



Te Tūrama Scholarship Female Students in Tech - Hangarau

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

Information Technology

Everyone relies heavily on technology and it's a critical part of all businesses infrastructure. The demand for competent, analytical, problem solvers is growing exponentially and the careers available in the ICT industry are progressive and varied.

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

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

Selection Process

Applicants will be considered by a selection panel from the New Zealand School of Education. The decision of the selection panel is final.

Te Tūrama Female Students in Tech - Hangarau Scholarship

Women are under represented in the technology sector - so this NZSE Scholarship was established for female students who have demonstrated a passion and talent for technology. NZSE wishes to offer the recipient the opportunity to extend their education in order to improve their level of skills.

Amount and type of award:

- The number of new scholarships to be awarded is determined annually
- Scholarships will be offered on a contestable basis to applicants who demonstrate a passion and talent for Information Technology
- The award consists of the tuition fees, value up to NZ\$9,000.00, valid until the end of 2020.

Eligibility criteria:

- Be a New Zealand Citizen or a Permanent Resident for at least 3 years
- The scholarship is awarded on the basis to applicants who demonstrate a passion and talent for technology
- Clear career goals related to the programme of study.

Conditions of award:

- The award will go directly into the applicant's tuition fees
- The scholarship may not be held in conjunction with any other fees scholarships
- If the recipient withdraws from study during the tenure of their scholarship they may be expected to repay the full value of the scholarship.

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)

Duration	1 academic year
Campus	Auckland CBD
Credits	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.



Diploma in Information Technology Software Development (Level 6)

Duration 2 academic years
Campus Auckland CBD
Credits 285 credits

Learn the fundamentals of information systems, hardware infrastructure and software development, user applications and communication. Dive deeper into theory and practice on coding applications, database, methodologies and paradigms, and how these systems are used to support business practices.

This programme embeds the [New Zealand Certificate in Information Technology \(Level 5\)](#) and the [New Zealand Diploma of Software Development \(Level 6\)](#).

Entry Requirements

- A computing certificate in Level 5 or equivalent knowledge, skills and experience OR overseas high school certificate

What Will I Learn?

- ICT Technical Infrastructure
- Introduction to Programming and Database
- ICT in Business
- ICT in Society
- Programming 1
- Programming 2
- Interface Design and User Experience
- IT Project Management
- Logical Database Design
- Physical Database Design
- Program Design and Construction
- Software Testing
- Software Development Practice
- Business and Process Modelling
- IT Service Provision
- Mobile and App Development
- Game Programming
- Communication Skills*
- Mathematical Concepts*
- Computer Network Principles*

*University Pathway Strand Courses

International Certifications

This programme prepares students towards the following certification:

- Microsoft Technology Associate Developer

What's Next?

Study Further

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

Get Employed

- Software Tester
- Front End Developer
- Back End Developer
- DevOps Engineer (Entry Level)

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



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.

Programming 1 (15 credits)

- An introduction to the basics of computer programming to equip students for a career in any branch of IT, the sciences, data analysis or engineering. The fundamentals of writing, designing and testing programs will be developed.

Programming 2 (15 credits)

- Introduces the process of program design and implementation using object-oriented programming, with particular emphasis on applications from Computer Science and engineering technology.

Interface Design and User Experience (15 credits)

- Provides students with the understanding of the principles involved in designing interfaces that are attractive, easy to use and meet the needs of different users.

Logical Database Design (15 credits)

- Produce a conceptual data model for a given set of requirements. Develop a logical database design for a given set of requirements and for a given conceptual design. Implement a physical database design from a given logical design. Build and test a database application containing forms and reports that demonstrates understanding of how business needs can be met by interaction with a given database. Database design and development: taking unstructured data normalising it, creating and implementing a database design. Advanced SQL using MySQL Concepts associated with multi-user databases will be covered, including distributed database architectures, transaction management, concurrency control, security and back-up and recovery.

IT Project Management (15 credits)

- Provides students with the core competencies of project management in an information technology context. A range 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.

Physical Database Design (15 credits)

- Covers database design from a performance perspective. Presents a complete view of the Database Design process from Requirements Analysis to Database Deployment on an actual Database server. Issues such as Data Storage, Security, Concurrency Control, Query Optimisation, Access Paths, Application Tuning and Data Warehousing are covered in depth. Overall, the course develops the ability to deal with the technical aspects of database administration in an enterprise scale database system.

Program Design and Construction (15 credits)

- An introduction to the design and construction of Object-Oriented software. It will extend individual design and programming skills developed in earlier programming courses, with an emphasis on the quality, modularity, and re-usability of the software developed. The course will introduce current techniques used in software development that allow the goals of software development projects to be realised.

Software Testing (15 credits)

- Students will apply testing and quality assurance methods and techniques in the development of ICT solutions.

Software Development Practice (15 credits)

- Extends individual software development skills into a team environment. Students are exposed to common and emergent practices in the field and introduced to a range of tools that support development processes and practices.

Business and Process Modelling (15 credits)

- Provides an insight into the Object Oriented paradigm and methods of data and process modelling. Building on the broader context of Software, Information and Systems Engineering, contemporary methods used in analysis and design are covered and the techniques used to produce optimised models of data and processes are detailed.

IT Service Provision (15 credits)

- Provides an introduction to IT Service Science and its role in the development and provision of high quality IT services. The foundations of high quality services are covered, including standard procedures, techniques and tools. Students will gain IT service and operations orientated skills.

Optional: Mobile and App Development (15 credits)

- Investigates the design and implementation of distributed systems, including contemporary technologies such as Java Enterprise Edition and .NET, as well as the development of mobile systems.

Optional: Game Programming (15 credits)

- A practical foundation in game programming, using a variety of game development tools and programming libraries, and deploying games on a variety of platforms.

University Pathway Strand Courses (New Zealand Diploma in Software Development, Level 6)

- Communication Skills (15 credits)
- Mathematical Concepts (15 credits)
- Computer Network Principles (15 credits)

Female Students in Tech - Hangarau Scholarship

Please fill in the form below and return to your Course Advisor.

First Name:	
Surname:	
Date of Birth:	
Ethnicity:	
Gender:	
Residential Address:	
Postal Address: (if different from above)	
Email Address:	
Name of Programme:	
Name of School:	

Scholarship:		Standard <input type="checkbox"/> COVID-19 <input type="checkbox"/>
To qualify for the COVID-19 Scholarship, you will need to supply employment evidence of your redundancy/hardship so we can verify that for funding purposes. Please tell us:		
Name of your company you were made redundant from:		
Your role at the company:		
Your final day of work (when redundancy started):		
Your direct Manager's name:		
Your direct Manager's official title:		
Your direct Manager's email address:		
Your direct Manager's contact number:		

Please provide at least one referee (school referee preferred):

Referee Name:	
Position:	
Contact Number:	
Email Address:	

Please make sure you include all required documentation with your application form.

Documentation Required	Tick
A copy of ID, proof of NZ Citizenship/Residency (NZ Birth Certificate, Passport or Overseas Passport with NZ Residency).	
An official Academic Transcript (Secondary and/or Tertiary).	
An official Curriculum Vitae including a brief history of your educational achievements, work experience and skills.	
One written reference . This must be from an employer, lecturer, teacher or respected person (school person or community leader) who can be contacted by the selection panel. The referee should highlight the reasons why the applicant is a good candidate for the scholarship. This could include: adversity the applicant has overcome, particular talent in areas related to the programme of study that the scholarship funds, a clear intent to pursue a career related to the programme of study, and outstanding leadership or contributions to the community.	
A supporting letter in which the applicant addresses how they meet the criteria for the scholarship. The letter should include key achievements to date, career goals and contribution to the community (minimum 500 words).	
Application Form	

Submissions

If you have any questions concerning this application, please contact us on free phone: 0800 99 88 11

Please submit your application in person, by post or by email to:

New Zealand School of Education

3033 Great North Road | PO Box 151293, New Lynn, Auckland 0640 | scholarships@nzse.ac.nz

Statement of Accuracy

I _____ hereby confirm that the above stated provided by me is true and accurate to the best of my knowledge.

Applicant Name: _____

Applicant Signature: _____ Date: _____

Disclosure Information

The Scholarship Office undertakes to store your application in a secure place in the event that you are successful in gaining an award or are selected as a reserve candidate for an award, and to destroy your application to preserve its confidentiality in the event that you are unsuccessful in gaining an award. Should you have reason to believe that information on hold about you and your application is incorrect, you have the right of access to that information.

I _____, agree to the above conditions in respect to my scholarship applications administered through the Scholarship Office of the New Zealand School of Education.

Applicant Name: _____

Applicant Signature: _____ Date: _____