

2024

Bachelor of Applied Science

Biodiversity Management

Equip yourself for a role in the exciting and ever-expanding world of environmental management.

You can now study for a degree in the environmental space through EIT | Te Pūkenga. This qualification follows on from the Level 5 and 6 Diplomas in Environmental Management.

PLEASE NOTE: Year three of the Bachelor of Applied Science (Biodiversity Management) is offered by EIT | Te Pūkenga in collaboration with Unitec | Te Pūkenga and leading to the award of a Bachelor of Applied Science (Biodiversity Management) from Unitec | Te Pūkenga.

Location	Hawke's Bay
Start	February and July
Length	Three years full-time*
Contact	Diana Morris Phone: 06 830 1057 Email: dmorris@eit.ac.nz

* Part-time study available
For NZ Citizens and Permanent Residents



TE AHO A MĀUI



TePūkenga

Environmental management for a sustainable future

In this degree programme, you will learn about ecosystems, conservation issues, sustainable management of land and plant life, as well as the management strategies that promote the conservation of biodiversity and address biosecurity.

As a biodiversity management learner, you'll explore how ecosystems function and support biological diversity, and how managers of biodiversity are responding to increasing concern over the impact of human activities on the planet.

Subject areas

- Biosecurity
- Restoration ecology
- Advanced field surveying of New Zealand biota
- Negotiated research
- Conservation science
- Applied GIS

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Career and study opportunities

Possible job and career opportunities can include:

- Park ranger
- Environmental consultant/technician
- Conservation officer
- Environmental researcher
- Resource management adviser/consultant

On completion of the Bachelor of Applied Science (Biodiversity Management) you may wish to further your knowledge with a relevant postgraduate qualification.

Timetable

Your study time will be made up of contact time (e.g. class times, tutorials, field trips, online sessions) and non-contact time (your own individual study time).

Contact time

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

For a current timetable, please refer to eit.ac.nz/students/timetable.


Non-contact time


You should plan to spend 10 hours per week, per course on individual study.




Bachelor of Applied Science (Biodiversity Management)

Level 7, 360 credits

 Hawke's Bay

 Full-time:
3 years
Part-time:
equivalent

 Fee:
Visit fees.eit.ac.nz to see the fees for this programme

Entry requirements

- Successful completion of the NZ Diploma in Environmental Management (with a Terrestrial strand) (Level 5); and
- Successful completion of the NZ Diploma in Environmental Management (with a Terrestrial strand) (Level 6); or
- An equivalent qualification.

For applicants 20 years or older without any of the above academic criteria, evidence of relevant knowledge and experience, and the ability to undertake tertiary study at degree level is required. In this case the applicant will be required to participate in an enrolment interview with the purpose of verifying the evidence.

In exceptional circumstances an applicant who does not meet the academic entry requirements may be granted entry to the Bachelor of Applied Science (Biodiversity Management) where they supply evidence to satisfy the Programme Coordinator of their ability to succeed on the programme.

Special conditions

Your enrolment in this programme will be registered with the Unitec | Te Pūkenga qualification.

English language entry requirements

All applicants must have a level of English sufficient to be able to study at this level.

For international learners, ways in which English language fluency may be demonstrated include the following:

- Successful study of a programme in which English was the language of instruction (conditions apply)
- Completion of a New Zealand Certificate in English Language (Level 5 with any endorsement)
- IELTS Academic score of 6.5, with no band score lower than 6.5, achieved in a single test within the two years preceding enrolment
- International equivalents to IELTS accepted by NZQA

2024 Key dates

Intake one	Starts: Monday, 19 February Ends: Friday, 29 November
Intake two	Starts: Monday, 22 July Ends: Friday, 18 July 2025
Semester breaks	Intake one: 15-26 April 1-19 July Intake two: 30 September-11 October 29 November-17 February 2025

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 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 Recognition of Prior Learning (RPL).

- 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 toward your intended programme of study, as part of your application.

Applications for RPL for a course should be made prior to enrolment in that course and no later than two weeks after the start of the course.

For further information and enquiries about CC and RPL please contact the Programme Coordinator, Lisa Turnbull, on 06 830 1879 or lmturnbull@eit.ac.nz.

Assessments

Assessments include evidence portfolios, projects, reports, presentations, case studies and laboratory workbooks.

Year 13 scholarship

EIT | Te Pūkenga offers a limited number of Year 13 Scholarships to eligible Taupō, Hawke's Bay and Tairāwhiti (Gisborne) learners who are beginning an undergraduate degree in 2024. You can study any one of our 13 degrees or selected level 5 certificate and diploma programmes that pathway into a degree.

If you live outside the Taupō, Hawke's Bay or Tairāwhiti regions there are scholarships available nationwide for a selected few programmes. Go to scholarships.eit.ac.nz to find out which programmes you can apply for.

For full information about the Year 13 Scholarship check out scholarships.eit.ac.nz, email 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

At EIT | Te Pūkenga, you can be confident in the quality of our teaching and your learning experience. EIT | Te Pūkenga is highly regarded in New Zealand for research excellence due to the quality of our community centred research, our publications and our external grant income provided by funding institutions who have confidence in our research capability. You can be confident 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.

Dr Amelia McQueen

PhD (Botany/Ecology), MSc (Ecology), BSc (Botany)

Amelia specialises in many aspects of terrestrial, freshwater and marine ecology. In particular, looking at wetland ecology and biodiversity of less well-known ecosystems such as frost flats, limestone rock features and nutrient poor ecosystems. Amelia values introducing different ecosystems, investigating questions focused on biodiversity and filling knowledge gaps for different ecosystems. She has been involved in a number of research projects and is highly regarded for the development of education packages for the White Pine Bush Reserve, Waste Aware - Napier City Council, Ball's Clearing Scenic Reserve, Ōtātara Outdoor Learning Centre and Waiaroha - HDC water treatment and freshwater education facility.

Dr Dinusha Jayathilake

PhD (Marine Science), MSc (Geoinformatics), BSc (Botany/Plant Biology)

Dinusha values using GIS (Geographic Information System) to develop maps, do spatial analysis and interpretations relating to ecology. She specialises in terrestrial, marine and freshwater ecology, population and community dynamics, and species distribution modelling (habitat suitability modelling). Dinusha collaborated with the United Nations Environmental programme and her published maps are available on the UNEP-WCMC map portal. In 2020 Dinusha was part of a team of researchers awarded the Elsevier Atlas Award for their work *'Where Marine Protected Areas would best represent 30% of ocean biodiversity'*.

Dr Glen Robertshaw

PhD (Environmental Science), MSc (Environmental Science) Distinction, BSc (Chemistry) Honours

Glen's background is in chemistry, environmental modelling and environmental land management. His PhD involved developing a Decision Support System that modelled the movement of radioactive contaminants through soils, plants, animals and the food production system and identified optimal strategies for re-mediating the land taking into consideration the social, ethical and environmental impacts. Glen's research

includes investigating the levels of complexity of agricultural and environmental models as well as modelling the effects of climate change on crops in New Zealand. He developed a prototype programme to allow DOC Rangers to identify when Kiwi eggs are ready to hatch and so be taken to a sanctuary to be reared until old enough to survive in the wild. Glen is currently involved in a research project using gamma-ray spectroscopy to map soil characteristics at a high resolution to allow growers to target their applications and increase productivity whilst reducing environmental impact.

Gerard Henry

MSc (Plant Taxonomy), DipHort

Gerard has previously held appointments at the Royal Parks London, Windsor Great Park, the Royal Botanic Gardens (Kew) and the National Trust for England and Wales. His qualifications include a Masters degree in Pure and Applied Plant and Fungal Taxonomy from the University of Reading and a Diploma in Horticulture from the Royal New Zealand Institute of Horticulture. Gerard is a current member of the Kew Guild, the Royal New Zealand Institute of Horticulture, the New Zealand Plant Conservation Network and Forest and Bird.

Chris Thorman

BSc (Agriculture) Honours, DipCropProtection

Chris has spent much of his professional life working in the agricultural and food processing sectors, having previously managed the growing operation for the supply of potatoes into Bluebird and ETA, and before that was responsible for 3500ha of crops in Scotland. He has worked with some of the big names in the agricultural/processing sectors, developed his own seed potato company, and in the 1990s was the biggest organic grower of seed potatoes in Europe by area. Chris is still well-connected to the agriculture industry and offers consultancy services to NZ farmers and packers for their storage and handling systems. Chris shares his real-world experiences and understanding of the importance of incorporating good environmental management with agricultural and horticultural practice.

EIT is now part of Te Pūkenga

Te Pūkenga brings 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 not only remain, they are strengthened by being part of the extensive Te Pūkenga network around the country. Your enrolment for study in 2024 will see you enrolling with Te Pūkenga and becoming part of the extensive Te Pūkenga network around the country.

The experience you need & the support to succeed

When you study at EIT | Te Pūkenga 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.

Course descriptions

Year one - Level 5

NZ Diploma in Environmental Management (Terrestrial strand) (Level 5)

Course no.	Brief description	NZQA level	No. of credits	Semester offered
ENV5.100	Sustainability 101 Principles and models of sustainability, historic and contemporary Māori sustainability perspectives and practices and contemporary environmental issues.	5	15	1
ENV5.200	Environmental Conservation in Aotearoa Legislation, context and community.	5	15	1
ENV5.400	Environmental Sampling Knowledge and skills required for environmental sampling in order to monitor ecosystems.	5	15	1
ENV5.700	Environmental Science Interactions between humans and the environment.	5	15	1
ENV5.310	Introduction to Biology Introductory knowledge about the biology of plants and animals.	5	15	2
ENV5.500	Flora and Fauna of Aotearoa Biological and cultural knowledge.	5	15	2
ENV5.800	Introduction to Earth System Sciences How natural processes create landforms and provide resources and hazards for humans.	5	15	2
ENV5.900	Introduction to Ecology and Biodiversity Environmental responses of plants and animals, community and ecosystem ecology and conservation biology.	5	15	2

Year two - Level 6

NZ Diploma in Environmental Management (Terrestrial strand) (Level 6)

Course no.	Brief description	NZQA level	No. of credits	Semester offered
ENV6.100	Freshwater Ecology And Monitoring This course aims to develop learners' knowledge about freshwater environments and skills in related sampling and analysis.	6	15	1
ENV6.200	Biosecurity This course aims to develop learners' knowledge of global biosecurity risks, threats to the Aotearoa environment and management methods for invasive species.	6	15	1
ENV6.800	Soil Science This course gives an introduction to the nature, formation, and classification of soils, their physical, chemical, mineralogical, and biological properties, and issues of soil quality, land degradation and sustainable management.	6	15	1
ENV6.010	Environmental Monitoring This course develops learners' knowledge and skills to plan, analyse and present data relevant to environmental monitoring.	6	15	1

Course no.	Brief description	NZQA level	No. of credits	Semester offered
ENV6.500	Sustainable Futures This course aims to develop learners' knowledge of current trends in sustainability and topics in environmental management.	6	15	2
ENV6.700	Principles Of Ecology This course covers the principles of ecology, including adaptation to the environment, intra- and inter-specific interactions, community and ecosystem dynamics, and biogeography.	6	15	2
ENV6.900	Geographic Information Systems This course aims to develop understanding in the use and application of GIS, GPS (Global Positioning Systems) and RS (Remote Sensing) for modelling and presenting spatial data and information.	6	15	2
RESE6.06	Statistics and Research Preparation This course aims to develop learners' introductory knowledge and skills of applied research. It includes scientific method and an introduction to scientific writing and statistical methods.	6	15	2

Year three - Level 7

Bachelor of Applied Science (Biodiversity Management) (Level 7)

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Course no.	Brief description	NZQA level	No. of credits	Semester offered
NCSI7104	Restoration Ecology To enable learners to apply ecological theory to the practice of restoring damaged ecosystems, using existing restoration projects as reference sites.	7	15	1
NCSI7732	Conservation Science To understand how the knowledge of genetics and population dynamics can be used to influence conservation and wildlife management decisions.	7	15	1
NCSI7736	Applied GIS This course aims to provide an advanced understanding of, and competence in, the acquisition, management, analysis, modelling and presentation of geoinformation in resource management.	7	15	1
NCSI7731	Negotiated Research This course provides learners with an opportunity to complete an investigation into a negotiated topic using a range of research skills.	7	15	1 & 2
NCSI6739	Behavioural Ecology This course aims to develop learners' understanding of the ecological and evolutionary basis of animal behaviour, and the role behaviour plays in enabling animals to adapt to their environment.	6	15	2
NCSI7107	Biosecurity This course aims to provide learners with an understanding of the impacts, management and risks of invasive alien species to New Zealand and beyond.	7	15	2
NCSI7105	Advanced Field Surveying of NZ Biota This course provides learners with experience of taxonomy, field identification and surveying techniques for a range of animals, plants and fungi.	7	15	2



How to enrol

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

Step 1

Check out eit.ac.nz to see the programmes available for you to study. A copy of the course information for each programme is available on our website.

Step 2

You can now use your RealMe verified identity to apply for study at EIT | Te Pūkenga. 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 | Te Pūkenga. The levy is to contribute to the provision of quality student services that support learning. The funds received by EIT | Te Pūkenga 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.



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Apply now for 2024

eit.ac.nz

0800 22 55 348

Hawke's Bay campus

501 Gloucester Street
Taradale, Napier 4112

Tairāwhiti campus

290 Palmerston Road
Gisborne 4010



TE AHO A MĀUI



TePūkenga