Medical and Health Sciences
Undergraduate Prospectus 2022
Medical Sciences | Medicine | Medical Imaging | Nursing | Optometry and Vision Science | Pharmacy | Population Health
If you are thinking of a career in medical and health sciences, we can provide you with the foundations for a rewarding career. We offer qualifications and pathways to help you prepare for almost any health career.

As a student here, you will benefit from academic, professional and research staff who are at the forefront of their fields. Many of our staff have contributed to significant discoveries in modern medicine, and our graduates are employed in some of the world’s best hospitals, medical centres, laboratories and biotech companies.

We offer our students the best learning experience through teaching that is professional, engaging and delivered in a range of modern facilities, including laboratories, lecture theatres, mock hospital rooms, and our world-class Auckland Medical Research Foundation (AMRF) Medical Sciences Learning Centre – Whakaaro Pai.

Since our beginnings in 1968, we have become internationally recognised as a comprehensive health sciences faculty, with more than 1,000 staff and 4,500 students across fields such as Health Promotion and Management, Medical Science, Medicine, Nursing, Optometry, Medical Imaging, Public Health, Pharmacy and so much more.

The Faculty of Medical and Health Sciences plays a significant role in making the University of Auckland New Zealand’s premier university, ranked in the top 100 in the world.*

Join us in 2022, become part of a welcoming and supportive family and be part of an active student body.

This prospectus is a guide to the undergraduate study options offered through our six schools: Medicine, Medical Sciences, Nursing, Optometry and Vision Science, Pharmacy and Population Health.

Explore our prospectus and visit our website to learn about the options. I very much look forward to welcoming you in 2022.

PROFESSOR JOHN FRASER
Dean, Faculty of Medical and Health Sciences
The University of Auckland

*Times Higher Education and QS World University Ranking 2021
Cover attributions:
1 Times Higher Education and QS World Rankings 2021
2 Times Higher Education University Impact Rankings 2020
3 QS World Rankings Graduate Employability, number one in NZ and 59th Worldwide in 2020
Welcome to the Faculty of Medical and Health Sciences

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Nau mai, haere mai
Māori and Pacific at our faculty

E ōgā waka, e ōgā mana, e rau rangatira mā. Tēnā rā koutou katoa.
Malo e lelei, kia orana, talofa lava, fakaalofa lahi atu, ni sa bula, taloha ni, halo olaketa, ia orana, kam na maori.

Whaia te pae tāwhiti kia tata whakamaua te pae tata kia tīna.
Reach for the distant horizons and hold fast to those that you attain.

Welcome to the Faculty of Medical and Health Sciences (FMHS) at the University of Auckland. Through our Vision 20:20 initiative, we are aiming to change the face of the health workforce in Aotearoa New Zealand by increasing the number of Māori and Pacific health professionals, including health workers, policy makers and researchers.

We are determined to optimise the health and well-being of Māori and Pacific communities by supporting Māori and Pacific students reach their career goals in health, this vision moves closer.

I am a proud graduate of the University of Auckland and of programmes within this faculty. As a leader and senior staff member, I can assure you that the quality of our programmes and our staff’s commitment will provide you with the foundation you need for a rewarding career in health.

I look forward to welcoming you to our University.

I am delighted to add my welcome to that of the Tumuaki and Dean of the Faculty of Medical and Health Sciences. We are building a learning environment that will continue to be the preferred place to study for a career in health in New Zealand, the Pacific and beyond.

I look forward to meeting you should you choose to study at the University of Auckland.

PROFESSOR PAPAARANGI REID (Te Rarawa)
Tumuaki

ASSOCIATE PROFESSOR COLLIN TUKUITONGA
Associate Dean (Pacific)
An initiative to increase the number of Māori and Pacific professionals in the health workforce

Vision 20:20 has three components coordinated by Te Kupenga Hauora Māori (Department of Māori Health): Māori and Pacific Admission Scheme (MAPAS), Hikitia Te Ora – Certificate in Health Sciences (CertHSc) and the Whakapiki Ake Project (WAP).

The Whakapiki Ake Project (WAP)

Māori Recruitment
The Whakapiki Ake Project (WAP) is a recruitment programme that actively engages with rangatahi Māori enrolled in secondary schools. We promote health as a career and encourage Māori and Pacific students to enter the Faculty of Medical and Health Sciences (FMHS) programmes. WAP offers exposure to health career options, support for students to apply to FMHS, help with transitioning to tertiary study and some financial assistance for successful applicants.

Hikitia Te Ora – Certificate in Health Sciences (CertHSc)

Foundation programme
The Certificate in Health Sciences is a one-year foundation programme that prepares Māori and Pacific students for successful tertiary study in health. We focus on academic and science literacy, including Chemistry, Physics, Biology, Mathematics and Population Health, all of which are necessary for success in First Year courses taught in the FMHS.

Māori and Pacific Admission Scheme (MAPAS)

Admission/Retention/Academic and Pastoral Support
MAPAS is a long-standing programme that provides current and prospective Māori and Pacific students in the faculty with admission, academic and pastoral support. Our goal is to encourage MAPAS students to successfully complete their programme and graduate while on their cultural and academic journey, leading to a career in health.
Why study with us?

The University of Auckland is New Zealand’s leading university. It is the only New Zealand university ranked in the top 100 in the QS World University Rankings. It is also the highest ranked New Zealand university in the Times Higher Education World University Rankings.

Career opportunities

Health is a rewarding field to work in, with a wide variety of career options. We offer undergraduate degrees in Health Sciences, Medical Imaging, Medicine, Nursing, Optometry and Pharmacy. We teach Medical Sciences courses under majors or specialisations in Biomedical Science, Pharmacology and Physiology. We also have foundation courses that support entry into our programmes.

Exceptional teaching, research and people

We are a research-led university. Our faculty’s lecturers and professors are internationally renowned, frequently directing global research projects designed to better people’s lives in New Zealand and around the world. Our research programmes keep our faculty at the forefront of modern medicine and ensure that our teaching is relevant, informed and current.

Partnerships in the health sector

We work closely with district health boards and with other health organisations across New Zealand. This ensures that you learn from teachers with both knowledge and experience in the New Zealand health system. These same partners offer our graduates opportunities to make positive and informed decisions about future careers upon graduation.

World-class facilities

Teaching and research facilities at our Grafton Campus are world-class, and we offer all our students a full digitally connected learning environment. Our Auckland Medical Research Foundation (AMRF) Medical Sciences Learning Centre – Whakaaro Pai is an extensive and valuable educational resource for our students.

Support for student equity groups

"Equity" means fairness and justice. The Equity Office Te Ara Tautika leads the University’s commitment to being a safe, inclusive and equitable place to study, and to ensuring everyone who has the potential to succeed at our University can do so. We have a range of initiatives, resources and support for our students, their whānau and families.

www.equity.auckland.ac.nz

Students with disabilities

Student Disability Services provide support tailored to your needs. This includes advice and advocacy, assistance with access, career advice, dedicated study spaces and mental health support. Contact us early so we can confidentially assist you with your support requirements.

www.disability.auckland.ac.nz

Lesbian, Gay, Bisexual, Transgender, Queer, Intersex and Takatāpui + students

www.equity.auckland.ac.nz/rainbow

Students from refugee backgrounds

www.equity.auckland.ac.nz/refugee

Students from low socio-economic backgrounds

www.equity.auckland.ac.nz/lowseb
Clinical programmes – Stage II entry

The clinical programmes Medicine, Medical Imaging (Honours), Optometry and Pharmacy are not available for school leavers to enter directly. First you must complete Year 1 in another approved programme and then be selected for entry.

If you have previously studied or are studying at another university and want to enquire about entry into a clinical programme, please contact our Student Centre (see back cover for contact details). Alternatively, view the entry requirements on the programme page of the website.
Bachelor of Health Sciences (BHSc)

Our Bachelor of Health Sciences is a non-clinical programme focusing on public health concepts such as socio-economic and behavioural factors affecting health and health provision. Studying Health Sciences at our University will help prepare you for a wide range of health-related careers.

Quick facts – BHSc

- Full-time: 3 years
- Points per degree: 360
- Taught at: Grafton Campus and City Campus
- Application closing date: 8 December 2021
- Classes start: 28 February 2022

Highlights

- A unique non-clinical programme that builds multidisciplinary understanding of health and healthcare in New Zealand
- A pathway into undergraduate clinical programmes in Medicine and Pharmacy
- A third-year work placement with a health employer

What you’ll be studying

In the first year, you will focus on the health of populations, with courses such as Health and Society, Health Systems, and Population Health.

In the second year and beyond, you will complete a number of core courses and select from a range of optional courses to focus your degree. Topics include:

- Māori Health and Practice
- Health and Pacific People in New Zealand
- Health in Asian Communities
- Health Care Ethics
- Research Methods
- Health Informatics
- Epidemiology
- Health Policy
- Health Promotion
- Addiction
- Nutrition and Environmental Health

Where can it lead?

The Bachelor of Health Sciences opens up a range of exciting job opportunities in the health and social sectors, including work as a policy analyst, health service manager, health promoter, health researcher, business development manager, health economist, health informatician, community addictions counsellor, population nutrition specialist, health protection officer and more.

The BHSc may also lead to postgraduate study in public health, health science or health management.

“One of the common misconceptions is that Health Sciences is a narrow field that is only concerned with things like epidemiology and disease control. But one of the first important lessons you learn in Population Health is how interconnected all of our societal systems are, and how our health is determined by a range of social, historical, environmental, and political factors. Once you have an understanding of this, you realise that there are so many channels that we must work through to eliminate health inequities, which permeate not just the health system, but all the other sectors it is connected to as well.”

Tahirah Moton

Ngāti Maniapoto

Graduate: Bachelor of Health Sciences (BHSc), Bachelor of Health Sciences (Honours) (BHSc (Hons))

auckland.ac.nz/bhsc
Hikitia Te Ora – Certificate in Health Sciences (CertHSc)

If you are a school leaver or returning to study, this one year programme can help strengthen your science and population health knowledge, improve your academic skills and prepare you to apply for other programmes within our faculty. The programme is open to students of Māori and Pacific ancestry, and applicants must attend the MAPAS General Interviews.

Quick facts – Hikitia Te Ora – CertHSc

- Full-time: 1 year
- Points per degree: 120
- Taught at: Grafton Campus
- Application closing date: 8 December 2021
- Classes start: 21 February 2022 (Includes Week O – a compulsory orientation week.)

Highlights

- A pathway into other programmes – Nursing, Health Sciences and Biomedical Science
- A combination of lectures, tutorials, lab sessions, wānanga, online learning and self-directed study within a culturally safe environment

What you’ll be studying

You will learn concepts in a variety of science subjects such as physics and chemistry, along with population health and human biology. You will also develop your academic and professional skills, such as note taking, time management and essay writing.

How do you get in?

All applicants will be required to complete an MH04 form and attend a MAPAS general interview.

Where can it lead?

This programme can provide an entry pathway into the Bachelor of Nursing (BNurs), Bachelor of Health Sciences (BHSc) and the Bachelor of Science (BSc) specialising in Biomedical Science. From there, students in Health Sciences or Biomedical Science have an entry pathway into a bachelors degree in Medicine, Medical Imaging (Honours), Optometry or Pharmacy.

“‘The CertHSc taught me specific skills such as study planning and exam preparation; it also helped me to mature as a student by becoming more disciplined with my study habits.”

“I really enjoyed learning more about specific health inequalities and issues for Māori and Pacific communities as this is something I am very passionate about addressing.”

“While I was accepted into all of the programmes I applied for (including Health Science and BSc Biomed), I took the advice to start with the CertHSc; I’m thankful for this advice.”

Jerome Mika

Māori, Ngāti Awa, Ngai Tuhoe, and Te Whānau-ā-Apanui

Samoan, Moata’a’a’, Lelepa

Graduate: Hikitia Te Ora – Certificate in Health Sciences – (CertHSc) Whakapiki Ake (WAP)

Student: Bachelor of Medicine and Bachelor of Surgery (MBChB)
“I can attest to the difference nurses make when it comes to medical assessments and patient experience. Nurses possess a balance of competence in both medical knowledge and values that provide patients with hope and comfort in times of vulnerability.

“I decided to specialise in Adult Mental Health because I believe mental wellbeing is crucial if we want to live purposeful and meaningful lives.

“The mental health sector has progressed in multiple ways in terms of safety, cultural competency, and holistic recovery for clients. I feel privileged to do my part in maintaining this progression for the wellbeing of the diverse range of clients in Aotearoa.”

Mikkol Gabriel Macabali

Graduate: Bachelor of Nursing (BNurs), Postgraduate Certificate in Health Sciences – specialising in Mental Health Nursing (PGCertHSc)

auckland.ac.nz/bnurs
Bachelor of Nursing (BNurs)

Our Bachelor of Nursing programme provides our students with a valuable clinical education, delivered by professionals who work in a variety of vocations. Studying with us at the School of Nursing will prepare you for a rewarding and exciting career as a registered nurse.

Quick facts – BNurs

- Full-time: 3 years
- Points per degree: 360
- Taught at: Grafton Campus (Some Year 1 classes are held at City Campus.)
- Application closing date: 8 December 2021
- Classes start: 28 February 2022
- Conjoint combinations: Health Sciences, Science, Advanced Science

Highlights

- An integrated programme that blends both academic and clinical learning throughout
- An interdisciplinary approach that includes shared classes with students of Medicine, Pharmacy and Health Sciences
- A supportive environment with dedicated lecturers who are all registered health professionals
- A conjoint option with either a Bachelor of Health Sciences (BHSc) or a Bachelor of Science (BSc)

Experience nurse life

CLINICAL PLACEMENTS WITH A NUMBER OF MAJOR HEALTH CARE PROVIDERS ACROSS THE AUCKLAND REGION.
Students work and learn with registered nurses appointed as mentors.

What you’ll be studying

In the first year (Part I) we’ll introduce the subjects that will form the foundation for your studies, including Biology for Biomedical Science, Population Health, Behaviour, Health and Development, and Nursing in Practice. Throughout your degree you will explore a range of practice areas, including mental health nursing, health of older people, family health care, Māori and Pacific health, medical and surgical nursing, and leadership in nursing. You will also gain extensive clinical learning opportunities to underpin your knowledge.

Where can it lead?

After successful completion of the BNurs, graduates may apply for registration as a comprehensive nurse with the Nursing Council of New Zealand.

Nursing offers a varied career. You may find yourself working as a community nurse, mental health nurse, nurse educator, nurse manager, child health nurse or a specialist nurse working in older people’s health.

There are various postgraduate options for continuing your professional development in nursing, including Postgraduate Certificate or Diploma in Health Sciences (PGCertHSc or PGDipHSc), Bachelor of Nursing (Honours) (BNurs(Hons)), Master of Nursing Practice (MNursPrac), Master of Nursing (MNurs), Doctor of Philosophy (PhD).

“Nurses possess a balance of competence in both medical knowledge and values.”

Find out more
auckland.ac.nz/bnurs
Bachelor of Optometry (BOptom)

Our programme covers both Clinical Optometry and Vision Science. It includes study of the basic physical and life sciences as they relate to the visual system. You will also gain extensive knowledge of optics, the anatomy and physiology of vision, ocular pharmacology, pathology and therapeutics, as well as immunology.

Quick facts – BOptom

Full-time: 5 years  
Points per degree: 600  
Taught at: Primarily at Grafton Campus, with placements at external locations as required  
Application closing date: 1 October 2021  
Classes start: 28 February 2022

In order to apply for the BOptom, you must have completed the required prerequisite courses usually taken in Year 1 of the Bachelor of Science (Biomedical Science) at the University of Auckland, or the Health Sciences First Year Programme at Otago University. Alternatively, you must have completed a relevant degree in, for example, science, health sciences or biomedical science.

Graduates with a non-science bachelors degree can also apply for admission and will be considered by the admissions committee.

Highlights

- New Zealand’s only BOptom degree and one of only six Australasian degrees accredited by the Optometry Council of Australia and New Zealand
- Accreditation as a registered optometrist, able to diagnose and treat eye diseases in New Zealand and Australia
- Clinical and business skill development to help you manage your own practice or to work in the public health sector
- The opportunity to complete your degree with honours

What you’ll be studying

You will take a mixture of courses in applicable life science, vision science, basic optometric sciences and practice, as well as various aspects of clinical optometry.

In the fourth and fifth years, you will learn about diseases of the eye, their treatment, contact lens practice, advanced clinical optometry, and optometry for special populations. You will also undertake a research project and gain practical experience of examining and treating patients in our public clinic and during external placements.

Scholarships

He Rau Aroha Optometry Student Scholarship

The Faculty of Medical and Health Sciences offers He Rau Aroha Scholarship for the Bachelor of Optometry – up to $10,000 annually for up to two students enrolling by way of the Māori and Pacific Asmissions Scheme (MAPAS).

Where can it lead?

The majority of optometrists enter private practice, which offers regular hours and the freedom to choose where to live and practise. Optometrists can also practise in hospitals and clinics, or work in industry and research.

Postgraduate study is available, with the Postgraduate Diploma in Science (PGDipSci), the Master of Science (MSc), the Master of Health Sciences (MHSc) and the Doctor of Philosophy (PhD). If you have been awarded an Optometry degree with honours from the University of Auckland, the MSc and MHSc options can be completed in one year of full-time study.

The University of Auckland offers New Zealand’s only BOptom degree.

Find out more

auckland.ac.nz/boptom
“Optometry isn’t just about prescribing glasses! There are many eye diseases, such as cataracts and diabetic retinopathy, that we are on the lookout for. I like to describe the role of an optometrist as being a GP for your eyes.

“An often-overlooked section of our degree is the vision science component. This incorporates the anatomy and physiology of the eye, which can get quite complex if we consider the eye is only an extension of the brain. In your fourth year you take part in research projects, as research is another avenue you may choose after your degree. It also doesn’t need to be clinically related; I did my project on animal colour vision. So you do get a great balance of clinical knowledge and research.

“If you’re looking for a career which is challenging, fulfilling and comes with great job opportunities then optometry is for you. As clichéd as it sounds this degree is worth looking into (no pun intended).”

Jessica Corrigan
Student: Bachelor of Optometry

[Website Link]
“Pharmacists don’t just count pills; there is so much more to the profession. We are there to ensure patients receive the best care possible with an emphasis on medicines safety and education. A pharmacist can be not only your medicines expert but also your guide. They can advocate for you so that your voice is heard.

“I have always been interested in healthcare and decided to study Pharmacy after meeting a Pharmacist who told me of the wide variety of opportunities that the career holds.

“During my degree, I found the placements at several pharmacies and hospitals valuable to help prepare me with the background knowledge needed for working life. I also highly valued the time I had to work with and talk to the lecturers and staff; they were all friendly and approachable.

“I made a lot of good friends in my time at university, some I will have for the rest of my life, some I even plan to run a business with.”

Hunter Te
Totara Matatu
Amende

Kai Tahu
Graduate: Bachelor of Pharmacy (with Honours)

auckland.ac.nz/bpharm
Bachelor of Pharmacy (BPharm) and (BPharm(Hons))

Our Pharmacy degree primes you for a rewarding, patient-centred career. Today’s pharmacists are the first point of contact for primary health care in many communities. Studying pharmacy will prepare you to coordinate medicines-related care as part of wider healthcare teams; you will be the medicines expert. You will also develop the patient assessment, clinical and professional skills necessary for effective interactions with other health professionals, patients and the public – in hospital, community, Ministry of Health and other health settings.

Quick facts – BPharm and BPharm(Hons)

Full-time: 4 years
Points per degree: 480
Taught at: Grafton Campus, with clinical placements in Auckland and elsewhere in New Zealand
Application closing date: 1 October 2021
Classes start: 28 February 2022

To be considered for admission to the BPharm you must have completed relevant prior study, including courses in specific subjects. This can be completed in the first year of a Bachelor of Health Sciences, the first year of a Bachelor of Biomedical Science (Honours) or the first year of some majors within the Bachelor of Science at the University of Auckland. There is also an alternative admissions pathway for transferring applicants and graduates of other programmes who have completed relevant study.

Highlights
- An integrated, experience-based programme developed with leading pharmacists and other health providers
- An emphasis on critical thinking, problem solving, and using research evidence to inform clinical decision making
- Ten weeks of practice placements in a range of pharmacy, clinical and other health settings
- Many simulations labs and workshops in our model pharmacy teaching suite and world-class pharmaceutical sciences laboratories

What you’ll be studying
Our pharmacy programme includes a range of topics concerning medicines and health – and puts patients at the heart of your learning. You will study how new medicines are developed and designed, how medicines work, which medical conditions they treat, and how pharmacists help people use medicines safely and effectively. Throughout the programme, your learning will incorporate aspects of population health, social science, pharmacology, pharmacy practice and pharmaceutical science. You will learn through lectures, as well as both online and interactive media, laboratory classes, clinical case workshops, tutorials and both online and real-life simulations. You will also gain practical experience during placements. In addition, the programme includes group-based research inquiry work and a focus on applying evidence-based practice to clinical cases in the final year of the BPharm.

BPharm(Hons)
If you are selected into the programme you will plan and conduct an independent piece of original research. There are expected to be ten places available each year. You will complete a research project with a supervisor to consolidate your academic skills and disseminate your research to the wider community.

Scholarships

He Rau Aroha Pharmacy Student Scholarship
The Faculty of Medical and Health Sciences offers He Rau Aroha Scholarship for the Bachelor of Pharmacy – up to $10,000 annually for up to two students enrolling by way of the Māori and Pacific Asmissions Scheme (MAPAS).

Hiwinui Heke Māori Pharmacy Student Scholarship
Offered by PHARMAC in partnership with the Māori Pharmacists’ Association (MPA) Ngā Kaitiaki o Te Puna Rongoā o Aotearoa to support the education of Māori students studying toward their Bachelor of Pharmacy degree and to promote pharmacy as a career.

Where can it lead?
In New Zealand, the pathway to becoming a registered pharmacist includes the successful completion of a Bachelor of Pharmacy degree and a one-year paid internship in an approved pharmacy setting outside the university. After that, potential roles include community pharmacist, hospital pharmacist, health sector manager, pharmaceutical researcher, pharmaceutical writer, medicines quality control pharmacist, medicines regulator, and prescribing adviser, to name a few. Pharmacy as a profession continues to evolve, and pharmacists now utilise their patient-centred skills to provide immunisations, health checks and monitoring. Pharmacists deliver enhanced medicines services in collaboration with other members of healthcare teams. Pharmacists also work in a range of health-based industries related to the manufacture, prescription and provision of medicines, as well as related industries, such as medical publishing and pharmaceutical marketing.

*QS World Rankings by Subject 2021
Biomedical Science

If scientific fields such as cancer biology, immunology or neuroscience spark your interest, take a closer look at a Bachelor of Science (BSc) specialising in Biomedical Science.

Quick facts – BSc, Biomedical Science specialisation

- Full-time: 3 years
- Points per degree: 360
- Taught at: Grafton Campus and City Campus
- Application closing date: 8 December 2021
- Classes start: 28 February 2022

Highlights

- A flexible programme with a wide range of contemporary biomedical topics tailored to your interests and passions
- An exciting learning environment fostered by staff who are global leaders in their research field

What you’ll be studying

The Biomedical Science programme is designed for students with an interest in the emerging areas of medical science. You can opt to keep your Biomedical Science specialisation general, or you can choose one of the following pathways:

- Anatomical Imaging Science
- Cancer Biology and Therapeutics
- Cardiovascular Biology
- Cellular and Molecular Biomedicine
- Genetics
- Infection and Immunity
- Neuroscience
- Nutrition and Metabolism
- Reproduction and Development

Where can it lead?

Biomedical Science equips students for a wide range of opportunities in biotechnology or pharmaceutical companies, science communications or media, universities or research institutes, education and healthcare. For example, you may find work as a research assistant at a biotechnology company or as a science communicator for a media outlet. Year 1 provides an entry pathway into clinical programmes, including Medicine, Medical Imaging (Honours), Pharmacy, and Optometry. Many honours graduates in Biomedical Science move on to careers as research leaders after further graduate training. Postgraduate study includes a Bachelor of Biomedical Science (Honours) or postgraduate diplomas in either Biomedical Science or Health Sciences. These can be followed by masters or doctoral study.

For entry requirements see www.auckland.ac.nz/bsc

BSc majors

Undergraduate study in Pharmacology and Physiology is shared between the Faculty of Science and the Faculty of Medical and Health Sciences, with classes held in both.

Bachelor of Science (BSc) majoring in Pharmacology

Pharmacology is the study of how drug structure and concentration influence effect at a biological target, how the structure can be altered by metabolism, and how the concentrations in the body change as the drug is absorbed and eliminated. Pharmacologists therefore need to understand the biological molecules that facilitate these functions and the ways in which these can change in disease.

As a pharmacology student, you will take some BIOSCI and MEDSCI courses in the first two years in Chemistry, Biochemistry, Physiology and Pathology. The third year of this BSc is very structured, with one course for drug design and action, one on drug clearance and drug safety and a third focusing on the use of drugs to target specific diseases. The fourth course, PHARMCOL 399, is a capstone course designed to complement and enhance the learning from the other three courses. In this course you will apply your integrated knowledge and skills to understand the safe and effective use of drugs, the ethics of pharmacological experimentation and its impact on society.

Bachelor of Science (BSc) majoring in Physiology

Physiology is the study of how living organisms function from the cellular to whole-body level. Understanding how organisms work helps us to understand what goes wrong in disease and provides a rational scientific basis for its treatment. Physiology is highly quantitative and has close links with biochemistry, molecular biology, mathematical modelling and pharmacology, as well as zoology and neuroscience.

The Department of Physiology offers world-class research inspired teaching, connecting basic biology with biomedical and bioengineering fields in many physiology topics. These include cardiovascular, respiratory, renal, vision and hearing, neuroscience, fetal and neonatal, cellular and molecular, and endocrinological studies. Our students graduate with expertise that will allow them to take up diverse opportunities in research, clinical medicine or industry.

As a physiology student, you will take courses in Biological Sciences, Chemistry, Medical Science, Physics and Statistics to give you a solid quantitative grounding and to encourage critical thinking and science innovation. As part of your physiology major you’ll complete a capstone course, PHYSIOL 399, where you’ll demonstrate your knowledge and skills through the design of a scientific research project. You will explore the role of science and scientists in society, ethics, science communication, and commitment to Māori and Pacific health advancement.

Complementary majors include Biological Sciences, Chemistry, Exercise Sciences, Mathematics, Pharmacology, Physics, Psychology and Statistics.

Interested in further study?

Postgraduate study options for Biomedical Science, Pharmacology and Physiology are conducted through the Faculty of Medical and Health Sciences.
“My high school strongly encouraged taking science, and biology was one of my favourite subjects, so I decided to study Biomedical Science after leaving school.

“I chose the University of Auckland because it is one of the top-rated universities in New Zealand, with excellent science facilities. I’m not from Auckland, so another important factor in my decision-making was hearing that the first-year halls were fun. Living in a hall was a great way for me to easily meet new people.

“I decided to pursue postgraduate studies after a lab-group project that assessed how melanoma enters the brain. This combined my two fields of interest: Neuroscience and Cancer Biology. That experience really sharpened my interest in postgrad study.”

Libby Martin
Graduate: Bachelor of Science (BSc) in Biomedical Science
Graduate: Bachelor of Biomedical Science (Honours) (BBiomedSc(Hons))
Student: Master of Biomedical Sciences (MBiomedSc)

“I think there is a common misconception that lab work is the only area for graduates to work in, but a degree in Biomedical Science gives you a strong foundation for a career in multiple fields, including policy work and clinical research.

“"I’m not from Auckland, so another important factor in my decision-making was hearing that the first-year halls were fun."
“All my family are from rural Canterbury, so it was a big step coming to Auckland. The thing I was most worried about was getting stuck there. However, during the medical programme, I spent a year in Waikato, Taranaki and Whangārei, and blocks of time in Hawera, Kaitaia, Ashburton and even Tobago. I value the time I’ve spent across the diversity of communities I’ve worked with.

“University support services are vital. If you are in a university residence, your resident advisor (someone who lives with you in your hall with the express job description of supporting you) will help you navigate the many support services available. If you choose not to live in a hall, then a little googling will suffice. The University can help out, whether you need support financially, with your physical or mental wellbeing, or your academics.”

Ben Alsop-ten Hove

Graduate: Bachelor of Medicine and Bachelor of Surgery (MBChB)
Bachelor of Medicine and Bachelor of Surgery (MBChB)

A rewarding, challenging and exciting career in medicine awaits you. Our programme provides you with valuable exposure to a range of clinical settings and hands-on experience that will prepare you for your career in medicine.

Quick facts – MBChB

Full-time: 6 years
Points per degree: 720
Taught at: Grafton Campus and at clinical sites throughout the upper North Island. Travel outside Auckland is mandatory.
Application closing date: 1 October 2021 (domestic applicants); 1 December 2021 (international applicants) (These dates are currently under review and subject to change.)
Classes start: 28 February 2022
Before applying for the MBChB, domestic applicants must have completed the first year of a Bachelor of Health Sciences or the first year of a Bachelor of Science (Biomedical Science) at the University of Auckland. Alternatively, you must have completed a degree at a New Zealand university. All applicants must complete the University Clinical Aptitude Test (UCAT-ANZ) in the year of application for the MBChB. Applicants will also be required to attend an interview process – the Multi Mini Interview (MMI). International applicants should contact us to discuss their eligibility.

www.ucat.edu.au/ucat-anz/

Highlights

- A faculty with an international reputation for research and innovation
- Unrivalled access to clinical environments, thanks to our close relationship with a range of district health boards and general practices
- Four Regional Rural year-long cohort options in Year 5, as well as rural experience in other years

Where can it lead?

Those who complete the Medical Programme are eligible to apply for provisional registration with the Medical Council of New Zealand as a doctor. You then need to complete two years of pre-vocational training.

Once you have gained general registration, you can choose from a range of disciplines such as General Practice, Dermatology, Emergency Medicine, General Medicine, Paediatrics, Geriatric Medicine, Obstetrics and Gynaecology, Medical Research and more.

If you are interested in research, you can defer your clinical MBChB studies after Part III and undertake a BMedSc(Hons), taking a year to pursue a supervised research project. We also offer a wide range of postgraduate programmes for doctors wishing to further their interests, up to Doctor of Medicine and PhD.

Find out more
auckland.ac.nz/mbchb

We’re committed to rural/regional and community-based health.

19
Bachelor of Medical Imaging (Honours) (BMedImag(Hons))

Our Medical Imaging programme offers extensive, hands-on clinical experience to prepare you for a varied and rewarding, patient-centred career in an exciting, ever-changing and rapidly evolving profession.

Quick facts – BMedImag(Hons)

- Full-time: 4 years
- Points per degree: 480
- Taught at: Grafton Campus
- Application closing date: 1 October 2021
- Classes start: 28 February 2022

Before applying for the BMedImag(Hons), you must have completed the first year of a Bachelor of Science (Biomedical Science) at the University of Auckland or the Health Sciences First Year at the University of Otago. Alternatively, you must have completed a relevant degree or postgraduate diploma in an area such as Science, Health Sciences or Biomedical Science.

Highlights

- Extensive hands-on clinical experience through the programme
- A Medical Imaging degree from the top-ranked university in New Zealand
- Support from experienced Medical Imaging Technologists (MITs) in radiology departments
- Graduate eligibility for registration with the New Zealand Medical Radiation Technologists Board (MRTB)

What you’ll be studying

You will complete courses in radiographic positioning and image acquisition, medical imaging physical principles and technology, image optimisation and evaluation, patient care and safety, sectional imaging anatomy and pathology, professional and evidence-based practice, and specialised imaging.

You will receive clinical experience in simulation labs, hospitals and outpatient radiology facilities.

Your final-year dissertation helps to develop your analytical and research skills in medical imaging.

Where can it lead?

MITs can work in a variety of roles, either in public hospitals or private radiology practices. Most will begin their career in general radiographic imaging (x-ray) with opportunities to work in computed tomography (CT), angiography and mammography.

From there, postgraduate qualifications are required for professional registration purposes in the imaging technology subspecialties of Magnetic Resonance Imaging (MRI), ultrasound and nuclear medicine.

We are the only NZ university that offers an honours degree in Medical Imaging.

Find out more

auckland.ac.nz/bmedimag-hons
“The Medical Imaging cohort is a close-knit and supportive community, with students and lecturers from a diverse array of cultures and backgrounds.

“The small cohort has allowed me to develop meaningful relationships with everyone, and after only one year together, I had already made life-long friendships. Whether at a study session, potluck dinner or walking the trails along Bethell’s Beach, we’re a tight unit. We have each other’s backs and support each other’s successes.

“Our little community is growing, and we are all eager to welcome new students into the Medical Imaging family.”

Ellie Shaw
Student: Bachelor of Medical Imaging (Honours) (BMedImag(Hons))

auckland.ac.nz/bmedimag-hons
Conjoint programmes

If you have broad interests and don’t want to limit your studies to one area, then a conjoint could be for you.

Conjoint programmes allow you to pursue two bachelors degrees at the same time. This enables you to spread your focus across two disciplines and gain greater knowledge.

More knowledge can increase your career opportunities, as employers are often attracted to the versatility of graduates who have skills and knowledge across two disciplines.

If you’re starting your tertiary studies, most combinations can be completed in four or five years full time, rather than six to eight years if you were to complete each degree separately. If you have already started your university studies, you may still have the opportunity to begin a conjoint programme.

Available conjoints in 2022:
- BA/BHSc
- BAdvSci(Hons)/BHSc
- BAdvSci(Hons)/BNurs
- BCom/BHSc
- BDes/BHSc
- BFA/BHSc
- BGlobalSt/BHSc
- BHSc/LLB
- BHSc/LLB(Hons)
- BHSc/BNurs
- BHSc/BSc*
- BNurs/BSc*

For more information about conjoint programmes visit:
www.conjoints.ac.nz

*Some majors/specialisations cannot be taken. Please check the programme page online for up-to-date information.

INCREASED CAREER OPPORTUNITIES
with knowledge spread across two disciplines
International opportunities

Join us at New Zealand’s leading university, ranked in the top 100 universities worldwide. We offer a quality education in an inviting and stimulating environment here in beautiful Auckland city. Our programmes open up a range of exciting career opportunities in health to international students from all over the world.

How to apply

The chart on page 23 lists urls for our online programme pages. Before you apply, check there for our entry and English-language requirements as well as the application closing date for your programme.

We recommend that you apply as early as you can. When you are ready to start, go online to apply for admission

www.auckland.ac.nz/international-apply

Exchange and study abroad

There are opportunities for domestic and international students to have an international experience during their degree.

As New Zealand’s largest university and leading research institution, the University of Auckland is a member of three international networks: Association of Pacific Rim Universities (APRU), Universitas 21 and Worldwide Universities Network (WUN). These network partnerships allow FMHS students access to virtual and international*** conferences and workshops.

360 International

Our 360 International*** exchanges, for a single semester or up to one year, provide students studying in our faculty the opportunity for a truly international learning experience. We also offer short-term courses, internships and virtual opportunities. For more information on programmes, contact the 360 International team or talk to the FMHS Student Centre.

www.auckland.ac.nz/360

We welcome international students into the following programmes:

<table>
<thead>
<tr>
<th>Undergraduate programme</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor of Health Sciences</td>
<td>3 years</td>
</tr>
<tr>
<td>(conjoint with another programme)</td>
<td></td>
</tr>
<tr>
<td>Bachelor of Medicine and Bachelor of Surgery</td>
<td>5 years*</td>
</tr>
<tr>
<td>Bachelor of Nursing</td>
<td>3 years</td>
</tr>
<tr>
<td>(conjoint with another programme)</td>
<td></td>
</tr>
<tr>
<td>Bachelor of Optometry</td>
<td>4 years*</td>
</tr>
<tr>
<td>Bachelor of Pharmacy</td>
<td>3 years*</td>
</tr>
<tr>
<td>Bachelor of Medical Imaging (Honours)</td>
<td>4 years*</td>
</tr>
</tbody>
</table>

*Entry is via the first year of approved programmes. There is also a graduate entry pathway.

**QS World University Rankings 2021

***When international travel is permitted.
“New Zealand is one of the safest, most prosperous, and most politically stable nations globally; there is also a better work/life balance. For students, this means New Zealand offers peace of mind when studying, allowing them to focus on their studies without worrying about other issues.

“I chose to study medicine at the University of Auckland because students rotate between different hospitals in northern parts of New Zealand. Medical students do their clinical years in at least one urban setting and one rural setting. Being exposed to various locations and experiences will allow me to become a better doctor. At the same time, I’ll be able to spend three months travelling around New Zealand, enjoying living and working in rural parts of this beautiful country.”

Edrick Sulistio

Student: Bachelor of Medicine and Bachelor of Surgery (MBChB)

Home country: Indonesia

auckland.ac.nz/international
How do you get in?

Admission from New Zealand secondary school qualifications*

All applicants must meet the University Entrance standard and the entry requirements for the programme they wish to pursue. For more detailed information and other entry pathways: www.auckland.ac.nz/entry-requirements

This table indicates the rank score that will gain you admission to your programme, subject to meeting any specified requirements.

Guaranteed entry scores

The table below shows the rank scores required to guarantee entry to the Faculty of Medical and Health Sciences in 2022 for school-leavers who are New Zealand or Australian citizens or permanent residents. For some programmes, applicants with scores below these will still be considered, provided places are available. NCEA, Cambridge International and IB have different scales and scores.

<table>
<thead>
<tr>
<th>Programme</th>
<th>NCEA Level 3</th>
<th>Cambridge International</th>
<th>IB Special entry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor of Health Sciences (BHSc)</td>
<td>250</td>
<td>300</td>
<td>33</td>
</tr>
<tr>
<td>Bachelor of Nursing (BNurs)</td>
<td>230</td>
<td>280</td>
<td>31</td>
</tr>
<tr>
<td>Bachelor of Science (BSc) in Biomedical Science</td>
<td>280</td>
<td>310</td>
<td>33</td>
</tr>
</tbody>
</table>

Conjoint programmes

<table>
<thead>
<tr>
<th>Programme</th>
<th>NCEA Level 3</th>
<th>Cambridge International</th>
<th>IB Special entry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor of Advanced Science (Honours)/ Bachelor of Health Sciences (BAdvSc(Hons)/BHSc)</td>
<td>275</td>
<td>330</td>
<td>36</td>
</tr>
<tr>
<td>Bachelor of Advanced Science (Honours)/Bachelor of Nursing (BAdvSc(Hons)/BNurs)</td>
<td>275</td>
<td>330</td>
<td>36</td>
</tr>
<tr>
<td>Bachelor of Arts/Bachelor of Health Sciences (BA/BHSc)</td>
<td>250</td>
<td>300</td>
<td>33</td>
</tr>
<tr>
<td>Bachelor of Commerce/ Bachelor of Health Sciences (BCom/BHSc)</td>
<td>250</td>
<td>300</td>
<td>33</td>
</tr>
<tr>
<td>Bachelor of Design/Bachelor of Health Sciences (BDes/BHSc)</td>
<td>For up to date entry requirements please check the relevant programme page.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor of Fine Arts/ Bachelor of Health Sciences (BFA/BHSc)</td>
<td>250</td>
<td>300</td>
<td>33</td>
</tr>
<tr>
<td>Bachelor of Global Studies/ Bachelor of Health Sciences (BGlobalSt/BHSc)</td>
<td>250</td>
<td>300</td>
<td>33</td>
</tr>
<tr>
<td>Bachelor of Health Sciences/ Bachelor of Laws (BHSc/LLb)</td>
<td>250</td>
<td>300</td>
<td>33</td>
</tr>
</tbody>
</table>

*Please note that this document is an updated reprint of the University of Auckland Undergraduate Prospectus 2022 published in February 2021. This reprint includes corrections to the numbering of the footnotes in the charts on this spread, the removal of footnotes from the B(Hons) conjoints and BGlobalSt conjoints, and a widened range of Level 3 NCEA subject options for the BHSc and the BNurs programmes.
Alternative entry schemes

The table below shows the entry requirements for non-school-leavers, who are New Zealand or Australian citizens or permanent residents, seeking admission into the Faculty of Medical and Health Sciences undergraduate programmes.

**2022 Faculty of Medical and Health Sciences alternative entry schemes**

<table>
<thead>
<tr>
<th>Programme</th>
<th>Basic entry requirements</th>
<th>Additional requirements</th>
<th>Available to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate in Health Sciences (CertHSc)</td>
<td>Students are selected on the basis of their academic merit. Applicants may be considered under Special Admission (20 years and older, and subject to approval).</td>
<td>Applicants must have Māori whakapapa or Pacific ancestry. Applicants must be New Zealand citizens or permanent residents. Applicants must apply under the MAPAS category. Submission of Supplementary Information Form (MH04)</td>
<td>MAPAS</td>
</tr>
<tr>
<td>Bachelor of Health Sciences (B(HSc))</td>
<td>Students are selected on the basis of their academic merit. Mature students and those with full/partial degrees may apply under the faculty’s alternative admission scheme.</td>
<td>Submission of Supplementary Information Form (MH04) for MAPAS applicants only.</td>
<td>MAPAS International</td>
</tr>
<tr>
<td>Bachelor of Medical Imaging (Honours) (BMedImag(Hons))</td>
<td>First Year Entry: 8 average across 8 courses including BIOSCI 101, 106 and 107, CHEM 110, PHYSICS 160, POPHLTH 111, MEDSCI 142 and a General Education course or equivalent study at another NZ university as approved by the faculty. This may be achieved through first year of BSc (various majors including Biomedical Science) or BHSc. Graduate Entry: relevant degree from any NZ university with a minimum B average or equivalent study at a recognised overseas tertiary institution.</td>
<td>Interview. All applicants are required to provide supporting statements as part of the online application process. Submission of Supplementary Information Form (MH04) for MAPAS applicants only.</td>
<td>MAPAS Regional Rural (RRAS)</td>
</tr>
<tr>
<td>Bachelor of Pharmacy (B(Pharm))</td>
<td>First Year Entry: A minimum of a B+ average* across 8 prescribed courses in B(HSc or BSc (Biomedical Science). Graduate Entry: At least B+ average across a degree or postgraduate diploma from any NZ university completed on a full-time basis within the past five years.</td>
<td>UCAT. Interview. All applicants are required to provide supporting statements as part of the online application process. Submission of Supplementary Information Form (MH04) for MAPAS applicants only.</td>
<td>MAPAS Regional Rural (RRAS) International</td>
</tr>
<tr>
<td>Bachelor of Nursing (BNurs)</td>
<td>Applicants should be able to provide evidence of success in academic study at tertiary level.</td>
<td>Interview may be required for alternative admission candidates. Submission of Supplementary Information Form (MH04) for MAPAS applicants only.</td>
<td>MAPAS International</td>
</tr>
<tr>
<td>Bachelor of Optometry (B(Optom))</td>
<td>First Year Entry: 8 average across 8 courses including BIOSCI 101, 106 and 107, CHEM 110, PHYSICS 160, POPHLTH 111, MEDSCI 142 and a General Education course or equivalent study at another NZ university as approved by the faculty. This may be achieved through first year of BSc (various majors including Biomedical Science) or BHSc. Graduate Entry: relevant degree from any NZ university with a minimum B+ average or equivalent study at a recognised overseas tertiary institution.</td>
<td>Interview. All applicants are required to provide supporting statements as part of the online application process. Submission of Supplementary Information Form (MH04) for MAPAS applicants only.</td>
<td>MAPAS Regional Rural (RRAS) International</td>
</tr>
<tr>
<td>Bachelor of Pharmacy (B(Pharm))</td>
<td>First Year Entry: 8 average across 8 courses including BIOSCI 107, CHEM 110, POPHLTH 111, MEDSCI 142 and a General Education course in a programme of study.** This may be achieved through first year of BSc (various majors including Biomedical Science) or BHSc. Alternative Admission Entry: equivalent study with B average at a NZ university or recognised overseas university as approved by the faculty.</td>
<td>Interview. All applicants are required to provide supporting statements as part of the online application process. Submission of Supplementary Information Form (MH04) for MAPAS applicants only.</td>
<td>MAPAS Regional Rural (RRAS) International</td>
</tr>
<tr>
<td>Bachelor of Science (BSc) specialising in Biomedical Science</td>
<td>Visit: <a href="http://www.science.auckland.ac.nz/biomedical-science">www.science.auckland.ac.nz/biomedical-science</a> Phone: +64 9 923 7000 Email: <a href="mailto:scfac@auckland.ac.nz">scfac@auckland.ac.nz</a></td>
<td>None</td>
<td>Māori/Pacific International</td>
</tr>
<tr>
<td>Conjoint Programmes</td>
<td>Candidates must have completed or partially completed a degree. Conjoint with Health Sciences require a minimum B average. Conjoint with Nursing require a minimum B- average.</td>
<td>Submission of Supplementary Information Form (MH04) for MAPAS applicants only. Interview for alternative admission candidates for BNurs conjoint programmes may be required.</td>
<td>MAPAS International</td>
</tr>
</tbody>
</table>

**Notes:**

- UCAT – more information can be found at www.ucat.edu.au/ucat-anz/
- RNAS – students wishing to apply under the Regional Rural Entry category must provide evidence of their regional/rural origin as specified on www.fmhs.auckland.ac.nz/rras

* Eligibility for an interview for MBChB (Medicine and Surgery) is based on the average grade achieved in university study (either in Year 1 or as a graduate). Approximately twice as many applicants are invited for interview as there are places available. The average grade required to be eligible for an interview varies from year to year, it generally exceeds a B+ average.

** Students who do not meet all of the requirements for entry to the BPharm but are interested in applying should email us for advice at fms@auckland.ac.nz