technology at Level 5 or above, OR have equivalent knowledge, skills and experience

## What Will I Learn?

- Computer Network Applications
- Networking and System Administration
- Cloud Computing
- IT Infrastructure and Planning
- IT Project
- IT Project Management
- Network Security

## What's Next?

### Study Further

- Bachelor of Computer and Information Sciences (AUT)\*
- Bachelor of Information Sciences (Massey University)\*

### Get Employed

- IT Technician
- Service Desk
- Network Administration (Entry Level)
- System and Network Administrator (Entry Level)
- Help Desk Technical Support

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## Course Descriptors

### Computer Network Applications

- To provide the knowledge and skills required to build a scalable switched and routed Wide Area Network.

### Network and System Administration (15 credits)

- To provide the student with a background in the issues, skills and strategies associated with providing core services over a network in a multi user environment. The student will also learn about fine tuning of networked systems for optimum delivery in terms of security, cost and speed.

### Cloud Computing (15 credits)

- To provide the student with the knowledge and best practices required of IT practitioners working in cloud computing environments, who must understand and deliver cloud infrastructure. Issues specific to the deployment of cloud technology are examined.

## IT Infrastructure and Planning (15 credits)

- This course reviews the advancement in data communications and networking supporting distributed systems incorporating components from current Networking protocols and products. It applies relevant theoretical models for the evaluation, selection and deployment of advanced network technologies providing specified services.

## IT Project (15 credits)

- An investigation into a selected area whether that be a specific problem domain, or an area of business opportunity. The project is typically an original investigation but considerable flexibility is allowed. Typically projects will involve software or network design and implementation for business clients or supervised research projects in selected areas specific to the qualification the student is pursuing. The project is expected to provide the student an opportunity to demonstrate that they can apply the skills and knowledge they have acquired throughout their programme of study in a formal context.

## IT Project Management (15 credits)

- Provides students with the core competencies of project management in an information technology context. Arrange of IT project management methodologies and approaches are compared. Some proven practices and supporting tools and techniques are further investigated, particularly with regard to planning, monitoring, estimating and implementing. Expected standards of professionalism and ethics will be highlighted.

## Network Security (15 credits)

- Addresses security technology and systems; basic cryptography and public key infrastructure, physical security, logical security, access controls, securing networks, network operations, systems, databases and applications, mobile and wireless security, web-services security, and security strategies for e-commerce. The intrinsic relationship between security technologies, ethics, legal and regulatory requirements, forensics and fraud, business strategy, and risk management is addressed.



## AUCKLAND CBD CAMPUS

Level 7 and 8, 238-242 Queen Street  
CBD, Auckland  
New Zealand

## WEST AUCKLAND CAMPUS

3033 Great North Road  
New Lynn, Auckland  
New Zealand

## SOUTH AUCKLAND CAMPUS

5A Ryan Place  
Manukau, Auckland  
New Zealand

## HAMILTON CAMPUS

850 Victoria Street  
Hamilton Central, Hamilton  
New Zealand

**[nzse.ac.nz](https://nzse.ac.nz)**

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