



# Bachelor of Information Technology



## Kia ora, Welcome!

Whitireia and Weltec are pleased to offer a new IT degree in 2019. The degree was designed with the IT industry to ensure our graduates are well-prepared with the skills required for the 21st century. You'll spend half of your final year working on an industry project.

**Specialise in Applied Data Science, Cyber Security, Interaction Design, Networking and Infrastructure or Software Development.**

This degree has been accredited by the industry, represented by IT Professionals New Zealand.

*\*Majors available subject to demand*

### ENTRY CRITERIA

- NCEA Level 3 with at least 14 credits in each of 3 subjects
- Literacy - 10 credits at Level 2 or above, made up of 5 credits in reading and 5 credits in writing
- Numeracy - 10 credits at Level 1 or above, or
- Any qualification (New Zealand or overseas) recognised by NZQA as being equivalent to the achievement of NCEA Level 3

### ENGLISH LANGUAGE REQUIREMENTS

IELTS 6.0 Academic (with no band score lower than 5.5) or equivalent.

BIT, School of IT and Business

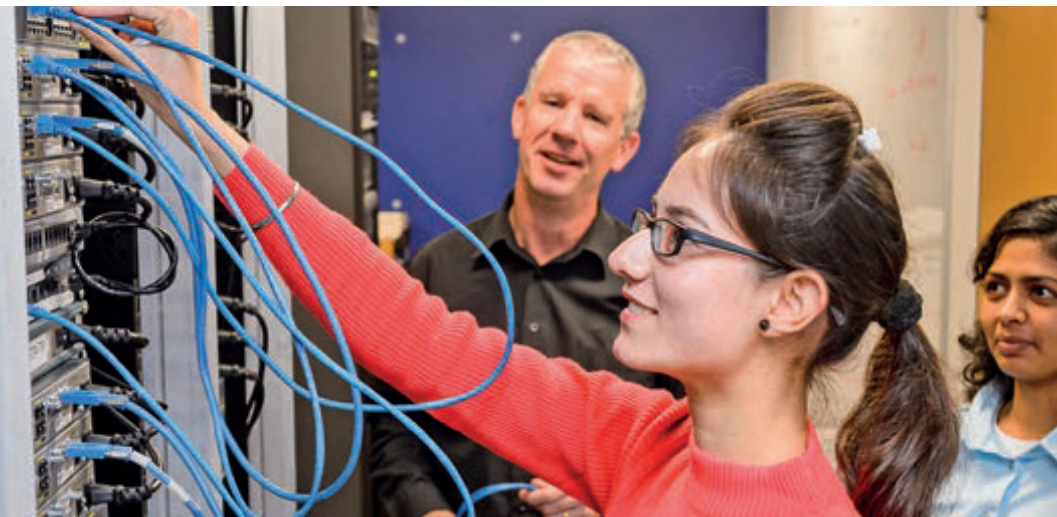
### GET IN TOUCH



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## MAJORS

### Applied Data Science (offered at Porirua)

Data Science is a rapidly growing field. Companies and organisations use data to support strategic decision making, solve problems and gain a competitive edge. Learn to apply technology to make the most of data.

- Understand the concepts of business intelligence and data mining
- Gain skills in information systems management
- Build data science solutions
- Design, implement and query complex databases
- Create and validate business analytical models
- Communicate data analysis through visualisation and stories

### Cyber Security (offered at Petone)

Manage risks involved with organisational technology. Protect data and systems. Security specialists are in high demand within government, commercial and banking sectors.

- Gain an understanding of security fundamentals and forensics
- Learn to perform security risk management and vulnerability assessment
- Design and develop security policies and controls
- Respond to security breaches using technical controls and forensic techniques
- Plan and implement security testing

### Networking and Infrastructure (offered at Petone)

Gain an advanced qualification relevant to the fast-changing demands of industry. Develop skills in Cisco, Linux and Microsoft network support. Learn in specialised labs and facilities.

- Learn networking fundamentals
- Plan and document network infrastructure
- Implement and support computer networks and management systems
- Gain skills to diagnose and resolve problems using network technologies and procedures
- Build an in-depth understanding of wireless technologies

### Software Development (offered at Whitireia Porirua and WelTec Petone)

Software developers create IT solutions using a range of codes and languages. Further your talent for problem-solving. Develop logic and analytical skills. Work in New Zealand and around the world.

- Learn about software design, development and maintenance
- Become proficient in a variety of programming languages
- Design and develop software applications
- Gain skills in testing and maintenance
- Understand logic methods and problem analysis
- Learn modelling techniques
- Work with commercial software applications

### Interaction Design (offered at Porirua and Petone)

- Define the meanings of Human-Computer Interaction and User Experience Design
- Scope and select appropriate technologies to solve user centred problems
- Evaluate and develop effective user experiences that use technology to enhance a wide range of human activities
- Design and create a range of interfaces for a variety of devices, which synthesise the high levels of interactivity
- Understand the process of interaction design, including, fieldwork, requirements elicitation, prototyping, evaluation frameworks and testing
- Analyse ways that user interfaces effectively relate to users' characteristics considering characteristics such as age, education, culture and ability.

### No Major

Design your Bachelor of Information Technology (offered at Porirua and Petone). Customise your degree and choose the courses that most interest you.

## COURSE STRUCTURE

In order to be awarded the Bachelor of Information Technology, a learner must successfully pass courses to a total of **360 credits**, with a minimum of **90 credits** at level 7 and a maximum of **135 credits** at level 5.

Year One - Level 5	Year Two - Level 6	Year Three - Level 7
<b>Mathematics for IT</b> 15 Credits, Course IT5501	<b>Mathematics for IT</b> 15 Credits, Course IT5501	<b>Mathematics for IT</b> 15 Credits, Course IT5501
<b>Communications for IT</b> 15 Credits, Course IT5502	<b>Communications for IT</b> 15 Credits, Course IT5502	<b>Communications for IT</b> 15 Credits, Course IT5502
<b>Major Course</b> 15 credits, Course IT550x	<b>Major Course</b> 15 credits, Course xx6501	<b>Major Course</b> 15 credits, Course xx7501
	<b>Major Course 2</b> 15 credits, Course xx6502	<b>Major Course 2</b> 15 credits, Course xx7502
<b>Elective Credit</b> 90 credits, Level 5-7	<b>Major Course 3</b> 15 credits, Course xx6503	
<b>Elective Courses</b> 45 credits, Level 6-7	<b>Major Course 4</b> 15 credits, Course xx6504	

## MAJOR COURSES

### Cyber Security

- Information Security 1, IT5504
- Information Security 2, CS6501
- Linux System Administration, CS6502
- Digital Forensics, CS6503
- Cryptography and Blockchain Fundamentals, CS6504
- Information Security 3, CS7501
- Special Topic in Security, CS7501

### Applied Data Science

- Fundamentals of Data Science, IT5507
- Social Data Analytics, DS6501
- Data Analysis and Design, DS6502
- Data Mining Tools and Techniques, DS6503
- Business Intelligence and Big Data, DS6504
- Data Mining for Business Analytics, DS7501
- Data Warehouse Design and Implementation, DS750

### Software Development

- Programming 1, IT5503
- Mobile Application Development, SD6501
- Programming 2, SD6502
- Testing and Secure Coding, SD6503
- Game Development, SD6504
- Web Application Development, SD7501
- Intelligent Systems Development, SD7502

### Interaction Design

- Interaction Design Fundamentals, IT5505
- Responsive Website Design, ID6501
- 3D Environments, ID6502
- Advanced Interaction Design, ID6503
- User Interface and User Experience, ID6504
- Advanced Interface Technologies, ID7501
- Human Computer Interaction, ID7502

### Networking and Infrastructure

- Introduction to Networking, IT5506
- Networking 2 – LAN, NI6501
- Networking 3 – Campus, NI6502
- Network Infrastructure Support, NI6503
- Cloud Computing, NI6504
- Current topic in Networking and Infrastructure, NI7501
- Emerging topic in Networking and Infrastructure, NI7502

## KEY INFORMATION



### Qualification

Bachelor of Information Technology



### Start Dates

2 March 2020, 13 July 2020



### Campuses

WelTec Petone, Whitireia Porirua



### Duration

3 Years



### NZQA Level

Level 7



### Credits

360 credits



### Fees

NZD 19,250 (excludes an additional annual fee of \$220 for administration and \$560 coverage under Whitireia and WelTec's default medical and travel insurance, provided by Uni-Care International)



### Contact Hours

Average 12 hours per week



### Self Study

23.3 hours per week

## CONTACT US



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