

Scientific & Technical Professions Qualification Pathway



Roles that provide options for on the job training

Anaesthetic technicians

Training completed on the job;

- Gain a position as a trainee anaesthetic technician at a recognised training hospital.
- Complete a Diploma in Applied Science (Anaesthetic Technology) or a Graduate Diploma in Applied Science (Anaesthetic Technology) from Auckland University of Technology.
- 48 credits at level 2 or higher including 8 credits at level 2 in any one subject from the following: Classical Studies, Drama, English, Geography, Health Education, History, History of Art, Media Studies, Social Studies, Business Studies, Economics, Physical Education, Te Reo Maori, Te Reo Rangatira.

Preferable to have:

- Level 2 NCEA Physics OR AUT Biophysics Level 4 (or equivalent)
- Level 3 NCEA Biology OR AUT Anatomy and Physiology Level 4 (or equivalent)

Dental assistants

Training is completed on the job, no specific pre-requirements. On job training involves completing Level 4 NZQA qualification.

Laboratory technicians

There are two pathways to becoming a medical laboratory technician – training on the job, or starting with a qualification.

If you train on the job you need to:

- Work as a medical laboratory trainee in an approved laboratory for two years.
- Pass the Qualified Medical Laboratory Technician (QMLT) exam.

If you start with a qualification, you need to:

- Get your qualification approved by the Medical Sciences Council of New Zealand.
- Work as a trainee for one year in a medical laboratory

Phlebotomists

If you train on the job you need to:

- Work as a trainee phlebotomist in an approved laboratory for two years.
- Gain the Qualified Medical Laboratory Technician (QMLT) certificate.
- Be registered with the Medical Sciences Council of New Zealand.

Physiology technicians

Training is completed on the job;

- Gain a position as a trainee technician at a recognised training hospital.
- Require NCEA level 2 in English, Maths, Science or an equivalent.
- Complete Certificate in Physiological Measurement or equivalent while working as a trainee technician.

Pharmacy technicians

- Distance study through the Open Polytechnic of New Zealand, while you undertake paid work of at least 20 hours a week in a community or hospital pharmacy.
- Full-time study for two years at Academy New Zealand (North Shore and Christchurch campuses) to qualify with a New Zealand Certificate in Pharmacy (Technician) – Level 5 – Community Strand
- NCEA Level 2 English and maths.

Sterile supply technicians

- Gain a position as a trainee sterilising technician
- Complete Certificate in Sterilising Technology (Level 4), from the New Zealand Open Polytechnic. Most sterilising technicians study by correspondence while working and training on the job.
- At least three years of secondary education is recommended. Useful subjects include english, maths and science.

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Roles that require a qualification prior to being able to apply for a job

Cardiac perfusionists

- Bachelor of Science degree or equivalent, then train on the job by an accredited teaching hospital.
- Useful secondary subjects include English, Chemistry, Biology and Maths.

Clinical engineers and technicians

- New Zealand Diploma of Engineering.
- Bachelor of Engineering Technology.
- Four years of secondary education is needed to enter training. Useful subjects include maths, physics, metal work, computer science and English.

Clinical physiologists

- Bachelor of Science degree with a relevant major, such as biology, physiology or anatomy, or equivalent such as a Sport and Exercise Science degree
- Gain employment as a trainee at an accredited teaching hospital.
- NCEA Level 3 is required to enter tertiary training. Useful subjects include English, maths, biology, chemistry and physics.

Dental therapists and technicians

- Bachelor of Oral Health from University of Otago.
- Bachelor of Health Science in Oral Health from Auckland University of Technology.
- A minimum of NCEA Level 2 or 3 in biology and English is required, depending on which university you apply to. Other useful subjects include chemistry and physical education.

Mortuary technicians

- New Zealand Institute of Medical Laboratory Science Certificate of Mortuary Hygiene and Technique.
- Useful secondary subjects include English, Chemistry, Biology and Maths.

Exercise physiologists

Need to complete a recognised qualification to gain accreditation with Clinical Exercise Physiology New Zealand. Qualifications in exercise physiology are offered across a number of locations in New Zealand. Refer to cepnz.org.nz for range of courses available.

Laboratory scientists & scientific officers

- Bachelor of Medical Laboratory Science from University of Otago, Massey University or the Auckland University of Technology or another qualification recognised by the Medical Sciences Council of New Zealand.
- NCEA Level 3 is needed to enter tertiary training. Useful subjects include English, biology, chemistry and maths.

Genetic counsellors

- To become eligible for employment and certification a master's degree in genetic counselling is required.
- The Masters qualification is not available through New Zealand universities. Most NZ candidates complete a bachelor of science through a NZ university then enrol in one of 2 Masters programmes offered in Australia (Melbourne and Sydney).
- On completion candidates become "board eligible" for certification and can use the title "associate genetic counsellor". Once employed an associate genetic counsellor completes a portfolio of work to become board certified as a genetic counsellor.

Medical physicists

To become a medical physicist you first need an undergraduate degree majoring in physics or a relevant branch of engineering, such as:

- Bachelor of Science (BSc) in Physics
- Bachelor of Engineering (BE) with a strong maths and physics component.

You then enter specialist training and work experience, involving:

- A Masters of Science (MSc) in Medical Physics
- A five-year clinical Training, Education and Accreditation Programme (TEAP), done in conjunction with the Master's degree.
- NCEA Level 3 is needed to enter tertiary training. Essential subjects include physics and maths. Useful subjects include chemistry, biology and computer science.

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Roles that require a qualification prior to being able to apply for a job

Radiation therapists

- Bachelor of Radiation Therapy from University of Otago, (based in Wellington), or another qualification recognised by the Medical Radiation Technologists Board.
- You must have the following NCEA Level 3 subjects:
- English or a language-rich subject, such as classics, geography, history, art history, te reo Māori or te reo rangatira, maths (with statistics or calculus), biology or physics.

Medical radiation technologists and technicians

- Bachelor's degree in medical radiation technology, which includes work in a clinical setting offered by Christchurch Polytechnic Institute of Technology (Bachelor of Medical Imaging), Universal College of Learning, Palmerston North (Bachelor of Applied Science, Medical Imaging Technology) and Unitec Institute of Technology, Auckland (Bachelor Health Science, Medical Imaging).
- Useful subjects include English, maths and calculus, science, particularly physics, computing and information management.

Nuclear medicine technologists

- Need to complete a Bachelor's degree in medical radiation technology and then complete a postgraduate diploma in Health Sciences in Nuclear Medicine issued by the University of Auckland.
- Refer to Medical radiation technologists' information for useful subjects to support entry into tertiary study.

Mammographers

- Need to complete a Bachelor's degree in medical radiation technology and then complete a postgraduate certificate in Mammography from The University of Auckland.
- Refer to Medical radiation technologists information for useful subjects to support entry into tertiary study.

Magnetic resonance imaging (MRI) technologists

- Need to complete a Bachelor's degree in medical radiation technology and then complete a postgraduate diploma in Health Sciences in Magnetic Resonance Imaging issued by the University of Auckland.
- Refer to Medical radiation technologists' information for useful subjects to support entry into tertiary study.

Pharmacists

- Bachelor of Pharmacy from the University of Auckland or University of Otago.
- Complete an internship of one year working in a hospital or community pharmacy.
- NCEA Level 3 chemistry, physics, biology and maths is preferred.

If you study for a degree you need to:

- Complete a degree approved by the Medical Sciences Council, such as a Bachelor of Science majoring in biology, anatomy or biochemistry
- Work for one year in a medical laboratory.
- Useful secondary subjects include English, science subjects and maths.

Sonographers

- Bachelor's degree in medical radiation technology, which includes work in a clinical setting then completion of a post graduate diploma in health sciences in ultrasound from University of Auckland.
- Refer to Medical radiation technologists' information for useful subjects to support entry into tertiary study.

Optometrists

- Bachelor of Optometry, offered at the University of Auckland.
- Useful secondary subjects include biology, chemistry, physics, maths and English.

Orthoptists

No current NZ based qualification.