# NEW ZEALAND CERTIFICATE IN INFORMATION TECHNOLOGY



Last Updated September 2018



### New Zealand Certificate in Information Technology (L5)

The new qualification provides graduates with the academic base required for further study and the ability to pursue a rewarding career in the growing IT industry.

Graduates will be capable of applying the fundamentals of current and emerging concepts and practice in IT. They will also be able to demonstrate awareness of appropriate professional practice, and work both as part of a team and independently, under broad supervision.

After completion of the Certificate, students can choose to advance to one of these three New Zealand Diplomas:

- NZ Diploma in Web Development and Design (L5)
- NZ Diploma in Information Technology Technical Support (L5)
- NZ Diploma in Software Development (L6)

#### **Entry Requirements:**

A minimum of 42 credits at NCEA Level 3, including 14 credits in Digital Technologies or Computing AND a minimum of 10 credits in Maths AND 10 credits in English at Level 2 or above, OR equivalent knowledge, skills and experience. If you do not have the above NCEA Level 3 credits or equivalent computing-related qualification, you can take our online Skills and Knowledge Assessment. Contact us at info@cpp.ac.nz

#### 2019 Course Fees:

\$3,306+ \$500 Enrolment fee

#### **Duration:**

17 weeks full-time + 3 weeks break 20 hours on campus/week + 15 hours/week home study

34 weeks part-time + 6 weeks break

#### PROGRAMME OVERVIEW

The NZ Certificate in Information Technology (L5) is a 60 credit programme, consisting of four x 15 credit courses.

Courses starts every 5 weeks. The first 20 working days are the study days on the course. The last 5 days include a day each for revision and the final assessment, and holidays.

**IT Systems** 

Data Handling & Web Concepts

Professional Practice

Programming Principles

By successfully completing these four core courses, you would also have achieved half of the eight courses needed towards the NZ Diploma in Web Development and Design, or the NZ Diploma in Information Technology Technical Support.

#### **Campus Study Shifts**

Morning: 7:30 am - 12:30 pm, Monday to Thursday Afternoon: 1:00 pm - 6:00 pm, Monday to Thursday Evening: 6:00 pm - 10:00 pm, Monday to Thursday\* Saturday: 8 am - 1 pm (9 am - 1 pm Auckland Campus)

#### NZ Certificate learning outcomes:

Graduates will be able to:

- Apply the fundamentals of IT technical support concepts and practice to manage hardware and software resources to meet organisational requirements.
- Apply the fundamentals of information systems concepts and practice to support and enhance organisational processes and systems.
- Apply the fundamentals of interaction design concepts and practice to enhance interface design.
- Apply the principles of software development to create simple working applications.
- Apply professional, legal, and ethical principles and practices in a socially responsible manner as an emerging IT professional.
- Apply communication, personal and interpersonal skills to enhance effectiveness in an IT role.
- Use problem-solving and decision making techniques to provide innovative and timely IT outcomes.

## **Course Descriptions**

IT SYSTEMS (15 Credits)

#### Content

- Hardware concepts and components
- Software components and configuration
- Operating system concepts and configuration
- IT support concepts
- Systems security concepts and tools

#### **Learning Outcomes:**

- 1. Install and configure hardware and software components of computer architecture.
- 2. Configure a variety of operating systems.
- 3. Explain the hardware and software components of a network, including the Internet.
- 4. Apply the fundamentals of IT technical support concepts and practice to manage hardware and software resources to meet organisational and end user requirements.
- 5. Discuss a range of security concepts, tools and techniques.
- 6. Explain the hardware, software, and operating system components of a computer

#### Assessment:

	Weight	Pass Criteria*
Practical Tasks	20%	Achieved/Not achieved
Project	30%	50%
Final Assessment	50%	50%

<sup>\*</sup> Christchurch Campus does not have a Thursday evening shift.

## OUR APPROACH TO LEARNING AND TEACHING

The self-paced\* and blended-learning environment offered by Computer Power Plus allows you to take control of your own learning, while being supplemented with experienced tutor support.

The necessary on-site hardware/software and software for home computers are available for students to practise what they are learning. Students will also have workshop time to practise their skills.

As an applied programme of study, student learning is generated from learning guides, case studies and projects. Projects offer students the chance to conduct research, write reports or develop information technology components, and work both independently and in a workshop environment. Some assignments are completed in groups.

In addition to gaining specific discipline related knowledge and skills, the programme emphasises the development of transferable soft skills that are required for success in the workplace. These include ethical and professional conduct, self-confidence, communication, people skills and teamwork.

# NEW ONLINE DELIVERY PLATFORM

Our courses will be delivered on a new and modern platform called iQualify.

This online platform has been optimised for delivery on desktop computers, tablets and smart phones, so you can continue your studies anywhere, or anytime.

iQualify allows students to carry on their studies exactly where they left off each time they login. Students can also create searchable study notes next to their course materials and share comments with other students. The platform also supports rich media content such as video and interactive guizzes.

<sup>&</sup>lt;sup>+</sup> Students can study at their own pace, but will be required to attend group activities at scheduled times and any final assessments are held in the fifth week of each course

#### **DATA HANDLING AND WEB CONCEPTS (15 Credits)**

#### Content

- Structured Query Language, to give students the skill and knowledge to use the basics of Microsoft SQL Server.
- Designing websites which gives an understanding of website design using HTML and CSS.

#### **Learning Outcomes:**

- 1. Apply the relational model of database design.
- 2. Employ a range of common SQL statements.
- 3. Analyse and solve data handling problems.
- 4. Design and build a website, using appropriate techniques, taking usability and communication into account.
- 5. Discuss the legal, ethical and security related issues surrounding gathering, storing, accessing and sharing information.
- 6. Test and reflect on the usability of a website focussing on its ability to communicate its content clearly.

#### Assessment:

	Weight	Pass Criteria*
Practical Assessment	10%	Pass/Not achieved
Project	55%	50%
Final Assessment	35%	50%

#### **PROFESSIONAL PRACTICE** (15 Credits)

#### Content

- Legal and regulatory considerations relevant to IT
- Ethical decision-making; Ethical issues relevant to IT
- Professional conduct and codes of practice
- Personal effectiveness and information presentation techniques
- Business context of IT, information systems, initiation and management of IT projects.

#### **Learning Outcomes:**

- 1. Discuss legislation that relates to the Information Technology industry.
- 2. Explain the importance of ethical behaviour and evaluate the main ethical considerations facing Information Technology professionals.
- 3. Discuss the organisational context and impact of IT on business
- 4. Apply information presentation skills.
- 5. Apply personal and interpersonal skills including, leadership, teamwork and relationship management.
- 6. Develop and propose a solution to meet a business need.
- 7. Understand role of information systems in an organisation and explain how they support organisational goals.

#### Assessment:

	Weight	Pass Criteria*
Practical Tasks	25%	50%
Project	30%	50%
Workshop	10%	50%
Final Assessment	35%	50%

<sup>\*</sup> Students are required to pass each assessment to pass the course.

## ABOUT COMPUTER POWER PLUS

Computer Power Plus is owned by Whitireia New Zealand Limited and is jointly operated by Whitireia NZ and Wellington Institute of Technology (WelTec), two successful and highly regarded Institutes of Technology and Polytechnics in New Zealand.





With a history spanning almost 20 years, Computer Power Plus is one of New Zealand's leading providers of IT and professional skills training.

We have campuses in Auckland, Wellington and Christchurch with over 400 domestic and International students.

Thousands of our graduates are now working in rewarding IT careers here and abroad since 1996.





#### **PROGRAMMING PRINCIPLES** (15 Credits)

#### Content

- Creating procedural and object oriented programs using Python.
- Mathematical and logical concepts underpinning programming.

#### **Learning Outcomes:**

- 1. Compare and contrast a range of design principles.
- 2. Create, debug and test simple programs using fundamental programming constructs, principles and tools.
- 3. Work with both procedural and objected oriented methods.
- 4. Demonstrate understanding of the objectives, people involved, tasks and deliverables of each stage in the systems development life cycle.
- 5. Use a variety of number bases such as binary, decimal and hexadecimal.

#### Assessment:

	Weight	Pass Criteria*
Project	50%	50%
Practical Assessment	20%	Achieved/Not achieved
Final Assessment	30%	50%

#### Need more information?

Send us an email to info@cpp.ac.nz or phone 0508 48 48 84.

#### WHAT OUR GRADUATES SAY



"CPP was really supportive in helping me find a job.
They run employment preparation workshops\*\*
telling how your CV and cover letters should be and
also how to act in a interview. This really helped me
whilst I was going through the interview process."

Ben Forsyth – Help Desk Consultant



"I liked being able to set my own goals with the selfdirected learning model CPP uses. The employment preparation was also really helpful. This and the practical skills I gained from my course really helped me in getting my job."

Anahera Pine – IT Help Desk



"I really liked the self-directed learning approach that CPP uses, as it allowed me to complete my studies at my own pace. The instructors were approachable and were really into IT."

Tim Cashman – Desktop Support Engineer



"I found CPP a great place to study with friendly tutors and a relaxed environment. I would recommend CPP as a great starting point if you want to get into the IT Industry."

Chris Wood – IT Asset Manager

\*\* Note: Graduates that complete a Level 5 or 6 Diploma with CPP are eligible to receive job placement support from our dedicated Job Placement Consultants. This free service includes assisting you in preparing your resume and your application letters, and providing job interview training. Our Placement Consultants will also set up interviews for you and circulate your resume when appropriate.

<sup>\*</sup> Students are required to pass each assessment to pass the course.