

Forensic Science

Postgraduate Handbook 2018



THE UNIVERSITY OF
AUCKLAND
Te Whare Wānanga o Tāmaki Makaurau
NEW ZEALAND

SCIENCE

SCHOOL OF CHEMICAL SCIENCES

Welcome to Forensic Science

Our postgraduate qualifications in Forensic Science will prepare you for a career in forensic science and introduce you to leading edge issues and techniques in this exciting field.



The Forensic Science programme offered by the School of Chemical Sciences gives science graduates the opportunity to progress their interest and knowledge of forensic science.

Forensic Science is the application of science to matters of law. As our knowledge and technical expertise in science increase, so does the complexity and importance of the science presented to the courts in the legal system.

Postgraduate Diploma in Forensic Science students attend laboratories teaching them key skills in forensic searching and chemical and biological analysis, together with workshops on modern data analysis. Research students in the MSc and PhD programmes pursue cutting-edge research at both The University of Auckland and at ESR, and have access to modern DNA analysers and chemical instrumentation.

You'll be taught by both practitioners and by academics many of whom are major contributors in their field. We look forward to working with you.

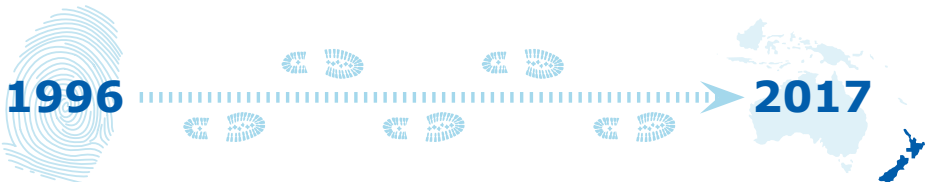
Postgraduate study in Forensic Science will enable students to begin or further their career in forensic or other sciences.

DR DOUGLAS ELLIOT
Director of the Forensic Science Programme

The Forensic Science programme is jointly run by the University of Auckland and the Institute of Environmental Science and Research (ESR) (the suppliers of forensic science to the New Zealand Police).

Students benefit from expert guest lecturers, including Crown Prosecutors and independent forensic practitioners.

**The Forensic Science programme is
one of the longest established forensics programmes in Australasia**





Postgraduate study options in Forensic Science

BSc



PGDipForensic



MSc



PhD

Certificate of Proficiency

Selected courses from the Forensic Science Programme may be taken individually. In particular, FORENSIC 701 and 702 provide a unique education in forensic science for professionals and graduates in all involved disciplines such as lawyers, justice persons, the police, scientists, health and medical professionals, and journalists.

Prerequisite: A Bachelor of Science or other relevant qualifications as approved by the Programme Director.

Structure: FORENSIC 701 and 702 (15 points each). FORENSIC 703 and 706 are also available to qualified applicants.

Length: Each course takes one semester



Postgraduate Diploma in Forensic Science (PGDipForensic)

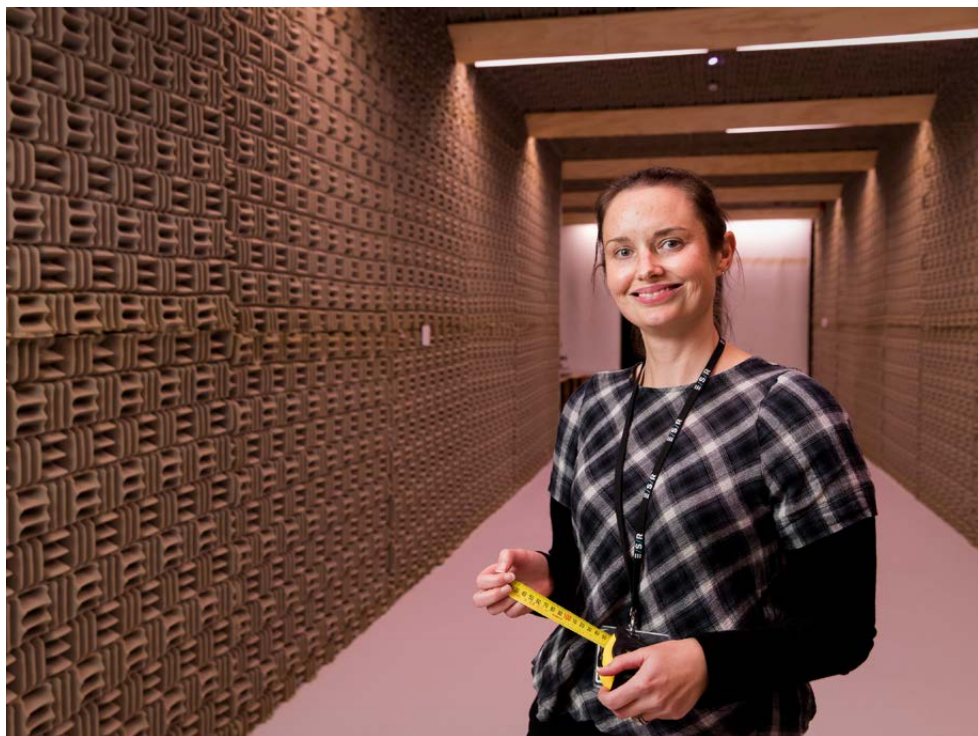
The Postgraduate Diploma in Forensic Science qualification (one year taught programme) normally requires candidates to have completed a degree in science, medicine, technology or related topics. A candidate's professional experience is also taken into account in the selection process.

Prerequisite: A BSc or other relevant qualifications as approved by the Programme Director.

Structure: 105 points from FORENSIC 701-704, 706, 707. 15 points from any approved 600 or 700 level course

Length: Two semesters of full-time study





Master of Science (MSc) in Forensic Science

The one year research MSc is available to students who wish to perform research in a Forensic Science field. A thesis (FORENSIC 796, 120 points) based on a research project is normally completed within one year.

Prerequisite: A PGDip in Forensic Science with an average of B- or higher or other relevant qualifications as approved by the Programme Director.

Structure: Independent research with a supervisor

Length: One year of full-time study

Students are advised to consult the 2017 Calendar for detailed regulations for this degree.



Doctor of Philosophy (PhD) in Forensic Science

Quick facts

Points per degree: 360 points

Full-time study: 3-4 years

Part-time study: 6-8 years

Degree structure: Research

Taught at: All Campuses or off-campus registration (subject to approval)

Application closing dates: Apply at any time

Start date: Start at any time

Entry to PhD

The normal requirement for admission to the PhD in Forensic Science is a masters degree with second class honours (first division) or better. Candidates with overseas qualifications should consult the school for advice and assessment of their qualifications. Candidates may be required to enrol in one or more courses concurrent with research work to complement either their research work or their background in the subject.

Postgraduate Forensic Science courses

Course code	Title	Semester
FORENSIC 701	Fundamental Concepts in Forensic Science	S2
FORENSIC 702	Introduction to Forensic Science	S1
FORENSIC 703	Statistics and Molecular Biology in Forensic Science	S1
FORENSIC 704	Techniques and Applications for Forensic Science	S2
FORENSIC 706	Environmental Forensic Science	S1
FORENSIC 707	Project in Forensic Science	S1/S2
FORENSIC 796	MSc Thesis in Forensic Science	S1/S2

For course descriptions and more information, go to www.chemistry.auckland.ac.nz/pgcourses

Research areas

Forensic science covers a broad range of subjects, from the statistical evaluation of glass evidence to the development of new molecules to aid in the visualisation of fingerprint residues. Some past and possible future research areas are:

- **Field Science:** 3D laser scanning, blood pattern analysis
- **Physical Evidence:** differentiating lubricants, discriminating glass fragments, gunshot residue analysis
- **Forensic Biology:** DNA fingerprinting, Wildlife forensics, Next generation sequencing, Identification of tissue types
- **Illicit Drugs:** Identification of trace impurities, Analysing designer drugs
- **Environmental Forensic Science:** Investigating contamination at clandestine laboratories

Careers in Forensic Science

Graduates have been employed in the positions shown below, as well as in other roles with scientific organisations or manufacturers.

Customs officers

Documents examiners

Entomologist

Fingerprint examiners

Forensic scientists or technicians with ESR

Forensic geologist

Independent forensic scientists

Laboratory technicians

Patent officer

Pharmaceutical representative

Police: uniformed police officers, scene of crime officers, CIB

University academic

"I've always wanted to work in science, and have been drawn to forensics in particular."

"The University of Auckland is the only university that offers postgraduate study options in Forensic Science and the forensics programme has a fantastic reputation."

"The great thing about the forensic programme is the fact that it is run in conjunction with the Institute of Environmental Science and Research (ESR), who is the sole provider of forensic services to the New Zealand police. It means that we are learning from the personal experience of a wide range of forensic practitioners and experts in their fields, and gives us the opportunity to get a great insight into the actual workings of the forensic field."

"Going into this qualification my hopes were that it would lead to employment in forensic casework. I am currently working at ESR in their forensic research team and it is fantastic putting into action all the skills and knowledge I have spent the last two years refining."

Gemma Nancollis studied toward a Master of Science specialising in Forensic Science and graduated in 2016. Previously, Gemma studied for a Postgraduate Diploma in Forensic Science and completed this qualification in 2015.



Helpful information

Academic dates

www.auckland.ac.nz/dates

Accommodation

www.accommodation.auckland.ac.nz

Apply for postgraduate study

www.auckland.ac.nz/applynow

Career Development and Employment Services

www.cdes.auckland.ac.nz

Childcare

www.auckland.ac.nz/childcare

Course advice and degree planning in Science

www.science.auckland.ac.nz/student-centre

Disability Services

www.disability.auckland.ac.nz

How to enrol

www.auckland.ac.nz/enrolment

Information for postgraduate students

www.postgraduate.ac.nz

International students

www.international.auckland.ac.nz

Libraries and Learning Services

www.library.auckland.ac.nz

Māori and Pacific students

www.science.auckland.ac.nz/tuakana

Need help?

www.askauckland.ac.nz

Postgraduate Students' Association

www.pgsa.org.nz

Rainbow Science Network for LGBTI students

www.science.auckland.ac.nz/rainbowsience

Scholarships and awards

www.scholarships.auckland.ac.nz

www.auckland.ac.nz/fees

Support for students

www.science.auckland.ac.nz/support

Questions about Forensic Science?
douglas.elliott@esr.cri.nz

Disclaimer

Although every reasonable effort is made to ensure accuracy, the information in this document is provided as a general guide only for students and is subject to alteration. All students enrolling at the University of Auckland must consult its official document, the University of Auckland Calendar, to ensure that they are aware of and comply with all regulations, requirements and policies.



THE UNIVERSITY OF
AUCKLAND
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NEW ZEALAND

Connect with us

Faculty of Science, The University of Auckland
Private Bag 92019, Auckland 1142, New Zealand

Phone: 0800 61 62 63 | Email: scifac@auckland.ac.nz

Web: www.forensic.auckland.ac.nz



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