

For NZ Citizens and  
Permanent Residents



## Bachelor of Computing Systems - Tairāwhiti with a major in Intelligent Systems or unendorsed

The Bachelor of Computing Systems at Tairāwhiti offers an endorsed undergraduate degree in Intelligent Systems which focuses on automation, IoT and machine learning, or an unendorsed option which allows for a wider selection of courses in web, databases and analytics.

This degree will develop your critical and systems thinking skills, and the core programming, hardware, information processing and soft skills required by IT professionals to deliver high quality computing solutions.

If you are looking for an applied computing qualification to launch your IT career, together with the ability to cope with technological changes in the IT world, then look no further. Your IT future starts here.

**Campus** EIT Tairāwhiti (also offered at EIT Hawke's Bay - see separate information pack)

**Starts** February and July

**Length** Three years full-time or equivalent part-time

**Contact** **Tairāwhiti** Rosie Recter | Phone: 06 869 3074 | Email: rrecter@eit.ac.nz  
**Hawke's Bay** Aman Kaur | Phone: 06 830 1203 | Email: akaur@eit.ac.nz

EASTERN INSTITUTE OF TECHNOLOGY

eit.ac.nz | 0800 22 55 348 |   





## Enjoy a career in NZ's best-paid industry

The Bachelor of Computing Systems (BCS) is a three-year full-time (or equivalent part-time) undergraduate degree programme, providing a proven pathway into an IT career in one of a myriad of technology-based roles. These range from internet, web and mobile device, and enterprise software development, through infrastructure provisioning and support, industrial automation and machine learning, to data and database administration, analytics and IT Management.

In particular, the programme is designed to:

- ▶ Provide a well-defined and relevant core curriculum, with scope for rapid and flexible adoption of new technologies as the frontiers of knowledge expand.

- ▶ Prepare you to be effective in a variety of professional roles, with the technical expertise needed to be productive in the chosen discipline.
- ▶ Promote independent learning and professionalism to ensure productivity and continued relevance.
- ▶ Provide flexible study modes to enable you to personalize your programme of study.
- ▶ Embed critical thinking and problem solving exercises to extend student analysis and research and delivery.

You are warmly invited to make an appointment to discuss your study options with our staff and to view our facilities.

### YOUR FUTURE CAREER OPPORTUNITIES

Entry-level IT roles and career prospects for graduates with sufficient work experience, include:

- ▶ Software Developer / Programmer
- ▶ Network Support Administrator
- ▶ Web Administrator
- ▶ Network Security and Data Protection
- ▶ Data Analyst
- ▶ Industrial Automation Technician
- ▶ Project Leader
- ▶ Information Systems Manager
- ▶ Hardware Technician
- ▶ Internet Developer
- ▶ Database Administrator
- ▶ Systems Analyst
- ▶ Systems Engineer
- ▶ Systems Designer
- ▶ Computer Consultant

# WHAT YOU NEED TO KNOW

## Bachelor of Computing Systems

Level	7	Credits	360
Length	Three years full-time or equivalent part-time On-campus blended delivery	Fee*	\$805 approximately per 15 credit course

\* This is a guide only based on the previous year. All costs quoted include GST and student services levy. Fees apply to New Zealand citizens and New Zealand permanent residents only.

## INDUSTRY-BASED TRAINING

The BCS aims to deliver graduates possessing a broad range of practical skills, therefore all courses include a significant practical component.

There are two compulsory Level 7 30-credit capstone courses requiring students to complete either a 600 hour internship IT role, embedded within a suitable organisation, or to undertake approved information systems analysis and development work in a commercial environment.

The capstones are completed in the last semester of the programme.

## PARTNERSHIPS

EIT is proud of our relationships with local IT providers and employers, which ensures the continuing relevance of our courses and leverages our qualifications and resources for the benefit of students, employers and the region.

## 2022 KEY DATES

### INTAKE ONE

Programme starts Monday, 14 February

### INTAKE TWO

Programme starts Monday, 18 July

### EIT TERM HOLIDAYS

15 - 29 April

27 June - 15 July

3 - 14 October

### YEAR ENDS

Friday, 25 November

## TIMETABLE

Your study time will be made up of on-campus instruction (lectures, laboratories and tutorials) and non-contact time (your own individual study time, online learning).

### Contact Time

On-campus classes are scheduled between 8.00am - 5.00pm, Monday to Friday.

A full-time study workload would include FOUR concurrent courses.

On-campus instruction for each course would ordinarily consist of two to three sessions totalling four hours per course per week, which you will need to supplement with a further six hours per course per week of self-directed learning (i.e. a total expected study investment of 10 hours per week per course). A full-time study workload would require a dedicated 40 hours per week.

## ADDITIONAL COSTS

- ▶ \$120 approximately per course for textbooks or equipment

You are advised to purchase suitable equipment to sustain studies in the computer field, and BYOD is encouraged for use in class, though workstations are supplied for all laboratory work.

## ENTRY CRITERIA

A personal interview may be part of the application process.

Applicants must meet one of the following criteria:

- ▶ University Entrance; or
- ▶ The NZ Certificate in Information Technology Essentials [Level 4]; or
- ▶ An equivalent qualification.

### Provisional Entry

Applicants who do not meet the criteria above, but present evidence of ability to succeed (e.g. maturity, life experience, work experience, other study) may be provisionally admitted into the programme. Entry to subsequent study is conditional on satisfactory academic progress.

Alternatively, applicants may be advised to enrol in either:

1. The stand-alone NZ Diploma in Information Systems [Level 5]. Upon successful completion of this programme students would be eligible for enrolment in the second year of the BCS programme; or
2. The stand-alone NZ Certificate in Information Technology [Level 5]. Upon successful completion of this programme students would be eligible for enrolment in the second half of the first year of the BCS; or
3. The NZ Certificate in IT Essentials [Level 4]. Upon successful completion of this

programme students would be eligible for enrolment in the BCS.

The Dean may apply discretion to these regulations in exceptional circumstances.

### Other Requirements

Mathematics, Algebra and Computer literacy is highly recommended in order to be able to cope with the conceptual and practical and online components of this programme.

### Please Note

- ▶ Entry to subsequent study is conditional upon satisfactory academic progress.

## ENGLISH LANGUAGE ENTRY REQUIREMENT

Applicants whose first language is not English must have an acceptable level of English language fluency prior to enrolment in the programme.

This may be demonstrated in a variety of ways, including schooling in New Zealand, completion of the relevant New Zealand Certificate in English Language, approved scores on IELTS tests or completion of accepted international equivalents. Specific scores for IELTS and New Zealand Certificates in English Language are as follows:

- ▶ IELTS 6.0 Academic (no band score lower than 5.5)
- ▶ NZCEL Level 4 with an Academic endorsement

## ENTRY WITH CREDIT

You may already have some knowledge or skills that can be recognised as part of your intended study. This may take a number of different forms, including study while at high school, study at a private training establishment, workplace training, other tertiary study, life experiences or voluntary work. If you think you may qualify, you may want to apply for Cross Credit (CC) or Recognition of Prior Learning (RPL).

- ▶ CC is based on the equivalency of courses or qualifications. You would apply for CC if you have passed a very similar course at the same level.
- ▶ RPL is based on the assessment of your current knowledge and skills. You would apply for RPL if you had gained the relevant knowledge and skills through life experiences and informal learning situations.

You will be asked to provide details of anything that you would like considered as credit towards your intended programme of study, as part of your application.

You must apply prior to enrolment. CC and RPL cannot be awarded for a course if you are already enrolled in that course. An original transcript or notice of results from the institute at which you previously studied (or verified copies) will be required for all applications.

For further information and enquiries about CC and RPL please contact the School of Computing Secretary on 06 830 1203.

## FACILITIES

The Tairāwhiti campus includes extensive learning environments, including specialized computer laboratories for both standard and school of computing specialist coursework.

## ASSESSMENTS

All assessments in the Bachelor of Computing Systems courses are marked internally. Assessments include assignments, tests and practical demonstrations.

## DEGREE ELECTIVES

A list of degree electives from other degree programmes as elective courses is available. Please call the EIT Infoline on 06 974 8918 OR 0800 CALL EIT (22 55 348).

## 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.

## YEAR 13 DEGREE SCHOLARSHIP

EIT offers a limited number of Year 13 Degree Scholarships.

The Year 13 Degree Scholarship covers one year of full-time study and is available to Hawke's Bay, Tairāwhiti (Gisborne) and Taupō based students who are beginning an undergraduate degree in 2022. It is also open to Diploma applicants intending on entering Year 2 of a corresponding degree in their second year of consecutive study.

NOTE: Scholarships for the Bachelor of Māori Visual Arts | Te Toi o Ngā Rangī, Bachelor of Viticulture and Wine Science and Bachelor of Veterinary Nursing degrees are open to students nationwide.

For more information about the Year 13 Degree Scholarship check out [scholarships.eit.ac.nz](https://scholarships.eit.ac.nz), email [scholarships@eit.ac.nz](mailto:scholarships@eit.ac.nz) or text your name, address and the word YR13 to 4631 and we will send you a Year 13 scholarship pack.

## EXPERIENCED LECTURERS

You can be confident in the quality of our teaching and your learning experience at EIT.

EIT is one of the top ITPs in New Zealand for research excellence due to the quality of our community centred research, and associated publications and level of government and external grant income. This means that your lecturers use the latest knowledge and research in their field of expertise to inform their teaching, and many are at the forefront of knowledge creation within their discipline area.

Our lecturers are highly trained professionals with particular areas of expertise in information systems. Staff also maintain contact with other professionals through organisations such as the Institute of Information Technology Professionals.

NAME	QUALIFICATION
John West Head of School	
Ian Purdon BCS Programme Coordinator	BBS (Econ), DipBus (IS), PGDipIT
Dr Thomas Hartley Level 7 Project Coordinator	PhD, ThD, NZCertAdLitNu
John Jamieson BCS Course Coordinator	MIT, BTech (Info Tech), NDipIT
Oliver Huang System Administrator	MBA, GDipIT, BCS
Hawke's Bay Campus	
Istvan Lengyel	MIT, PgDipSc
Dr Emre Erturk	PhD, MS, BA

NAME	QUALIFICATION
Dr Daniel Dang	PhD
Robyn Pascoe	BCS, DipBC
Graham Ward	PGDipIT (in progress)
Dr Noor Alani	PhD
Tairāwhiti Campus	
Steve Main	DipAdEd, NCertAutEIEt, NCertAdLitNu
Tina Blumenthal	PGDipIT, BCS
Ken York	ME, BSc

## PROGRAMME INFORMATION

To graduate with a BCS Degree, students must have passed degree courses at Level 5 to 7 worth 360 credits, including the two 30 credit capstones undertaken during the last semester of study. The structure of the degree is summarised in the following table. The courses and their co-requisites and pre-requisites are appended.

These courses are subject to change please contact the Programme Secretary for an up to date course list.

ET reserves the right to change timetables. Courses may be offered in different timeslots or cancelled if there is insufficient enrolment. Textbooks and/or equipment are required for several courses - these additional costs are not included in the course fees noted.

LEVEL	5	6	7	electives 6 to 7	Total
CREDITS	120	120	90	30	360

### Course Descriptions

NB: Courses are offered subject to sufficient enrolments being received.

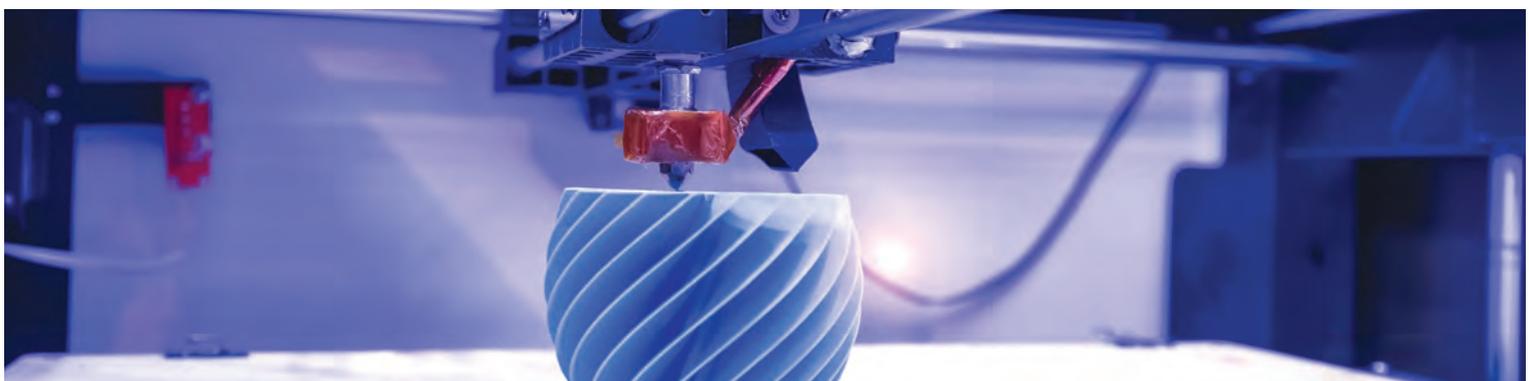
In the following descriptions: P= Pre-requisite – courses which must be studied before.

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

The courses offered for the Bachelor of Computing Systems include the following\*:

\* NB: not all courses are offered at all campuses.

COURSE NO.	LEVEL 5 BRIEF DESCRIPTION	NO. OF CREDITS	NZQA LEVEL	SEMESTER OFFERED
<b>ITIS5.450</b>	<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	1
<b>ITUX5.210</b>	<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	1
<b>ITDT5.220</b>	<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	1
<b>ITPM5.240</b>	<b>Agile Projects</b> To provide students with fundamental project management concepts and skills experienced in an IT context.	15	5	1
<b>ITCS5.100</b>	<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	2
<b>ITWD5.130</b>	<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	2
<b>ITPF5.110</b>	<b>Programme 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	2
<b>ITCT5.120</b>	<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	2



COURSE NO.	LEVEL 6 BRIEF DESCRIPTION	NO. OF CREDITS	NZQA LEVEL	SEMESTER OFFERED
ITPM6.318	<p><b>Project Management</b></p> <p>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.</p>	15	6	1
ITSD6.348	<p><b>Systems Analysis</b></p> <p>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> <p>P: ITIS5.540 Information Systems ITDT5.228 Introduction to Data Concepts</p>	15	6	1
ITPR6.358	<p><b>User Experience and User Interfaces</b></p> <p>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.</p>	15	6	2
ITHW6.238	<p><b>Electronics and Internet of Things Technology (IoT)</b></p> <p>To provide students with the knowledge of electronics and the technical skills to work in a computing hardware setting.</p> <p>P: ITCS5.100 Computer System Architecture</p>	15	6	2
ITDF6.100	<p><b>Digital Forensics Fundamentals</b></p> <p>To equip students with the knowledge and skills to use appropriate computer forensics tools and techniques to contribute towards evidence gathering.</p> <p>P: ITSD6.348 Systems Analysis</p>	15	6	2
ITMA6.240	<p><b>Maths in Information Technology</b></p> <p>To provide students with the knowledge and skills of mathematics theory and its use in general and applied IT.</p> <p>P: ITDT5.228 Introduction to Data Concepts</p>	15	6	3
ITAE6.100	<p><b>Automation and Embedded Systems</b></p> <p>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> <p>P: ITCS5.100 Computer System Architecture C: ITHW6.238 Electronics and IoT</p>	15	6	3
ITDB6.208	<p><b>Database Management Systems</b></p> <p>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> <p>P: ITDT5.228 Introduction to Data Concepts</p>	15	6	3
ITKM6.398	<p><b>Knowledge Management</b></p> <p>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> <p>P: ITIS5.450 Information Systems</p>	15	6	4
ITNA6.258	<p><b>Advanced Network and the Cloud</b></p> <p>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> <p>P: ITCS5.100 Computer System Architecture</p>	15	6	4
ITWD6.408	<p><b>Advanced Internet and Web Page Development</b></p> <p>To provide the students with the knowledge and skills of the client-side web development and website management.</p> <p>P: ITWD5.130 Website Development</p>	15	6	4

COURSE NO.	LEVEL 7 BRIEF DESCRIPTION	NO. OF CREDITS	NZQA LEVEL	SEMESTER OFFERED
ITST7.408	<b>Special Topic</b>	15	7	1 & 3
ITDA7.240	<p><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> <p>P: ITPF5.110 Programming Fundamentals ITDT5.228 Introduction to Data Concepts ITDB6.208 Database Management Systems ITMA6.240 Maths in IT</p>	15	7	1 & 3
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> <p>P: ITDB6.208 Database Management Systems</p>	15	7	1 & 3
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> <p>P: ITKM6.398 Knowledge Management</p>	15	7	2
ITAI7.110	<p><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> <p>P: ITAE6.100 Automation and Embedded System ITHW6.238 Electronics and IoT</p>	15	7	2 & 4
ITFM7.120	<p><b>Mechatronics in IT</b> To provide students with knowledge and skills of feedback control, electro-mechanical system in terfaces, software and electronics that enable robotics.</p> <p>P: ITAE6.100 Automation and Embedded System ITHW6.238 Electronics and IoT C: ITAI7.110 Machine Learning and Artificial Intelligence</p>	15	7	2 & 4
ITCP7.001	<p><b>Capstone 1</b> To provide the students with the knowledge and skills to undertake an in-depth focussed investigation into aspects of a chosen Information Technology domain.</p> <p>P: A pass in ALL Level 5 and 6 courses</p>	30	7	2
ITCP7.002	<p><b>Capstone 2</b> To provide students with the opportunity to apply the knowledge and skills gained during their computing studies in a organisational context.</p> <p>P: A pass in ALL Level 5 and 6 courses</p>	30	7	2



# HOW TO ENROL

There is an easy 3-step process to follow when enrolling at EIT.

## STEP 1

Check out the programmes online to see the programmes available for you to study. A copy of the course information for each programme is available online.

## STEP 2

You can now use your RealMe verified identity to apply for study at EIT. If you use your RealMe verified identity you will no longer be sent a copy of your application form to sign. You also will not need to provide us with a copy of your primary ID.

If you apply online without using RealMe then you will be sent a summary of your enrolment to check and sign. It will also include course selection forms which you need to complete and return. Your enrolment cannot progress until you have sent the summary and forms back to us.

You can also apply using a paper enrolment form. Please call us on **0800 22 55 348** and we will send you one out.

You will receive an acceptance letter from your Faculty with programme information. This will include the start date of your

study and any special information regarding your programme. Depending on your chosen programme of study, you may be invited to attend an interview before you are accepted.

## STEP 3

Arrangement for full payment of enrolment fees must be made before the start of your programme. You will receive an invoice with payment details.

**Fees-Free government scheme:** Tertiary education is fees-free for eligible domestic tertiary students. To check if you are eligible, go to **FeesFree.govt.nz** and enter your National Student Number (NSN). If you are not eligible you will be responsible for paying your fees.

**Scholarships and grants:** Scholarships and grants make life easier by helping to cover your fees, other costs and living expenses while you study. You don't always need to be an academic high-flyer to qualify. You can find out more about scholarships and other options for paying your fees at **eit.ac.nz**.

**StudyLink:** If you need to pay for your own study you can choose to apply for your Student Loan and Student Allowance with StudyLink. You should do this early, even if you haven't yet been accepted on your programme. You can change your details later if anything changes. Visit **studylink.govt.nz** to find out more about StudyLink.

## STUDENT SERVICES LEVY

The Student Services Levy is a compulsory non-tuition fee that is charged to students enrolled at EIT. The levy is to contribute to the provision of quality student services that support learning. The funds received by EIT from the levy are ring-fenced, meaning they can only be spent on student services.

## STUDENT LOANS AND ALLOWANCES

StudyLink is a service of the Ministry of Social Development. Apply well before your programme begins (even if you haven't been accepted yet) so you'll be ready to get your payments when you need them most.

Check out what you qualify for at **studylink.govt.nz**.



## EIT is now part of Te Pūkenga

Te Pūkenga will bring together New Zealand's Institutes of Technology, Polytechnics, and Industry Training Organisations to build a network of on job, on campus and online learning. The services we offer will not only remain, they will be strengthened by being part of the extensive Te Pūkenga network around the country. From 2023 your enrolment will transfer to Te Pūkenga and you will become part of the extensive Te Pūkenga network around the country.

