

# GRADUATE DIPLOMA IN INFORMATION TECHNOLOGY 2023



Information for international applicants, January - June 2023

Napier Campus

The Graduate Diploma in Information Technology (GradDip IT) is designed to provide you with advanced IT skills ready for immediate application in industry.

You will gain the necessary technical skills and insight so you can adapt to technological changes and meet the challenging demands of the IT world. Your new skill set will enhance your existing qualification and put you in good stead within your current or future workplace.

The GradDip IT will enable you to develop a range of professional skills, including the ability to advise and implement innovations leading to a more efficient use of resources. You will also gain an understanding of the regulatory and ethical frameworks of the IT sector.

This programme is suitable for graduates who have not previously studied IT at tertiary level.

## CAREER OUTCOMES

Possible job and career opportunities can include:

- Systems Analyst
- Web Developer
- Business Analyst
- IT Infrastructure support
- Project Management
- E-Commerce Advisor
- Technical Support Advisor

## CAREER OUTLOOK

Visit the following websites for the latest information about job opportunities in New Zealand for your chosen career path.

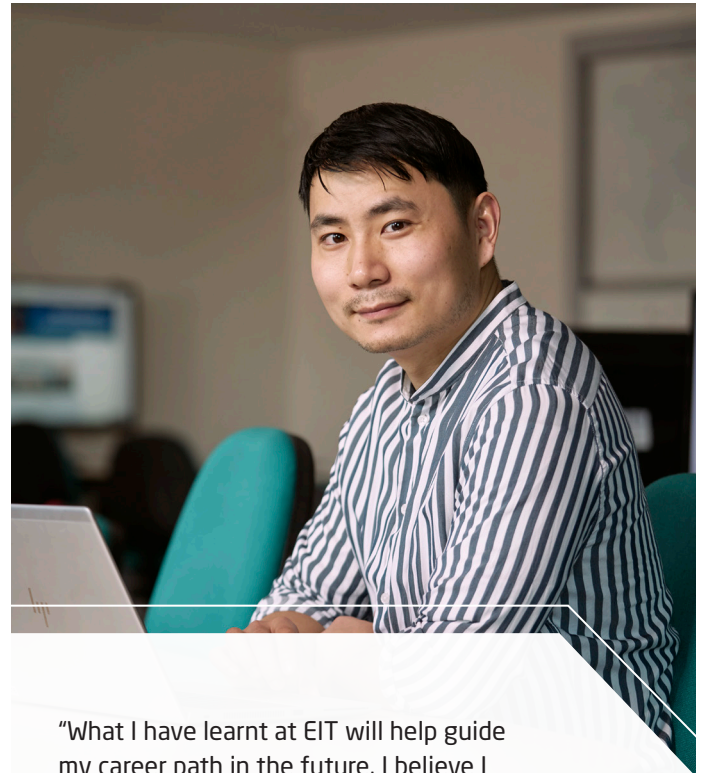
CareersNZ offers a range of tools to help you explore jobs and plan your career: [careers.govt.nz](https://careers.govt.nz)

For extensive information on labour supply and demand for occupations visit: [occupationoutlook.mbie.govt.nz](https://occupationoutlook.mbie.govt.nz)

For information about the Long Term Skill Shortage List visit: [skillshortages.immigration.govt.nz](https://skillshortages.immigration.govt.nz)

## FACILITIES

In the state-of-the-art School of Computing complex at EIT there are nine networked computer laboratories with between 24 and 30 student stations in each. All the rooms are environmentally controlled, with audio-visual presentation equipment. There are specific labs for software development, hardware, multimedia, and a room for computer study. The building also has a 50-seat tiered lecture theatre.



“What I have learnt at EIT will help guide my career path in the future. I believe I have found what I am passionate about.”

AN WANG | China

<b>Qualification</b>	Graduate Diploma in Information Technology
<b>Level</b>	Level 7
<b>Length</b>	1 year
<b>Start dates</b>	13 Feb, 17 July
<b>Fees</b>	NZ\$ 21,300 per year
<b>IELTS</b>	6.0 (academic) with no band score lower than 5.5 or equivalent.
<b>Total credits</b>	120
<b>Class times</b>	Classes are scheduled between 8.00am and 5.00pm Monday - Friday. Full-time study would include FOUR concurrent courses per semester. Each course will ordinarily have 4-hours of scheduled classroom and laboratory on-campus teaching each week.
<b>Self-directed Study</b>	Approximately two hours for each classroom hour

## WHAT YOU WILL LEARN

The GradDiplIT programme has been designed to enable graduates to pursue a career in the computing industry. In particular, the programme is designed to provide students with:

- A sound knowledge of current IT technologies and the effective management of IT systems.
- The ability to analyse organisations and make recommendations for IT services and systems.
- The ability to relate to and communicate effectively with personnel and clients who have diverse backgrounds.
- The motivation for continued learning and self-development to cope effectively with change.
- An understanding of the legal, regulatory and ethical frameworks of the IT sector.

## ENTRY CRITERIA

### ACADEMIC ENTRY REQUIREMENTS

Applicants must meet the following criteria:

- A bachelor's degree at a recognised educational institute or
- Equivalent qualification, and
- Students are required to provide evidence of knowledge and skills in:
  - Data storage and data manipulation; and MS Office applications

### ENGLISH LANGUAGE ENTRY REQUIREMENTS

PTE (Academic) score of 50 with no band score lower than 42 or IELTS (Academic) score of 6.0 with no band score lower than 5.5 (or equivalent) achieved within the last 2 years.



## COURSE LIST

The structure of the diploma is summarised in the following table. Please note, pre-requisites will apply to some courses.

Level	5 - 7	7	Total
Credits	45	75	120

LEVEL 5		CREDITS
ITIS5.450	Information Systems	15
ITUX5.210	UX and UI Fundamentals	15
ITDT5.220	Introduction to Data Concepts	15
ITPM5.240	Agile Projects	15
ITPF5.110	Programming Fundamentals	15
ITWD5.130	Website Development	15
ITCS5.100	Computer Systems Architecture	15
ITCT5.120	IT Concepts and Tools	15

LEVEL 6		CREDITS
ITPM6.318	Project Management	15
ITSD6.348	Systems Analysis	15
ITSD6.349	Systems Design	15
ITPR6.508	Advanced Object-Oriented Programming	15
ITHW6.238	Electronics and IoT	15
ITPR6.358	User Experience & User Interfaces	15
ITPR6.518	Enterprise Software Development	15
ITDB6.208	Database Management Systems	15
ITOS6.608	Operating Systems	15
ITAE6.100	Automation and Embedded Systems	15
ITMA6.240	Maths in IT	15
ITKM6.398	Knowledge Management	15
ITWD6.408	Advanced Internet and Web Page Development	15
ITDC6.218	Data Communications and Networking	15
ITNA6.258	Advanced Networking and the Cloud	15
ITDF6.100	Digital Forensics Fundamentals	15

LEVEL 7		CREDITS
ITST7.408	Special Topic	15
ITSY7.668	Cybersecurity	15
ITDA7.240	Data Analytics	15
ITPR7.508	Business Application Programming	15
ITWD7.358	Web Application Programming	15
ITEC7.398	E-Business Strategies	15
ITHW7.238	Enterprise Support and Infrastructure	15
ITAI7.110	Machine Learning and Artificial Intelligence	15
ITFM7.120	Mechatronics in IT	15
ITIM7.458	IT Management and Professionalism	15
ITGA7.100	GIS Analytics	15

## COURSE DESCRIPTIONS

NB: Courses are offered subject to sufficient enrolments being received. In the following descriptions:

P= Pre-requisite – courses which must be studied before

C= Co-requisite – courses which can be studied before or at the same time

LEVEL 5 COURSE NO.	BRIEF DESCRIPTION	CREDITS	LEVEL
ITIS5.450	<b>Information Systems</b> To provide students with an economic and organisational context and the skills to identify requirements and suitable solutions in the application of Information Technologies and Systems.	15	5
ITUX5.210	<b>UX and UI Fundamentals</b> To equip students with knowledge and skills to elicit requirements for human-computer interfaces, and to design, prototype, and evaluate user experiences and interface designs.	15	5
ITDT5.220	<b>Introduction to Data Concepts</b> To provide students with fundamental knowledge and skills of the data concepts central to all Information Systems.	15	5
ITPM5.240	<b>Agile Projects</b> To provide students with fundamental project management concepts and skills experienced in an IT context.	15	5
ITPF5.110	<b>Programming Fundamentals</b> To provide students with the core knowledge and skills to use software development tools to create a working application to meet given requirements	15	5
ITWD5.130	<b>Website Development</b> To provide students with the knowledge and skills to create a static website that meets a specific client brief.	15	5
ITCS5.100	<b>Computer Systems Architecture</b> This course provides students with the knowledge and skills required to successfully plan, construct, optimise and maintain a modern PC-based computer system, with emphasis placed on safe and effective industry practices.	15	5
ITCT5.120	<b>IT Concepts and Tools</b> To provide students with the knowledge and skills of IT tools and concepts used within organisations and their impact on business and professional communication practices.	15	5
LEVEL 6 COURSE NO.	BRIEF DESCRIPTION	CREDITS	LEVEL
ITAE6.100	<b>Automation and Embedded Systems</b> To introduce students to the theory and application of automation with some focus on how to build solutions to real-world problems using embedded systems. P: ITCS5.100 Computer System Architecture C: ITHW6.238 Electronics and IoTT	15	6
ITDB6.208	<b>Database Management Systems</b> To provide the students with the knowledge and skills to apply the principles of data design and management using database software, and enable them to create and implement a database with standard development tools. P: ITDT5.228 Introduction to Data Concepts	15	6
ITDC6.218	<b>Data Communications and Networking</b> To equip students with practical skills in switched networking environments. Students will apply the knowledge from level 5 Computer System Architecture to design and implement and networks using modern data communications tools and equipment. P: ITCS5.100 Computer System Architecture	15	6
ITHW6.238	<b>Electronics and Internet of Things Technology</b> To provide students with the knowledge of electronics and the technical skills to work in a computing hardware setting P: ITCS5.100 Computer System Architecture	15	6
ITKM6.398	<b>Knowledge Management</b> To provide students with the knowledge and skills of explicit mechanisms to retain and use institutional knowledge and the practical strategies to implement KM programmes into the workplace. P: ITIS5.450 Information Systems	15	6

ITMA6.240	<b>Maths in Information Technology</b> To provide students with the knowledge and skills of mathematics theory and its use in general and applied IT. P: ITDT5.228 Introduction to Data Concepts	15	6
ITNA6.258	<b>Advanced Networking and the Cloud</b> To provide the students with general knowledge of a Network Operating System and the necessary skills to install and carry out various administrative tasks P: ITCS5.100 Computer System Architecture C: ITDC6.218 Data Communications and Networking	15	6
ITOS6.608	<b>Operating Systems</b> To provide the students with a general understanding of a modern operating system and the necessary skills to install and carry out various administrative tasks. P: ITCS5.100 Computer System Architecture	15	6
ITPM6.318	<b>Project Management</b> To provide students with the knowledge and skills in formal project methodologies in business and IT and the applications of best-practice project management frameworks and techniques to select, plan, execute, and control projects to successful conclusion.	15	6
ITPR6.358	<b>User Experience &amp; User Interfaces</b> To provide the students with knowledge and skills of industry based theory and methods for the design and development of successful user interfaces, user experience (UX) design and prototyping.	15	6
ITPR6.508	<b>Advanced Object Oriented Programming</b> To provide students with the knowledge and skills to design and develop software using all the facilities of an object-oriented programming language and design modelling and concepts P: ITPF5.110 Programming Fundamentals	15	6
ITPR6.518	<b>Enterprise Software Development</b> To provide students with the knowledge and skills to design, develop, maintain and deploy software to support enterprise systems applications. P: ITPR6.508 Advanced Object-Oriented Programming	15	6
ITDF6.100	<b>Digital Forensics Fundamentals</b> To equip students with the knowledge and skills to use appropriate computer forensics tools and techniques to contribute towards evidence gathering. P: ITSD6.348 Systems Analysis	15	6
ITSD6.348	<b>Systems Analysis</b> To provide students with the knowledge and skills to analyse complex information systems, identify problems and requirements as well as document and model these findings using appropriate methods, tools, and diagrams. P: ITIS5.540 Information Systems ITDT5.228 Introduction to Data Concepts	15	6
ITSD6.349	<b>Systems Design</b> To provide students with the knowledge and skills to design and document simple and complex information systems solutions using the appropriate modelling, prototyping, and documentation tools and methods. P: ITSD6.348 Systems Analysis	15	6
ITWD6.408	<b>Advanced Internet &amp; Web Page Development</b> To provide the students with the knowledge and skills of the client-side web development and website management. P: ITWD5.130 Website Development	15	6
<b>LEVEL 7 COURSE NO.</b>	<b>BRIEF DESCRIPTION</b>	<b>CREDITS</b>	<b>LEVEL</b>
ITAI7.110	<b>Machine Learning and Artificial Intelligence</b> To provide students with the knowledge and skills to apply machine learning and artificial intelligence theories and technologies to solve real-world problems P: ITAE6.100 Automation and Embedded System ITHW6.238 Electronics and IoTT	15	7
ITDA7.240	<b>Data Analytics</b> To provide students with the knowledge and skills to use industry standard data analysis tools and techniques and present meaningful and useful information. P: ITPF5.110 Programming Fundamentals ITDT5.228 Introduction to Data Concepts ITDB6.208 Database Management Systems ITMA6.240 Maths in IT	15	7

ITEC7.398	<p><b>E- Business Strategies</b> To provide students with the knowledge and skills to evaluate and analyse the drivers of successful e-business strategies for organisations. P: ITEC6.398 Knowledge Management</p>	15	7
ITFM7.120	<p><b>Mechatronics in IT</b> To provide students with knowledge and skills of feedback control, electro-mechanical system interfaces, software and electronics that enable robotics. P: ITAE6.100 Automation and Embedded System ITHW6.238 Electronics and IoT C: ITAI7.110 Machine Learning and artificial intelligence</p>	15	7
ITHW7.238	<p><b>Enterprise Support and Infrastructure</b> To provide students with the technical knowledge and skills to plan, prepare and manage a range of enterprise technologies, configurations, and infrastructure. P: ITET6.238 Electronics and Technology in IT ITDC6.218 Data Communications and Networking</p>	15	7
ITIM7.458	<p><b>IT Management and Professionalism</b> To provide students with the knowledge and skills to analyse organisations and make informed IT management decisions while maintaining the highest level of professionalism and ethical behaviour expected of IT Professionals. P: ITIS5.450 Information Systems ITSD6.348 Systems Analysis ITSD6.349 Systems Design</p>	15	7
ITPR7.508	<p><b>Business Application Programming</b> To provide students with the knowledge and skills to develop a business application from a specification. P: ITPR5.518 Introduction to Object Oriented Programming ITPR6.508 Advanced Object Oriented Programming ITWD6.408 Advanced Internet and Web Page Development</p>	15	7
ITSY7.668	<p><b>Cybersecurity</b> To provide students with the knowledge and skills to apply information systems security/forensics concepts, identify security risks and make contingency plans and policies. P: ITDC6.218 Data Communications &amp; Networking</p>	15	7
ITWD7.358	<p><b>Web Application Programming</b> To provide students with the knowledge and skills to develop client-server web-based applications. P: ITPR5.518 Introduction to Object Oriented Programming ITIM5.238 Internet and Mobile Technology ITWD6.408 Advanced Internet and Web Page Development</p>	15	7
ITST7.408	<p><b>Special Topic</b></p>	15	7
ITGA7.100	<p><b>GIS Analytics</b> To provide students with the knowledge and skills to use appropriate GIS analytics tools and techniques to present meaningful and useful GIS information. P: ITDB6.208 Database Management Systems</p>	15	7

**Disclaimer:** All information in this publication pertains to international students, and is correct at the time of publication but is subject to change without notice. The programme fees, other costs, entry requirements, duration and programme start dates are for January - June, 2023. Programme content is based on current information and may be subject to change. Te Pūkenga – New Zealand Institute of Skills and Technology trading as EIT reserves the right to cancel or postpone any programme or course for any reason and shall not be liable for any claim other than that proportion of the programme fee which the cancelled or postponed portion bears. Programmes or courses may be subject to review as part of the Reform of Vocational Education and Training. For full programme entry requirements visit [eit.ac.nz](http://eit.ac.nz).

