

BACHELOR OF COMPUTING SYSTEMS 2024

Information for international applicants

If you are looking for an applied computing qualification that will give you a wide range of IT skills together with the ability to cope with technological changes in the IT world, then look no further. Your IT future starts here.

The Bachelor of Computing Systems (BCS) will equip you with foundation knowledge of computer hardware, networking communications and security, data and databases, information systems and IT management, systems analysis, design, and development, and internet and mobile technologies.

Depending on the stream of courses you select, you will develop the ability to design and implement high quality IT solutions within your specialisation, and apply the professional processes necessary to achieve successful outcomes for organisations.

To graduate with an endorsed degree in one of the following majors, you will need to ensure selection and passes in the required course of study.

Systems Development	Support and Infrastructure
Information Systems	Intelligent Systems

CAREER OPPORTUNITIES

Possible job and career opportunities can include:

- IT Support / Helpdesk
- Systems Analyst
- Web Designer
- Project Management
- Data Analyst
- Network Support
- Database Administrator
- E-commerce
- Software Developer
- IoT Technician

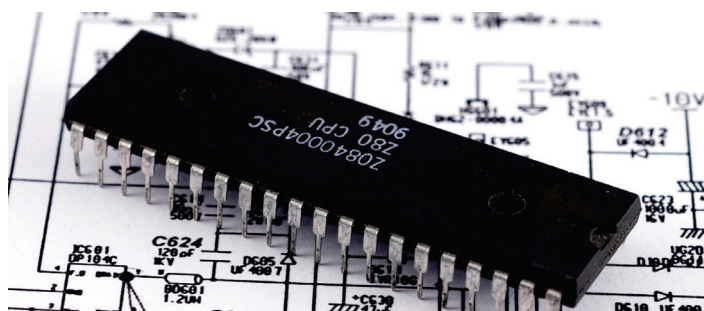
CAREER OUTLOOK

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

careers.govt.nz

mbie.govt.nz

immigration.govt.nz



“My lecturers and learning advisors play a major role in my learning development. They have always motivated me whether in my personal development or in my learning.”

PARNEET SAINI | India

Qualification	Bachelor of Computing Systems (with majors in Systems Development, Support and Infrastructure, Information Systems, Intelligent Systems, or unendorsed)
Level	Level 7
Length	3 years full-time
Start dates	19 February, 22 July
Fees¹	NZ\$25,000 per year
IELTS	6.0 (academic) with no band lower than 5.5 or equivalent OR accepted international equivalent qualification
Total credits	360 credits (3 years) - 120 credits per year
Class times	Classes are scheduled between 8.00am and 5.00pm, Monday to Friday. Full-time study would include FOUR concurrent courses per semester. Each course will ordinarily have four hours of scheduled classroom and laboratory, on-campus teaching each week.
Self-directed study	Approximately two hours for each classroom hour

1. All fees shown in this information are in New Zealand dollars and include Goods and Services Tax (GST) at current rates. If you need to study for more than one year to complete your qualification, your fees in the second year, and subsequent years, will not be known when you first enrol.

WHAT YOU WILL LEARN

The BCS programme equips graduates with the skills and practices to achieve entry-level IT positions to pursue a professional career in the industry. In particular, the programme is designed to:

- Prepare graduates to be effective in a variety of professional roles, applying the technical expertise required by their endorsed discipline;
- provide a well-defined and relevant curriculum, whilst incorporating flexibility to enable rapid adoption of new technologies;
- promote professionalism and independence in learning;
- provide flexible study modes and the capacity to develop individual study initiatives and directions;
- provide components which incorporate problem solving, analysis and research.

WORK EXPERIENCE

The BCS aims to produce graduates who have a broad range of practical skills. The majority of courses have a significant practical component.

The compulsory Level 7 Project, which is viewed as the “capstone” of the degree, requires students to either complete an internship embedded within a local organisation, or undertake analysis and development work for a business client. The project is taken in the last semester of study and is equivalent to 600 hours of work.

ENTRY CRITERIA¹

ACADEMIC ENTRY REQUIREMENTS

Applicants must have successfully met degree entry-level standards equivalent to NZ University Entrance Level 3, including sufficient mathematics and English credits.

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 two years.

FACILITIES

In the state-of-the-art Information Technology Complex there are networked computer laboratories with student stations in each. The rooms are environmentally controlled, with data show equipment in each room. There are specific labs for software development, hardware, multimedia and a room for computer study. The facility also has a 50-seat tiered lecture theatre.

COURSE LIST

To qualify for the BCS, students must have passed degree courses at Level 5 to 7 worth 360 credits, including an industry-based project course of 60 credits, which is taken in the last semester of study.

The structure of the degree is summarised in the following table. Compulsory subjects and pre-requisites will apply to some courses.

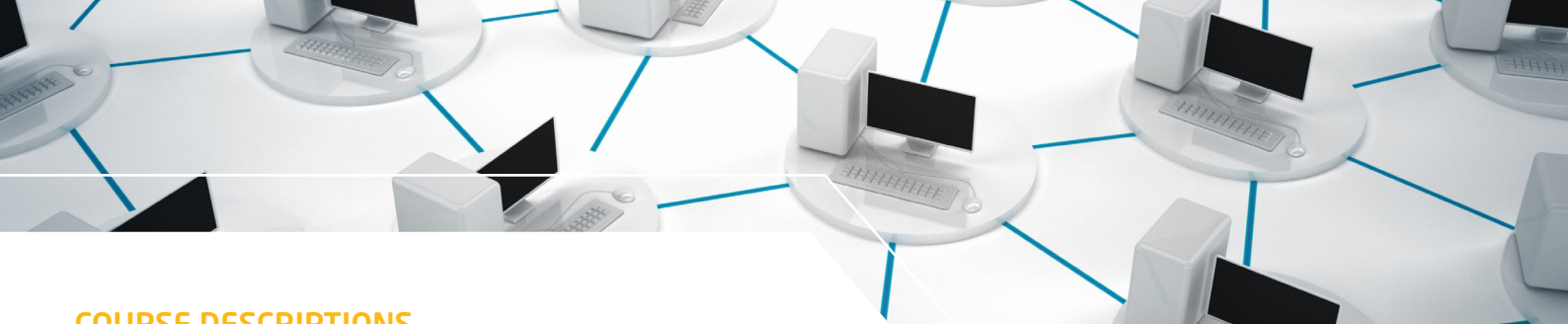
LEVEL	5	6	7	6 to 7	TOTAL
Credits	120	120	90	30	360

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 System 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 and 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
ITWD7.358	Business Application Programming	15
ITPF5.110	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
ITCP7.001	Capstone 1	30
ITCP7.002	Capstone 2	30
ITGA7.100	GIS Analytics	15

¹ To study onshore in New Zealand, students must meet current Immigration New Zealand requirements for a student visa. For more information please see the [Immigration New Zealand website](https://www.immigration.govt.nz/).



COURSE DESCRIPTIONS

NB: Courses are offered subject to sufficient enrolments being received. Courses may differ depending on selected campus.

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 Courses

COURSE NO.	BRIEF DESCRIPTION	LEVEL	CREDITS
ITIS5.450	Information Systems 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.	5	15
ITUX5.210	UX and UI Fundamentals 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.	5	15
ITDT5.220	Introduction to Data Concepts To provide students with fundamental knowledge and skills of the data concepts central to all Information Systems.	5	15
ITPM5.240	Agile Projects To provide students with fundamental project management concepts and skills experienced in an IT context.	5	15
ITPF5.110	Programming Fundamentals To provide students with the core knowledge and skills to use software development tools to create a working application to meet given requirements.	5	15
ITWD5.130	Website Development To provide students with the knowledge and skills to create a static website that meets a specific client brief.	5	15
ITCS5.100	Computer Systems Architecture 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.	5	15
ITCT5.120	IT Concepts and Tools 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.	5	15

Level 6 Courses

COURSE NO.	BRIEF DESCRIPTION	LEVEL	CREDITS
ITAE6.100	Automation and Embedded Systems 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. <i>P: ITCS5.100 Computer System Architecture</i> <i>C: ITHW6.238 Electronics and IoT</i>	6	15
ITDB6.208	Database Management Systems 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. <i>P: ITDT5.228 Introduction to Data Concepts</i>	6	15
ITDC6.218	Data Communications and Networking 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. <i>P: ITCS5.100 Computer System Architecture</i>	6	15
ITHW6.238	Electronics and IoT To provide students with the knowledge of electronics and the technical skills to work in a computing hardware setting. <i>P: ITCS5.100 Computer System Architecture</i>	6	15

COURSE NO.	BRIEF DESCRIPTION	LEVEL	CREDITS
ITKM6.398	Knowledge Management 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. <i>P: ITIS5.450 Information Systems</i>	6	15
ITMA6.240	Maths in Information Technology To provide students with the knowledge and skills of mathematics theory and its use in general and applied IT. <i>P: ITDT5.228 Introduction to Data Concepts</i>	6	15
ITNA6.258	Advanced Networking and the Cloud To provide the students with general knowledge of a Network Operating System and the necessary skills to install and carry out various administrative tasks. <i>P: ITCS5.100 Computer System Architecture</i> <i>C: ITDC6.218 Data Communications and Networking</i>	6	15
ITOS6.608	Operating Systems 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. <i>P: ITCS5.100 Computer System Architecture</i>	6	15
ITPM6.318	Project Management 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.	6	15
ITPR6.358	User Experience and User Interfaces 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.	6	15
ITPR6.508	Advanced Object Oriented Programming 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. <i>P: ITPF5.110 Programming Fundamentals</i>	6	15
ITPR6.518	Enterprise Software Development To provide students with the knowledge and skills to design, develop, maintain and deploy software to support enterprise systems applications. <i>P: ITPR6.508 Advanced Object-Oriented Programming</i>	6	15
ITDF6.100	Digital Forensics Fundamentals To equip students with the knowledge and skills to use appropriate computer forensics tools and techniques to contribute towards evidence gathering. <i>P: ITSD6.348 Systems Analysis</i>	6	15
ITSD6.348	Systems Analysis 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. <i>P: ITIS5.540 Information Systems and ITDT5.228 Introduction to Data Concepts</i>	6	15
ITSD6.349	Systems Design 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. <i>P: ITSD6.348 Systems Analysis</i>	6	15
ITWD6.408	Advanced Internet and Web Page Development To provide the students with the knowledge and skills of the client-side web development and website management. <i>P: ITWD5.130 Website Development</i>	6	15

Level 7 Courses

COURSE NO.	BRIEF DESCRIPTION	LEVEL	CREDITS
ITAI7.110	Machine Learning and Artificial Intelligence To provide students with the knowledge and skills to apply machine learning and artificial intelligence theories and technologies to solve real-world problems. <i>P: ITAE6.100 Automation and Embedded System and ITHW6.238 Electronics and IoT</i>	7	15
ITDA7.240	Data Analytics To provide students with the knowledge and skills to use industry standard data analysis tools and techniques and present meaningful and useful information. <i>P: ITPF5.110 Programming Fundamentals, ITDT5.228 Introduction to Data Concepts, ITDB6.208 Database Management Systems and ITMA6.240 Maths in IT</i>	7	15

COURSE NO.	BRIEF DESCRIPTION	LEVEL	CREDITS
ITEC7.398	E-Business Strategies To provide students with the knowledge and skills to evaluate and analyse the drivers of successful e-business strategies for organisations. <i>P: ITEC6.398 Knowledge Management</i>	7	15
ITFM7.120	Mechatronics in IT To provide students with knowledge and skills of feedback control, electro-mechanical system interfaces, software and electronics that enable robotics. <i>P: ITAE6.100 Automation and Embedded System, ITHW6.238 Electronics and IoT and C: ITA7.110 Machine Learning and Artificial Intelligence</i>	7	15
ITHW7.238	Enterprise Support and Infrastructure To provide students with the technical knowledge and skills to plan, prepare and manage a range of enterprise technologies, configurations, and infrastructure. <i>P: ITET6.238 Electronics and Technology in IT and ITDC6.218 Data Communications and Networking</i>	7	15
ITPR7.508	Business Application Programming To provide students with the knowledge and skills to develop a business application from a specification. <i>P: ITPR5.518 Introduction to Object Oriented Programming, ITPR6.508 Advanced Object Oriented Programming and ITWD6.408 Advanced Internet and Web Page Development</i>	7	15
ITSY7.668	Cybersecurity To provide students with the knowledge and skills to apply information systems security/forensics concepts, identify security risks and make contingency plans and policies. <i>P: ITDC6.218 Data Communications and Networking</i>	7	15
ITWD7.358	Web Application Programming To provide students with the knowledge and skills to develop client-server web-based applications. <i>P: ITPR5.518 Introduction to Object Oriented Programming, ITIM5.238 Internet and Mobile Technology and ITWD6.408 Advanced Internet and Web Page Development</i>	7	15
ITST7.408	Special Topic	7	15
ITGA7.100	GIS Analytics To provide students with the knowledge and skills to use appropriate GIS analytics tools and techniques to present meaningful and useful GIS information. <i>P: ITDB6.208 Database Management Systems</i>	7	15
ITCP7.001	Capstone Part 1 To provide the students with the knowledge and skills to undertake an in-depth focussed investigation into aspects of a chosen Information Technology domain. <i>P: A pass in ALL Level 5 and 6 courses</i>	7	30
ITCP7.002	Capstone Part 2 To provide students with the opportunity to apply the knowledge and skills gained during their computing studies in an organisational context. <i>P: A pass in ALL Level 5 and 6 courses</i>	7	30

THE EXPERIENCE YOU NEED & THE SUPPORT TO SUCCEED

When you study at EIT you'll get the kind of experiences that will help you gain the knowledge and skills to get ahead.

You'll also be supported by lecturers and tutors who are here for you, within a learning environment where you are treated as an individual, not just a number. They'll know your name and you'll receive one-on-one attention to make sure you get the support to succeed.



Disclaimer: All information 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 2024 and are listed as a guide only. Conditions apply. EIT (a Business Division of Te Pūkenga – New Zealand Institute of Skills and Technology) 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.