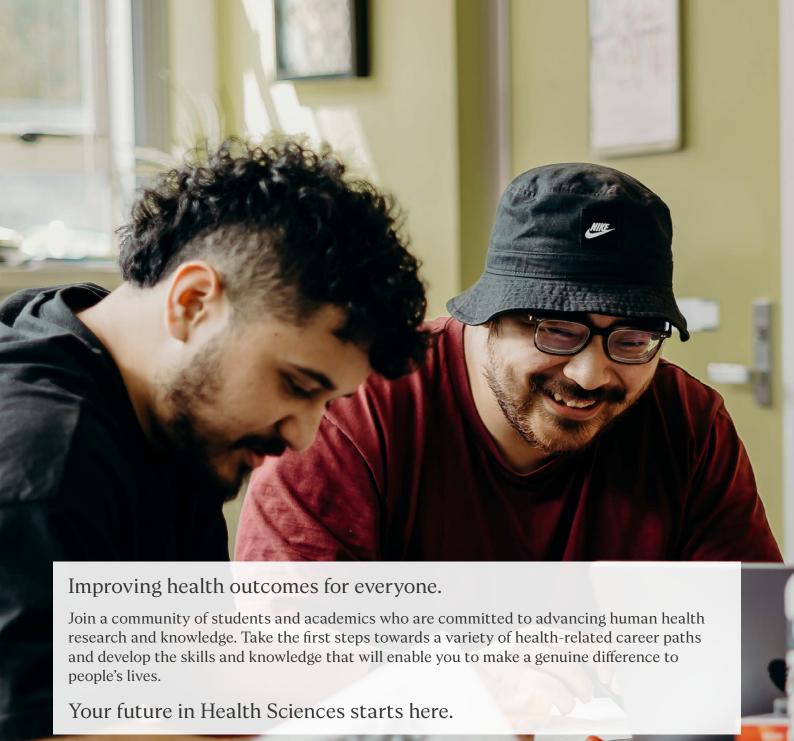
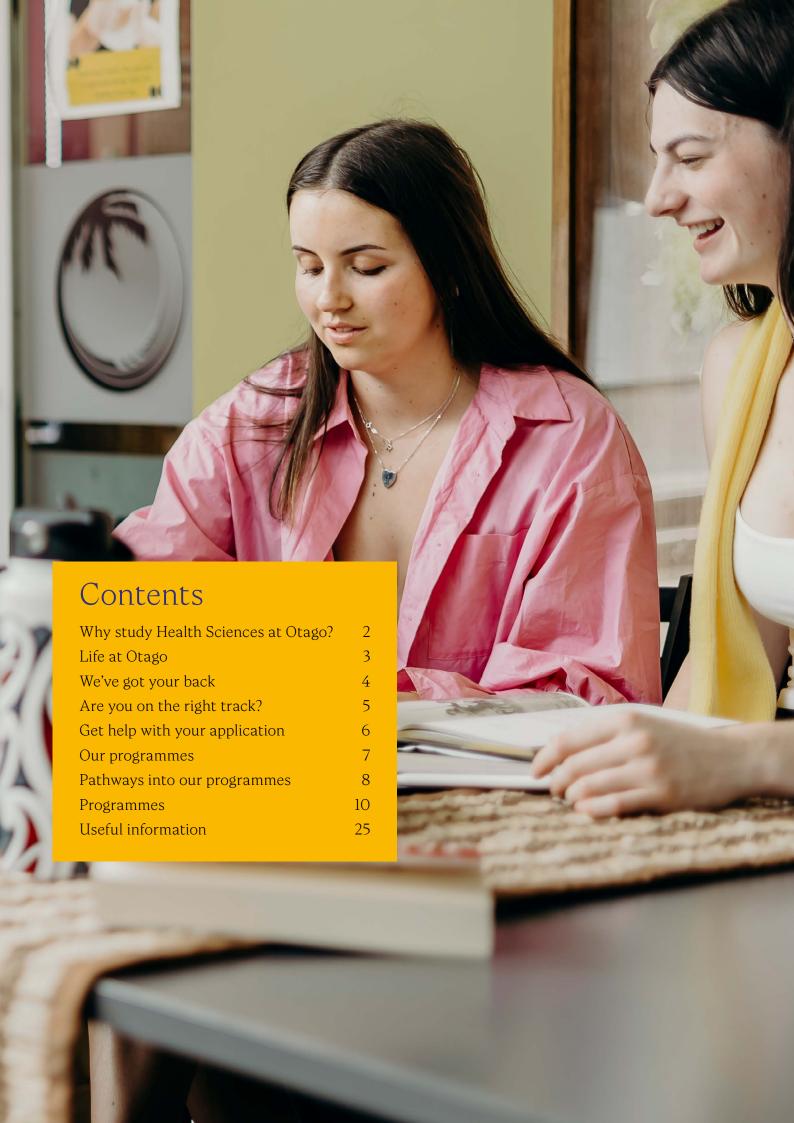


Health Sciences at Otago Mātau Hauora ki Ōtākou







Why study Health Sciences at Otago? He aha e whai ai i te Mātau Hauora ki Ōtākou

We're home to Aotearoa's first and longest-running schools of Medicine, Dentistry, Anatomy, Physiotherapy, and Pharmacy, and are responsible for building the healthcare workforce in Aotearoa and the Pacific.

Health Sciences at Otago provides undergraduate, postgraduate and professional courses in health, biomedicine and related sciences at our campuses in Dunedin, Christchurch and Wellington.

Expert teaching and research

- Learn the most up-to-date practices and approaches to health from lecturers and researchers at the top of their fields.
- We host many important research collaborations including Ageing Well, Healthier Lives and Genomics Aotearoa. We also house flagship research centres in oral health, neuroendocrinology, cardiac research, public health, cancer research, diabetes and obesity, infectious diseases and global health.
- Much of our clinical research is done in partnership with Te Whatu Ora Health New Zealand, with a focus on saving lives and improving health outcomes for all New Zealanders.

Get career ready

- Qualified healthcare professionals are in high demand, both in Aotearoa New Zealand and worldwide. Choose from a wide variety of undergraduate programmes and take the first steps towards a rewarding career.
- Hands-on learning opportunities are built into our courses. Gain the practical skills to become future-ready for a diverse range of roles in the health industry.
- We have close ties to businesses in the food, agriculture, pharmaceutical and medical device industries, providing opportunities for future employment and postgraduate training.

World-class facilities

- Our ultra-modern dental school the only one in New Zealand – is the most technologically advanced in Australasia.
- The Mellor Laboratories offer state-ofthe-art laboratories, including a dietetics lab, a bioengineering lab and a metal-free clean lab.
- Eight libraries across our three campuses provide comfortable study spaces and access to a huge array of resources.

Supportive community

- We offer a range of support services to help you with everything from mental health and wellbeing to study skills.
- Equity pathways help us create a representative healthcare workforce and better healthcare outcomes for all New Zealanders.
- We're committed to advancing mātauranga Māori in contemporary healthcare. The Kōhatu Centre for Hauora Māori leads kaupapa Māori research and teaching excellence across the division.

Life at Otago Te koiora i Ōtākou

University life isn't just about study. It's a chance to meet new people, develop your hobbies and interests and have fun. At Otago, there are countless ways to immerse yourself in student life, from sporting activities and student clubs to volunteering opportunities.

Around 21,000 students call our Dunedin campus and its surrounding streets home, creating a lively buzz and a real community feel. The city centre, with its cafes, bars, art galleries, museums and live music venues is just a short walk away.

If you're into the outdoors, you'll find plenty to keep you occupied – Dunedin is surrounded by beaches, hills and harbour waters.



University of Otago, Wellington

Our Wellington campus is home to around 1,000 students and an inspirational teaching team of leading health educators and researchers.

What we offer

- Undergraduate 4th-6th year Medicine.
- New Zealand's only Bachelor of Radiation Therapy.
- Hosting for Dietetic, Physiotherapy, Dental and Pharmacy undergraduate students.
- Research degree opportunities from BMedSci to PhD.
- Postgraduate courses in health sciences.
- Short courses every February at our Public Health Summer School.





University of Otago, Christchurch

The University of Otago, Christchurch is New Zealand's most research-intensive campus for medical and health sciences and home to more than 1.000 students.

What we offer

- Undergraduate 4th-6th-year Medicine.
- Undergraduate 4th-year Physiotherapy.
- Postgraduate courses in health sciences.
- Diverse student body with more than 20 nationalities. represented.

We've got your back He tuarā mātou mōu

The journey into university study is a big and exciting one, so we take pride in offering our students a range of support networks. Once you're here, you're part of our whānau.

Every student at Otago can freely access awesome services, like study groups, disability support, chaplains, our on-site Student Health Services, and the Career Development Centre, and connect with places like Te Huka Mātauraka / Māori Centre and the Pacific Islands Centre.

In Health Sciences we take it even further. Here are some of the teams you'll be introduced to when you arrive:

Socioeconomic Equity (EQ) Project

EQ supports students from school communities challenged by socioeconomic barriers to educational success, helping them progress into health professional programmes, and ultimately into the health workforce.

Māori Health Workforce Development Unit - Kōhatu, Centre for Hauora Māori

Kōhatu work with our tauira Māori to build connections and support Māori entering Aotearoa's health workforce. Kōhatu and EQ often run events together as Raukaha – a student support group that offer everything from scholarships and tutorials to course advice and financial support.

Va'a o Tautai student support (POPO)

The Va'a o Tautai – Centre for Pacific Health aims to increase the number of Pacific students in health-related courses and facilitate high academic outcomes. This is done through leading Pacific research, and also by supporting Pacific students before and during their time at university.

To connect with these support teams and more, visit

otago.ac.nz/healthsciences/students/ hsfy/contacts#hedc-student-learningdevelopment



Are you on the right track? Kei te ara tika koe?

Wondering which Year 13 subjects you should take in order to apply for a Health Sciences programme? Use the table below to find out about required and recommended subjects.

Admission requirements: University entrance qualification The following background subjects are required to Year 13							
	Chemistry Biology Physics Statistics Calculus Language-rich						
Oral Health		14 credits L3				++	
Dental Technology	14 credits in: 2 x Level 3 NCEA-approved subjects from science, maths or technology; physics strongly recommended						
Radiation Therapy	16 Level 3 credits in: Physics or biology and maths or calculus or statistics and English or te reo Māori or history or art history or classics or geography or te reo rangatira						

Admission requirements: University entrance qualification The following background subjects are recommended to Year 13							
	Chemistry	Biology	Physics	Statistics	Calculus	Language-rich*	Other useful supporting subjects
Health Sciences First Year	++		++		++	++	PE, statistics, biology
Biomedical Sciences	++	+		+		+	PE
Bachelor of Health Sciences (all majors)		++		++		++	Social sciences, chemistry, health, PE
Pharmaceutical Sciences	++	+	++		++	+	PE

Key

The Language-rich* category includes reading, research and written communication-based subjects such as English, history, classics and history of art.

- + Background learning useful
- ++ Background learning recommended

For information about university entrance qualifications, see

otago.ac.nz/entrance

Get help with your application Ka āwhina i a koe ki tō tono

Do you have questions about programmes, requirements or the application process?

Schools' liaison

Schools' liaison work with anyone considering study at Otago, including secondary school students and adults thinking about returning to education.

If you're a secondary school student, your schools' liaison officer will visit your school to help you plan your first year of study. You can also contact them at any time through their offices.

otago.ac.nz/liaison

How to apply

Applications to Otago are made online through eVision. Once you've created your account, eVision will guide you through the application process. All enrolment, scholarship, and residential college applications are made via eVision.

otago.ac.nz/study/enrolment

AskOtago

AskOtago is your one-stop shop for all questions about studying at Otago. Find answers with our searchable knowledgebase, or call, email or chat with us. You can also visit our hub in the Information Services Building, or at one of our other hubs around campus.

ask.otago.ac.nz

Course advice

Once you're on campus, course advisers are available to help. Course advice is available as many times as you need throughout your time at Otago.

otago.ac.nz/courseadvice

Our programmes Ā mātou hōtaka

Want a career that contributes to the health and wellbeing of Aotearoa New Zealand? Whether you already have a clear idea of what you want to do after university – or you just know you want a career you love, that makes a genuine difference to people's lives – our programmes can help you get there.

Entry Programme

Health Sciences First Year (HSFY)

Professional Programmes

Bachelor of Dental Surgery (HSFY required) Bachelor of Dental Technology (HSFY optional) Bachelor of Medical Laboratory Science (HSFY required)

Bachelor of Medicine (HSFY required)
Bachelor of Oral Health (HSFY optional)
Bachelor of Pharmacy (HSFY required)
Bachelor of Physiotherapy (HSFY required)
Bachelor of Radiation Therapy (Wellington campus) (HSFY optional)

Health Sciences Programmes

Bachelor of Biomedical Sciences (BSFY required or HSFY optional)

- · Drugs and Human Health
- · Functional Human Biology
- · Infection and Immunity
- · Molecular Basis of Health and Disease
- Nutrition and Metabolism in Human Health
- · Reproduction, Genetics and Development

Bachelor of Health Sciences (HSFY optional)

- · Pacific and Global Health
- · Community Health Care
- · Māori Health
- · Public Health

Bachelor of Pharmaceutical Science (HSFY optional)

Pathways into our programmes Kā ara rau e uru atu ai ki ā mātou hōtaka

We offer 11 Health Sciences qualifications at Otago. Most programmes offer direct entry, however some professional programmes require students to first complete Health Sciences First Year.

Important information for planning your study

Most Health Sciences students begin with Health Sciences First Year (HSFY). That's because you can go from HSFY into any of the qualifications listed here. In most cases, HSFY will count as the first year of your degree. This means HSFY adds no extra time or cost to your study, and gives you options across all of the professional and Science programmes at the end of your first year. HSFY can be used as the first year of the Bachelors of Biomedical Science, Health Science, and Pharmaceutical Science, and also the first year of a Bachelor of Science majoring in:

- Anatomy
- · Biochemistry
- · Forensic Analytical Science
- · Genetics
- · Microbiology and Immunology
- · Neuroscience
- · Pharmacology and Toxicology
- Physiology

You can also enter into Dental Technology, Oral Health, and Radiation Therapy from HSFY, with HSFY as an additional year of study.

	Year 1	Year 2	Year 3			
Professional Programmes		Bachelor of Medicine and Surgery				
	Health Sciences First Year	Bachelor of Dental Surgery				
		Bachelor of Medical Laboratory Science				
		Bachelor of Pharmacy				
		Bachelor of Physiotherapy				
	Bachelor of Dental Technology					
	Bachelor of Oral Health					
	Bachelor of Radiation Therapy					
Health Sciences Programmes	Bachelor of Biomedical Science					
	Bachelor of Health Science					
	Bachelor of Pharmaceutical Science					
Sciences Programmes	Bachelor of Science					

Year 4	Year 5	Year 6	Year 7 +					
			Two years as a house officer and approximately six years of specialist training					
	Apply for professional registration direct from qualification							
	Trainee role for at least six months, then professional registration							
	The Intern Training Programme runs from 1 February until 7 November each calendar year							
	Apply for professional registration direct from qualification							
Apply for profess	Apply for professional registration direct from qualification, or continue with postgraduate study							
Apply for profess	Apply for professional registration direct from qualification							
Apply for professional registration direct from qualification								
Enter workforce after graduation; apply for a professional course; apply for technicial-related health positions; continue into postgraduate study at honours, master's or doctorate levels								
See Sciences at	See Sciences at Otago guide for major/degree information							



Ivana Barbalich

Bachelor of Medicine and Bachelor of Surgery

"HSFY was a life-changing experience. It is intense but completely doable if you set your mind to it and are resilient. It is a very well-organised course with clear expectations, structure and support. Seeking clarification of content from lab demonstrators, help desks and college tutors was fundamental in my experience. Working consistently is the way to go – it's a marathon, not a sprint."



Health Sciences First Year Mātau Hauora Tau Tuatahi

- · Full time: 1 year
- · Location: Dunedin
- · Applications close: 10 December

Health Sciences First Year (HSFY) is the launching pad for many health professional programmes and an excellent way to begin degrees in biological sciences, biomedical sciences or any health sciences-based degree.

About the programme

You'll gain foundational knowledge about how the body functions at various levels, from the physical, chemical, biochemical, molecular and cellular levels, through to functional organ systems and factors affecting health and disease in human populations.

HSFY is only available at Otago, and must be completed in its entirety in the first year of your university study. It's a busy year that includes weekly lectures, tutorials, laboratories, assignments, tests and readings.

HSFY is a common entrance pathway into Dental Surgery, Medical Laboratory Science, Medicine, Pharmacy, or Physiotherapy. But your options don't end there. HSFY can be credited towards a wide range of degrees and many students discover new areas of interest after taking HSFY.

Recommended subjects

There are no subject requirements for entry into HSFY, but we strongly recommend you take chemistry, physics and calculus in Year 13.

Prepare for HSFY

If you haven't studied NCEA chemistry or physics, there are various ways you can upskill before starting HSFY. For more information: otago.ac.nz/hsfy/preparing-to-study

All HSFY students will be required to pass a compulsory English diagnostic test in semester 1. Students who do not pass the test will be required to take ENGL 128.

What will you study?

HSFY is made up of seven compulsory papers:

BIOC 192 Foundations of Biochemistry

CELS 191 Cell and Molecular Biology

CHEM 191 The Chemical Basis of Biology and Human Health

HUBS 191 Human Body Systems 1

HUBS 192 Human Body Systems 2

PHSI 191 Biological Physics

POPH 192 Population Health

There's also the option to take an eighth paper to study something outside of health sciences. Learn more: otago.ac.nz/hsfy8thpaper

otago.ac.nz/hsfy

What can you do after completing Health Sciences First Year?

Apply for admission into a professional programme:

Dental Surgery

Dental Technology (HSFY not required)

Medical Laboratory Science

Medicine

Oral Health (HSFY not required)

Pharmacy

Physiotherapy

Radiation Therapy (Wellington campus) (HSFY not required)

Study for a Bachelor of Pharmaceutical Science (HSFY not required)

Study for a Bachelor of Biomedical Sciences and major in:

- Drugs and Human Health
- Functional Human Biology
- · Infection and Immunity
- · Molecular Basis of Health and Disease
- · Nutrition and Metabolism in Human Health
- · Reproduction, Genetics and Development

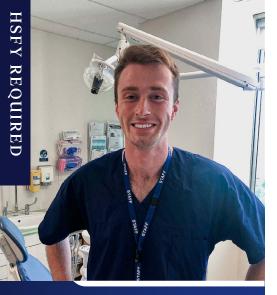
Choose a Bachelor of Health Sciences and major in:

- · Community Health Care
- Māori Health
- · Pacific and Global Health
- · Public Health

Explore the biological sciences with a Bachelor of Science and major in:

- Anatomy
- Biochemistry
- Forensic Analytical Science
- Genetics
- Microbiology and Immunology
- Neuroscience
- Pharmacology and Toxicology
- Physiology

See $\it Sciences\ at\ Otago$ guide for more information about the Bachelor of Science.



Duncan McCrory

Bachelor of Dental Surgery

Maxillofacial and Dental House Officer, Auckland District Health Board

"At Otago, you will make lifelong friends and get the chance to work with great people, some of whom are world-renowned clinicians in their field and keen to pass on their knowledge. Combine this with the brand-new facilities offered at Otago and it's easy to see why the education here is among the best in the world

"The Faculty of Dentistry taught me about more than just teeth. To be a dentist, one must be a doctor, engineer, and artist all in one, giving us the ability to apply scientific principles, artistic talents and human physiology, all while keeping the patient at the centre of our focus."



Bachelor of Dental Surgery (BDS) Tohu Paetahi Hāparapara Niho

- Full time: 5 years (including 1 year HSFY)
- · Location: Dunedin (Year 5: Auckland or Dunedin)
- · Applications close: 15 September

Dentistry combines a high degree of manual dexterity and precision with strong scientific knowledge and excellent communication skills. As a dentist, you'll be the leader of an oral health team, diagnosing and carrying out treatment to suit each patient's needs.

State-of-the-art teaching facilities

Learn in Aotearoa's only dental teaching hospital. Located next to the university, in the heart of Dunedin's health precinct, you'll help real patients and train alongside Oral Health and Dental Technology students, giving you the experience of working in an integrated, professional dental team from the start.

Study timeline

After admission from HSFY (or from other entry categories), you'll undertake a further four years of study within the Faculty of Dentistry. In your fifth (final) year, you'll undertake clinical work in either Dunedin or Auckland.

Career opportunities

As a graduate, there are opportunities in private general practice or specialist practice. You could also work in a hospital, community clinic or a defence-based practice. Dentistry provides considerable variety and lifelong learning as you work to maintain your practising standards.

otago.ac.nz/dentalsurgery

Bachelor of Dental Technology (BDentTech) Tohu Paetahi Hangarau ā-Niho

· Full time: 3 years

· Location: Dunedin

· Applications close: 15 September

Interested in a career that combines hands-on practical work, creativity and the ability to care for people? Study Dental Technology and learn how to design and construct dental appliances that improve the health and wellbeing of patients.

Learn the biomechanics and biomaterials science behind dental appliance design, and work with a wide range of materials, including gold, porcelain and acrylic, to make artificial teeth and removable orthodontic appliances.

If you enjoy working with your hands on detailed and delicate items, Dental Technology could be for you. A dental technician learns to visualise in a 3D perspective. They typically have an eye for detail to get things just right.

Our state-of-the-art laboratories provide hands-on experience with the latest industry-standard equipment including computer-aided design (CAD), computer-aided manufacturing (CAM), milling and 3D printing.

Professional registration

The profession of dental technician is registered under the Health Practitioners Competence Assurance Act (2004). Graduates of the Bachelor of Dental Technology programme are automatically entitled to register with the New Zealand Dental Council in order to practise as a registered dental technician.

Career opportunities

Skilled dental technicians are in high demand around the world. You could work in a commercial dental laboratory, providing appliances to private dental clinics, the defence forces, hospitals and state dental services. You could also pursue postgraduate studies to enable you to work direct with patients.

otago.ac.nz/denttech



Ana Grymak

Bachelor of Dental Technology with Honours

"Dental technology is a new, exciting and creative field. The course is very hands-on, with a great balance between theory and practical aspects. The class culture and the learning environment is friendly with great support from the lecturers. Making a dental appliance might seem like a simple process, but there is complex science behind the work."





Lisa Stevens

Bachelor of Medical Laboratory Science

Technical Officer, World Health Organization

"If you're interested in healthcare and diagnostics, this course is for you. It was great getting such a broadspectrum look at many aspects of human pathologies, like haematology, biochemistry and microbiology. But it was also good to specialise in areas that were particularly interesting to me. My beginnings in the BMLSc at Otago set me up for a long and exciting career in infection sciences. The education and skills I gained at Otago meant that I could be competitive and capable on the world stage of laboratory science."



Bachelor of Medical Laboratory Science (BMLSc) Tohu Paetahi Taiwhanga Pūtaiao Rongoā

- Full time: 4 years (including 1 year HSFY)
- · Location: Dunedin
- · Applications close: 10 December

Medical laboratory professionals are the behind-the-scenes backbone of medicine, playing a major part in helping to diagnose and treat diseases. The test results that medical laboratory scientists provide have an immediate impact on the care of patients, especially those who are critically ill.

Medical laboratory scientists also play important roles in areas such as medical research, forensic science and biotechnology.

Join a life-saving profession

70 per cent of diagnoses made by clinical staff (such as doctors) depend on laboratory tests, making medical laboratory science a life-saving profession.

Choose your speciality

Medical Laboratory Science covers a wide range of subjects. You'll choose to focus on two of these for your fourth-year clinical placement:

- Haematology
- Chemical pathology
- Histology and cytology
- Immunology
- Microbiology and virology
- · Transfusion science
- · Molecular diagnostics

Professional registration

Around 70 per cent of graduates work for at least six months in diagnostic medical laboratories. This is necessary to fulfil the requirements for registration with the Medical Science Council of New Zealand.

Career opportunities

With a qualification that's recognised in most countries, and an increasing shortage of medical laboratory scientists worldwide, this degree provides plenty of career opportunities.

otago.ac.nz/medlabsci

Bachelor of Medicine and Bachelor of Surgery (MB ChB) Tohu Paetahi Rongoā, Tohu Paetahi Hāparapara

- Full time: 6 years (including 1 year HSFY)
- Location: Years 1-3: Dunedin. Years 4-6: students will be divided and allocated to: Dunedin, Christchurch, or Wellington.
- · Applications close: 10 December

Being a doctor is a challenging and exciting career that requires the highest level of clinical competency, excellent communication and research skills, and a high standard of professional and ethical behaviour.

At Otago, you'll be taught by experienced clinicians who are at the forefront of modern practice. If you're applying from school, you'll enrol in Health Sciences First Year and then apply for admission to second-year Medicine. Selection from HSFY is very competitive. Graduates can also apply for admission at second year.

There is a wide range of specialisation available in the public and private sectors – most doctors choose to complete postgraduate training in their chosen specialty. This can include Cardiology, Oncology, Paediatrics, Psychological Medicine, Surgery, Pathology, Public Health, General Practice and many others.

What will you study?

You'll spend your first two years at Dunedin Medical School where topics will include clinical skills, integrated cases, Early Professional Experience (EPE), medical sciences, ethics, professional development, evidence-based medicine, transfusion science, and molecular diagnostics.

Clinical training

For your final three years of study, you'll undertake clinical training in either Christchurch, Wellington or Dunedin. You'll rotate around a variety of specialties, gaining exposure to medical disciplines and contexts, and take part in a Rural Medical Immersion Programme.

Professional registration

Before you can practise as a doctor in New Zealand, you must register with the Medical Council of New Zealand and complete a one-year internship in a hospital.

otago.ac.nz/medicine



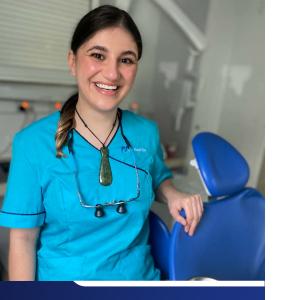
Grace Macaulay

Bachelor of Medicine and Bachelor of Surgery, Bachelor of Medical Science with Honours, Postgraduate Diploma in Child Health

Clinical Trials Project Manager -Oxford Vaccine Group, Department of Paediatrics, University of Oxford

"The Medicine programme at Otago was varied and diverse in its teaching and clinical experiences. I enjoyed the focus on group work in the second and third years and then the challenges and accelerated learning offered by the hands-on placements in the last three years. My medical degree sparked my passion and desire for life-long learning. It has allowed me to identify and bring my own experiences and strengths to the collective work of promoting and striving for equitable, sustainable and meaningful health outcomes for all patients in Aotearoa."





Lateisha Chant

Rangitāne ki Wairau, Ngāti Apa ki te Rā Tō, Ngāti Kuia, Kāi Tahu

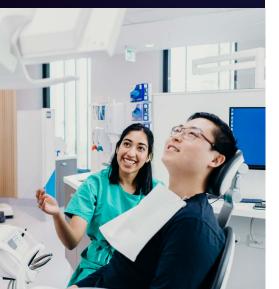
Bachelor of Oral Health

Oral Health Therapist, Te Whatu Ora

– Te Tai Tokerau (Health New Zealand,
Northland region)

"One of the main reasons I chose to study for a Bachelor of Oral Health was because of how community-focused it is, so it really aligned with my values. My parents both grew up with poorer oral health, so I saw how it can negatively impact someone's overall quality of life in the future. I really wanted a career where I could help to prevent this from happening to our tamariki.

"I really enjoyed how hands-on the degree is, with a good mixture of both academic and clinical work. I loved meeting a wide variety of people from all aspects of the dental profession, who end up being the colleagues you collaborate with or refer to in the future."



Bachelor of Oral Health (BOH) Tohu Paetahi Oranga Waha

· Full time: 3 years

· Location: Dunedin

· Applications close: 15 September

Good oral health can change lives. Study for a Bachelor of Oral Health and you'll gain skills in dental hygiene, dental therapy and oral health promotion, enabling you to play an important role within a dental team and the community.

Prevent and manage oral disease

Learn how to diagnose and treat oral diseases (such as gum disease and dental decay), educate patients about their oral health, and provide quality care for patients of all ages, including restorative care for children and adolescents.

Promote healthy lifestyles

Foster lifelong positive oral health attitudes and behaviour in your patients. You'll learn how to apply your knowledge about health and disease to health promotion in education, community development and public policy.

Professional registration

Graduates of the Bachelor of Oral Health programme are automatically entitled to register as an Oral Health Practitioner with the New Zealand Dental Council.

Career opportunities

Employment opportunities include working in private dental practices, specialist practices, community-based clinics, iwi-based clinics, and hospital dental clinics.

otago.ac.nz/oralhealth

Bachelor of Pharmacy (BPharm) Tohu Paetahi Taka Rongoā

- Full time: 4 years (including 1 year HSFY)
- · Location: Dunedin
- · Applications close: 10 December

Pharmacists work directly with patients, helping them understand their medicines and use them in the most effective way. As medicines experts, pharmacists are trusted by other healthcare professionals to assess prescriptions and recommend the best combination of medicines. Pharmacists also assess and treat health conditions, prescribe medication, and give life-saving vaccinations.

On this programme, you'll study the foundational sciences that underpin pharmacy, such as drug design, delivery and pharmacology. You'll learn about the practice and role of pharmacists in improving the health outcomes of patients and focus on person-centred care in clinical settings and patients in the community.

Pharmacy is a varied profession, from manufacturing medicines through to optimising patient health-related outcomes and providing ongoing monitoring of their effectiveness.

Gain hands-on skills

You'll spend time in our Virtual Professional Practice Laboratory, where you'll use the latest procedures and technologies. You'll also get real-life experience at our pharmacy clinic – the only university pharmacy clinic in New Zealand and Australia – and opportunities to learn in different types of pharmacy environments alongside practising pharmacists.

Professional registration

Once you complete your fourth year and graduate, there is a one-year, pre-registration internship programme which is overseen by the Pharmacy Council of New Zealand. This is undertaken as paid employment at an approved site in a hospital or community pharmacy.

Career opportunities

Pharmacists can work in a wide variety of locations including community pharmacies, clinics, hospital pharmacies, pharmacy regulation bodies, drug companies, universities, government organisations, or they can own their own pharmacy.

otago.ac.nz/pharmacy



Paige Rangi

Ngāti Kahungunu

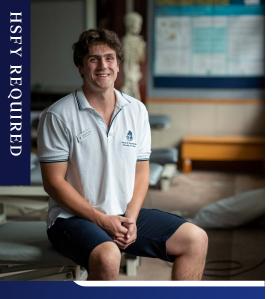
Bachelor of Pharmacy with Honours

Intern Pharmacist, Palmerston North Hospital

"From a young age, I knew that I wanted to be a health professional. After a hospital pharmacy experience during secondary school, I knew that Pharmacy was it for me – I loved the fact that I could have a career and still have lots of time to spend with family and friends. I decided to do an honours degree because, throughout my studies, I realised that research has a huge impact on health outcomes and I wanted to develop my skills in this area.

"I loved learning a wide variety of subjects from anatomy to pharmacology and law, and being able to visualise how what I was learning was going to help me in my future career. I love being challenged and found that Pharmacy was the perfect mix of clinical and social health."





Hamish Laing

Bachelor of Physiotherapy

Physiotherapist, Elite Physiotherapy

"The course is very hands-on – we got to interact with patients in the early stages of the second year – which was good for me because I find it is easier to learn through practical means.

"I enjoyed the support and fun opportunities amongst my cohort, and interacting with members of the community and helping them through my placements."



Bachelor of Physiotherapy (BPhty) Tohu Paetahi Haumanu Korikori

- Full time: 4 years (including 1 year HSFY)
- Location: Dunedin
- · Applications close: 10 December

Physiotherapists play an essential role in helping people achieve optimal physical function and heathly lifestyles. They treat people of all ages and from all backgrounds – from babies with breathing issues to people with cerebral palsy and sporting injuries, as well as those who have recently given birth, or are recovering from a stroke or surgery.

On this programme, you'll learn how to assess, treat and prevent a wide range of physical limitations and dysfunction, and gain expertise in exercise therapies, and manual rehabilitation techniques. Through real clinical scenarios and hands-on learning, you'll develop the skills to support individuals to live fulfilling and active lives. You'll also empower your patients to take a more active role in their own rehabilitation and personal healthcare, making it a very rewarding career.

Otago's School of Physiotherapy has a long-standing international reputation as a leader in education, research and clinical practice. Our programmes are informed by the latest research and continually improved to keep in step with leading edge physiotherapy practice.

Career opportunities

Physiotherapists work in hospitals, aged care facilities, rehabilitation centres or private practice. Graduates also find employment with sports teams, fitness centres, sports clinics, or schools, and many establish their own private practices. Opportunities also exist within large companies as occupational health and safety professionals, and in the areas of health management and policy.

International networks

Physiotherapy offers career pathways through supportive and established international networks, including the World Confederation for Physical Therapy.

otago.ac.nz/physio

Bachelor of Radiation Therapy (BRT) Tohu Paetahi Haumanu Iraruke

· Full time: 3 years

· Location: Wellington

· Applications close: 15 September

Radiation therapists are involved in the planning and delivery of radiation treatment and care for patients with cancer. Radiation therapy is a highly skilled health profession and, because cancer affects so many people, qualified radiation therapists are in demand.

A degree in Radiation Therapy combines a variety of learning from health science to technology, patient care and teamwork. It's taught from the Wellington campus of the University of Otago, next to Wellington Hospital. Students go on clinical placements at cancer centres around the country during their study, gaining the experience that allows an easier transition to working once qualified.

Connect with patients

Study to become a qualified radiation therapist and make a real difference to the health of Aotearoa. Due to the lengthy nature of cancer treatment – sometimes five days a week for up to seven weeks – you'll get to know your patients and their whānau well, which is very rewarding.

Great work/life balance

Radiation therapists work in a fast-paced, high-tech environment. It's a career that offers a great work/life balance as you'll typically work standard hours.

Study in Poneke/Wellington

Wellington is renowned for its food, entertainment and arts culture and our Newtown campus is just minutes from the city centre. The University of Otago does not have any residential colleges in Wellington, however Radiation Therapy students can apply directly to Victoria University and Massey University (Wellington campus) for accommodation. This is a popular option for first-year students, especially those away from home for the first time. Many students choose to flat together. For more information, talk to our schools' liaison team or contact us at rtenquiries.uow@otago.ac.nz

Visit a cancer centre

See first-hand what Radiation Therapy is all about by attending one of our information sessions held at cancer centres around the country. See the website below for dates.

Professional registration

Graduates are eligible for registration with the New Zealand Medical Radiation Technologists Board. There are excellent career opportunities both in New Zealand and overseas. Radiation oncology departments in New Zealand are at six public hospitals (Auckland, Waikato, Palmerston North, Wellington, Christchurch and Dunedin), and four private centres (Auckland, Tauranga, Wellington and Christchurch).

otago.ac.nz/radiationtherapy



Ariana Cann

Ngāti Ruanui

Bachelor of Radiation Therapy

Radiation Therapist, Kathleen Kilgour Centre

"I realised I wanted to work within the health sector, helping people, so I decided to pursue a degree in Radiation Therapy, which is the perfect combination of technology, science, anatomy and patient care – all the things I'm passionate about. The second and third years of the programme are a combination of theory and clinical placement in a hospital. At the end of the third year, you are essentially working as a radiation therapist, so I was well prepared to begin working."





Jordon Lima

Ngāti Porou

Bachelor of Biomedical Sciences with Honours, PhD candidate

"I love science, problem-solving and being creative. Studying disease at a molecular level ticks all these boxes for me. A highlight of my time at Otago has been the amazing people who support me on my journey to create safe Māori spaces in Biomedical Sciences. I am driven to improve access to cancer care for rural and Māori communities as I have suffered the loss of loved ones from such inequities."



Bachelor of Biomedical Sciences (BBiomedSc) Tohu Paetahi Pūtaiao Rongoā Koiora

· Full time: 3 years

· Location: Dunedin

· Applications close: 10 December

With one degree, learn about it all – the fundamentals of human biology, health and wellbeing as well as the causes, diagnosis, and remedies of human diseases like cancer, diabetes, COVID-19, flu, tuberculosis, and brain and heart disorders.

Through a combination of theoretical, practical, and self-directed learning, you'll develop knowledge and skills in laboratory techniques; data analysis, handling and presentation; report writing; and teamwork.

Starting with Biomedical Sciences First Year (BSFY), you'll explore the fundamentals of cell and molecular biology, chemistry and biochemistry, and human structure and function. In your second year of study, you'll choose to specialise in one of six subjects, giving you the opportunity to shape your study around the fields that interest you the most

Career opportunities

Your working life might begin with an innovative biotechnology company or with a more established company in the pharmaceutical, biomedical, or agricultural sectors.

Alternatively, you might be employed by a research institute, in a university, government agency or local authority, using the scientific skills you have learned during your studies to provide policy, technical, or diagnostic advice.

A significant number of our BBiomedSc graduates are also successful in obtaining PhD positions or gaining postgraduate entry into professional health programmes such as Dentistry, Medicine, and Pharmacy.

Choose from six majors:

- Drugs and Human Health
- Functional Human Biology
- Infection and Immunity
- Molecular Basis of Health and Disease
- · Nutrition and Metabolism in Human Health
- · Reproduction, Genetics and Development

otago.ac.nz/bbiomedsc

Bachelor of Biomedical Sciences programme structure

YEAR 1	BIOC 192 Foundations of Biochemistry	CELS 191 Cell and Molecular Biology	CHEM 191 The Chemical Basis of Biology and Human Health	HUBS 191 Human Body Systems 1	HUBS 192 Human Body Systems 2	Other 100-level 18 points	Other 100-level 18 points
YEAR 2	PHSL 231 Neurophysiology or ANAT 241 Human Biology: cells to systems	PHSL 232 Cardiovascular and Respiratory Physiology	Gastrointestinal and Renal BIOC 221, MICR 221, M		oints from ANAT 24 OC 223, HUNT 24 AICR 223, PATH 20 PHAL 212, PHSL 23	Other 200-level 18 points	
YEAR 3	PHSL 343 Cellular and Epithelial Physiology	PHSL 345 Physiological Aspects of Health and Disease	At least 36 points from ANAT 331, ANAT 332, ANAT 335, BIOC 353, HUNT 342, MICR 332, MICR 334, PATH 301, PHAL 304, PHAL 305, PHSL 342 (or PHSL 341 or PHSL 344)		Other 300-level 18 points	Other 300-level 18 points	Total 360 points

Drugs and Human Health

otago.ac.nz/subjects/drhh

As our knowledge of human health advances, so does the need for new drugs and treatments.

In this major, you'll learn about the different types of drugs used to treat disease. You'll explore drug toxicology and drug safety, and the discovery process for translating molecules with therapeutic potential into clinical use.

Functional Human Biology

otago.ac.nz/subjects/fuhb

Ultimately, human health depends on the correct functioning of the cells, tissues and organ systems of the body. Understanding disease, in turn, rests upon knowledge of the pathological processes on these systems. This major provides an overview of the functional mechanisms of the multiple systems in the human body and explores specific areas in depth with a research-informed focus.

Infection and Immunity

otago.ac.nz/subjects/inim

The human immune system defends the body from disease-causing microbial invaders like viruses and bacteria. This major provides in-depth knowledge of the immune system: how it develops, how it functions, its role in health and disease, and what happens when it fails to function.

You'll study the microbes responsible for infectious diseases such as HIV, tuberculosis and meningococcal disease, how these infectious diseases are controlled, and how antibiotic resistance arises. You'll also explore how the immune system can be used to treat diseases such as cancer.

Molecular Basis of Health and Disease

otago.ac.nz/subjects/mbhd

You'll explore a varied range of topics including pathways of cell growth, cell survival and death, protein interactions in cell signalling pathways, dysregulation of metabolism, and the expression of disease phenotypes.

Nutrition and Metabolism in Human Health

otago.ac.nz/subjects/nmhh

This major focuses on the biochemistry and metabolism of essential nutrients, including carbohydrates, fats, protein, vitamins and minerals, with an emphasis on human health and disease across the lifecycle. Topics covered include nutritional assessment, energy balance, and the role of nutrition in the development and treatment of chronic disease.

Reproduction, Genetics and Development

otago.ac.nz/subjects/regd

One of the key objectives in current biomedical science research is to understand the interplay between our genes and physiology during reproduction and development. In this major, you'll examine the biology of reproduction, embryo formation and development, and the genetics underlying these events. You'll also have the opportunity to explore key anatomical and genetic techniques.



Portia Sutherland

Bachelor of Health Sciences

Health Promotion Officer, Te Whatu Ora Health New Zealand

"I chose to study a Bachelor of Health Sciences degree after completing Health Sciences First Year, as I realised that I was interested in improving the health of populations in a non-clinical way. Majoring in Public Health particularly interested me because of the wide scope of work that it offers.

"My time at Otago gave me the opportunity to complete hands-on research into an issue that was of national significance and relevance – I believe this experience prepared me well for working as part of a public health response to COVID-19."



Bachelor of Health Sciences (BHealSc) Tohu Paetahi Mātau Hauora

· Full time: 3 years

· Location: Dunedin

This career-focused degree will give you the skills needed to help address the global challenges impacting the health and wellbeing of our communities.

Through classroom and hands-on learning, you'll gain expertise in topics such as health services, health policy, social health, and population health, and learn how to develop innovative and proactive approaches to challenging and complex health needs.

Choose from four majors:

- · Community Health Care
- Māori Health
- · Pacific and Global Health
- · Public Health

otago.ac.nz/bhealsc

Community Health Care

otago.ac.nz/subjects/cmhc

The Bachelor of Health Sciences majoring in Community Health Care is a three-year degree for those who want to help shape the future of healthcare and respond to the challenges facing our healthcare system.

Through interactive learning, you'll examine the biological, sociological, cultural, psychological, and developmental perspectives of healthcare. You'll study health and wellbeing, disability, human development, and common health problems, enabling you to deliver compassionate and inclusive care and services to individuals, whānau and communities.

Career opportunities

You'll be well equipped to gain employment in a variety of community roles within primary and secondary healthcare settings, policy and managerial roles, or in health and disability services.

Māori Health

otago.ac.nz/subjects/maoh

Māori Health focuses on making a difference for Māori health outcomes. Learn how to provide culturally responsive health practice when working with Māori individuals, whānau, communities, organisations and populations.

You'll explore the historical, social, and cultural contexts to Māori health, and examine strategies for addressing health inequities. You'll learn how to work within Māori communities in a way that reflects te ao Māori, and how to apply and integrate indigenous knowledge and practices in health practice.

Career opportunities

You could take up a role within the Māori health, public health, healthcare, disability and social services sectors.

Pacific and Global Health

otago.ac.nz/subjects/pach

Gain a holistic perspective of health and wellbeing, and develop the skills and knowledge needed to serve the health needs of Pacific people and communities in New Zealand and across the Pacific region.

On this programme, you'll learn how to effectively engage with Pacific peoples and communities to create positive healthcare solutions. You'll explore how the health of Pacific peoples has been impacted by historical and contemporary challenges, and learn how to apply Pacific belief systems, values, principles, and ethical approaches to healthcare.

Through first-hand learning from community and global health leaders, and participation in Pacific cultural practices, you'll graduate with the ability to make a positive impact on the health and wellbeing of Pacific peoples.

Career opportunities

You could find a career in community work, as a health navigator, in international health organisations or in policy change. You might work for organisations like the Ministry of Health or Te Whatu Ora in managerial, adviser, analyst, or engagement co-ordinator roles.

Public Health

otago.ac.nz/subjects/pubh

As society becomes more interconnected, we're facing new health challenges. People are living longer, often with multiple long-term conditions and disabilities. Our healthcare resources are under increasing pressure and we're seeing the effects of environmental change on our health.

This programme will equip you with the skills to address these challenges. With a strong focus on reducing ethnic and socioeconomic inequities, you'll learn how to identity and understand the collaboration needed across sectors and disciplines to prevent and control disease, prolong life, and actively promote good health.

Through classroom and hands-on learning, you'll learn how to question the context of disease, and to consider all the elements that impact health and disease in communities – from policies and pollution to humanitarian crises and personal choices.

Career opportunities

After graduating, you'll have the knowledge and skills to work in the wider health sector, including within government and non-government organisations in areas such as hauora Māori, health policy, and health promotion.



Professor Sarah Hook

Chair of Pharmaceutics

"The importance of medicines to individuals and our society has never been more apparent and will continue to gain significance with increasing globalisation and urbanisation.

"This reliance on medicines means there will be ongoing demand for the skilled, innovative pharmaceutical scientists our new degree will deliver.

"The expertise of our staff in the design, synthesis, formulation and delivery of pharmaceuticals and rongoā will excite and empower students for a wide variety of careers both nationally and internationally."



Bachelor of Pharmaceutical Science (BPharmSc) Tohu Paetahi Pūtaiao Taka Rongoā

- Full time: 3 years (or HSFY + 2 years)
- · Location: Dunedin
- · Applications close: 10 December

This lab-based degree – the only one of its kind in Aotearoa – opens doors to the diverse and rapidly growing pharmaceutical industry and health-related research careers.

Taught by industry experts and academics, you'll learn through lectures, laboratory classes, tutorials and interactive workshop sessions. You'll delve into the scientific basis of the discovery, design, development, formulation and use of drugs, honing your practical skills in our state-of-the-art laboratories.

Unique Aotearoa perspective

This degree incorporates rongoā Māori, to help understand medicines beyond western practice and give you training that's only available at Otago.

Expand your knowledge

Areas of study include medicinal chemistry, microbiology, pathology, formulation science, pharmacognosy, pharmacology, pharmacokinetics, pharmacodynamics and more.

Career opportunities

This degree paves the way to a career in a wide range of industries, from the make-up and beauty industry to working with explosives! You could work as a researcher, formulation scientist, regulatory affairs officer, border control agent or within marketing and sales, quality control, and more.

otago.ac.nz/bpharmsc

Useful information

General information for new students otago.ac.nz/future-students

Applying to study at Otago otago.ac.nz/enrolment

Accommodation at Otago otago.ac.nz/accommodation

Locals otago.ac.nz/locals

Te Huka Mātauraka / Māori Centre otago.ac.nz/maoricentre

Pacific Islands Centre otago.ac.nz/pacific

While all information in this booklet is, as far as possible, up to date and accurate at the time of production, the University reserves the right to change courses and course requirements, and to make any other alterations, as may be deemed necessary.

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