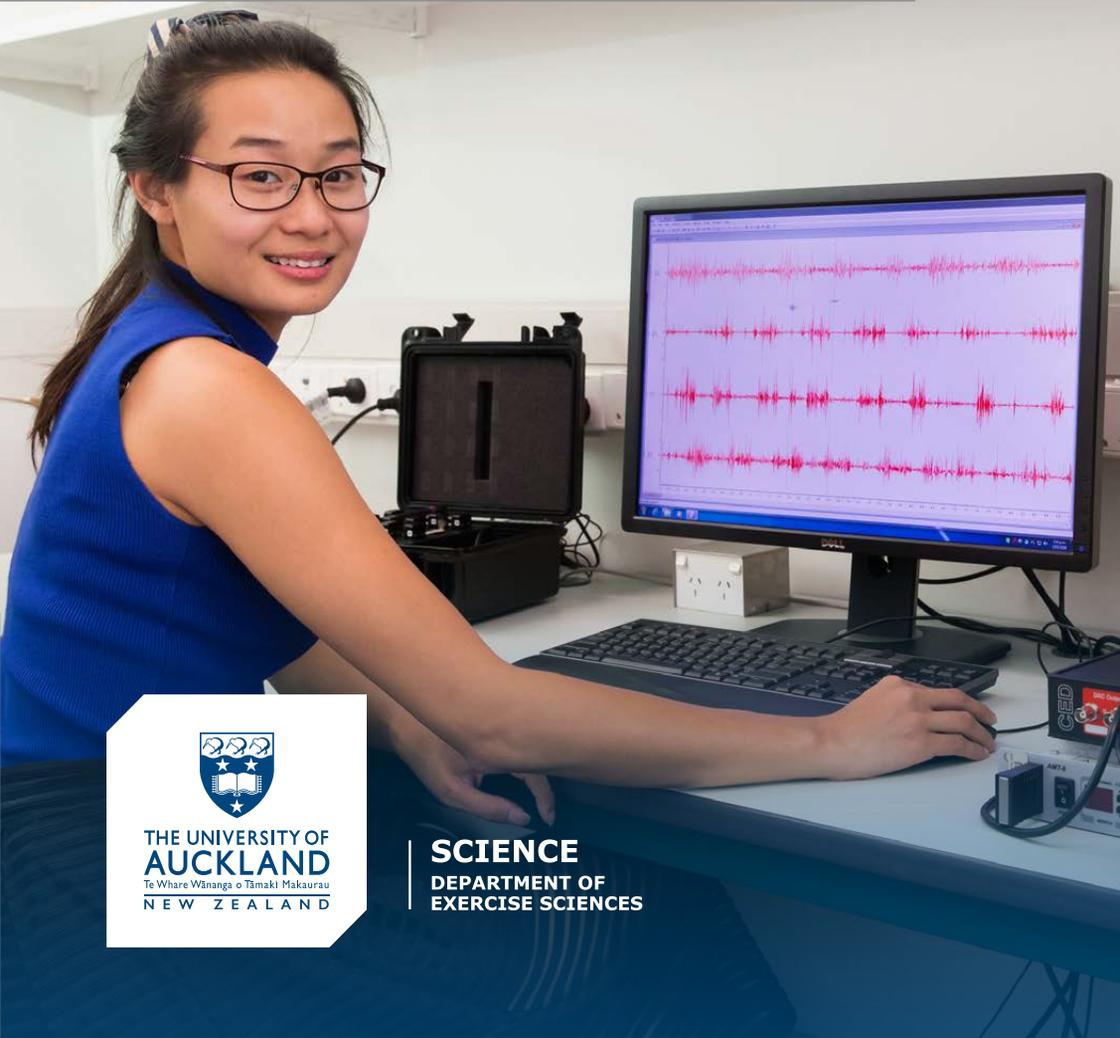


# Exercise Sciences

Postgraduate Handbook 2018



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

**SCIENCE**  
DEPARTMENT OF  
EXERCISE SCIENCES

# Welcome to the Department of Exercise Sciences

Exercise Sciences stretches the boundaries of knowledge from cell to psychology – working out how brain and body function. Join us to investigate the nature of physical activity and how it changes the human body when it is growing, performing incredible physical feats, ageing, or when it is at risk of disease.

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From early 2018, the Department of Exercise Sciences will be located in new facilities nearer the City and Grafton campuses on the Newmarket Campus.

Postgraduate study in the Exercise Sciences is exciting, and full of opportunities to focus your interest in movement neuroscience, biomechanics, exercise physiology, or exercise psychology. Extend your knowledge of how exercise sustains health, improves disease outcomes, and enhances human performance.

Exercise Scientists develop prescriptions for exercise, techniques for analysing human performance, and novel interventions to reduce chronic disease risk and improve recovery.

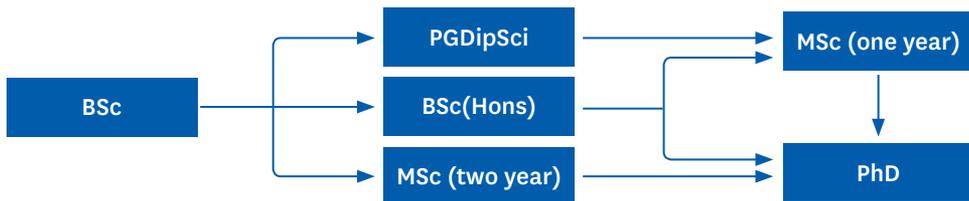
Exercise Sciences offers two postgraduate tracks; the primarily research-focused BSc(Hons), MSc and PhD programmes, and the internationally accredited two-year Clinical Exercise Physiology (CEP) programme that can be taken as either a PGDipSci or MSc.

Graduates in CEP will become allied health professionals and provide innovative practice across the health industry. Both tracks will interest Exercise Sciences' graduates and graduates of Physiology, Engineering, Psychology and Health Science disciplines.

We welcome enquiries about postgraduate study in CEP from physiotherapists, physicians, nurse specialists and allied health professionals.

ASSOCIATE PROFESSOR GREG ANSON  
Head of Department

# Postgraduate study options in Exercise Sciences



Research: BSc(Hons), MSc and PhD in Exercise Sciences

Clinical: taught PGDipSci and MSc in Clinical Exercise Physiology

## Bachelor of Science (Honours)

Extend your knowledge in your specialist area at postgraduate level with our honours programme. Study one-year full-time or two-years part-time.

### Exercise Sciences

#### Prerequisites

Bachelor of Science (BSc) in Sport and Exercise Science, Exercise Sciences or equivalent as approved by the Head of Department:

- At least 90 points at Stage III
- Attained at least a B average in 45 points above Stage II in the relevant subject major or equivalent as specified in the Bachelor of Science regulations.

#### Programme structure

The BSc(Hons) requires completion of select 700-level courses and submission of a research honours dissertation with a total value of 120 points.

##### Option one:

- 15 points EXERSCI 705
- 45 points from EXERSCI 780 (Dissertation)
- 60 points from EXERSCI 702-704, 706-714

##### Option two:

- 15 points EXERSCI 705
- 45 points from EXERSCI 780 (Dissertation)
- 45 points from EXERSCI 702-704, 706-714 and a further 15 points from 700-level courses in a related subject (subject to Head of Department approval)

After graduating with a BSc(Hons), it is possible to progress to a Masters degree (MSc), or to a doctorate (PhD).



For Clinical Exercise Physiology and Exercise Sciences programmes:  
[www.es.auckland.ac.nz/pg](http://www.es.auckland.ac.nz/pg)

# Postgraduate Diploma in Science (PGDipSci)

Study PGDipSci full-time in one-year or part-time must be completed within four years.



## Exercise Sciences

This qualification allows graduates to specialise in an area of particular interest in the Exercise Sciences.

### Prerequisite

- A BSc major in Exercise Sciences, Sport and Exercise Science, or equivalent as approved by the Head of Department.

### Programme structure

**Each student needs to pass courses with a total value of 120 points.**

- 15 points from EXERSCI 705
- 45 points from approved EXERSCI 700-level courses
- 60 points from other 600 or 700-level courses: Biological Sciences, Engineering, Exercise Sciences, Food Science, Nutrition, Physiology, Psychology, Statistics, or related subjects as approved by the Head of Department.

Students who have completed a PGDipSci may apply for entry to an MSc programme.

## Clinical Exercise Physiology

This postgraduate diploma programme has been designed to provide students with academic and clinical experience in the application of exercise for people with a wide range of health conditions or disease. In addition to course work, students will complete at least 200 hours of practical training working with clients at the Health and Performance Clinic.



Our Clinical Exercise Physiology programme has been awarded international accreditation by **Commission on Accreditation of Allied Health Education Programs**

### Prerequisites

- A major in Exercise Sciences, Sport and Exercise Science or equivalent qualification
- EXERSCI 302 or equivalent as approved by the Head of Department

### Programme structure

**Each student needs to pass courses with a total value of 120 points.**

- 90 points from EXERSCI 703, 705, 710, 712, 771 and 772
- 30 points from other approved 700 level courses in the Faculty of Science or the Faculty of Medical and Health Sciences

Suggested elective courses are: EXERSCI 706, 708, 713, 715 (recommended for students planning on the MSc in Clinical Exercise Physiology), MEDSCI 712 and 743, HLTHPSYC 714 and POPHLTH 739.

This postgraduate diploma programme prepares students for entry to the taught MSc in Clinical Exercise Physiology programme.

A student who is within 15 points of completing all the requirements for a BSc may, with the approval of the Head of Department, enrol for a PGDipSci provided that the remaining course is completed within 12 months of entry to PGDipSci and is not a course required for the major.

# Master of Science (MSc)

A student who is within 15 points of completing a BSc(Hons) or PGDipSci may, with the approval of the Head of Department, enrol for MSc provided that the remaining course is completed within 12 months of entry to MSc.

This qualification allows graduates to specialise in an area of particular interest in:

## Exercise Sciences (research MSc)

A research masters degree is an advanced postgraduate research programme that involves working on a scientific research project. The research masters in Exercise Sciences is a good option for students who are considering studying toward a PhD.

### Option one: prerequisites

- A BSc(Hons) or a PGDipSci in Sport and Exercise Science, Exercise Sciences or a PGDipSci in Clinical Exercise Physiology
- B- average in at least 90 points taken for the qualifying programme. At least 75 of these points must be in 700-level courses.

### Programme structure

- 120 points: EXERSCI 796 MSc Thesis in Exercise Sciences

### Option two: prerequisites

- A BSc major in Sport and Exercise Science, Exercise Sciences, or equivalent

### Programme structure

- 15 points from EXERSCI 705
- At least 75 points from EXERSCI 702-704, 706-714
- Up to 30 points from other 700-level courses as approved by the Head of Department
- 120 points: EXERSCI 796 MSc Thesis in Exercise Sciences

*Mid-year enrolment is possible for the research masters.*

### Masters (120 points) option one:

Full-time must be completed in one year and part-time must be completed within two years.

### Masters (240 points) option two:

Full-time must be completed in two years and part-time must be completed within six years.

## Clinical Exercise Physiology (taught MSc)

The taught masters programme includes course work, a dissertation, and at least 400 hours of practical training working with clients at the Health and Performance Clinic. Practical experience is gained with people with cardiovascular, metabolic, musculoskeletal, neoplastic, neurological and pulmonary diseases or conditions, and/or mood disorders, and those who are recuperating from surgery, chemotherapy or other medical interventions.

### Option one: prerequisites

- PGDipSci in Clinical Exercise Physiology or equivalent as approved by the Head of Department
- To be eligible for entry to this programme, students will have attained a B- average in at least 90 points taken for the qualifying programme. At least 75 of these points must be in 700-level courses.

### Programme structure

#### Taught masters

- 75 points: EXERSCI 773, 774, 775
- 45 points: EXERSCI 792 Dissertation

### Option two: prerequisites

- A BSc major in Sport and Exercise Science, Exercise Sciences, or equivalent approved programme

## Programme structure

### Taught masters

- 90 points from EXERSCI 703, 705, 710, 712, 771 and 772
- 30 points from other approved 700 level courses in the Faculty of Science or the Faculty of Medical and Health Sciences.
- 75 points: EXERSCI 773, 774, 775
- 45 points: EXERSCI 792 Dissertation

Graduates of the programme will develop advanced clinical and service delivery skills that prepare them to take the American College of Sports Medicine (ACSM) Registered Clinical Exercise Physiologist® Certification examination.



Commission on Accreditation  
of Allied Health Education Programs

*On the 15 January 2015 the US Commission on Accreditation of Allied Health Education Programs (CAAHEP), accredited our **Clinical Exercise Physiology** programme. This level of accreditation is the highest available internationally, and ours is the first CAAHEP – accredited clinical exercise physiology programme outside the USA.*

[www.es.auckland.ac.nz/caahep-accreditation](http://www.es.auckland.ac.nz/caahep-accreditation)



## Doctor of Philosophy (PhD)

The PhD degree comprises a programme of advanced study and research, the results of which are presented in a thesis.

### Quick facts

**Points per degree:** 360 points

**Full-time study:** 3-4 years

**Part-time study:** 6-8 years

**Degree structure:** research

**Application closing dates:** apply at any time

**Start date:** start at any time

For more information, go to:

[www.science.auckland.ac.nz/phd](http://www.science.auckland.ac.nz/phd)

### Entry to PhD

Entry into the PhD programme requires a Master of Science degree with first or second class honours (division one), or a relevant BSc(Hons) degree with first class or second class (division one) honours from a recognised institution. Candidates with overseas qualifications should consult the department for advice. 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.

### Selection of supervisor

Students need to select research supervisors for BSc(Hons) Dissertation, MSc research thesis and PhD study in Exercise Sciences. Please contact individual academic staff for the projects that are of interest to you. You should consult with at least two or three staff members.

For more information:

[www.es.auckland.ac.nz/staff](http://www.es.auckland.ac.nz/staff)

Research topics:

[www.es.auckland.ac.nz/research-topics](http://www.es.auckland.ac.nz/research-topics)

Find a thesis:

[www.findathesis.auckland.ac.nz](http://www.findathesis.auckland.ac.nz)

# Careers in Exercise Sciences

Cardiac physiologist

Cardiac perfusion technologist

Clinical exercise physiologist

Corporate health assessor

Exercise scientist

Human movement scientist

Injury prevention consultant

Research scientist (university or industry)

Respiratory physiologist

Fitness trainer

Sport scientist (consultant in biomechanics, exercise, nutrition, physiology)

For our postgraduate course information:  
[www.es.auckland.ac.nz/PG-courses](http://www.es.auckland.ac.nz/PG-courses)

*"I developed a keen interest for the brain during my undergraduate degree, particularly its role in motor control."*

*"My PhD focuses on understanding the effects of healthy ageing and stroke on neural circuits within the brain and the implications this may have for motor function and recovery."*

*"I thoroughly enjoy the independent nature of a PhD. While supervisors and mentors provide advice and assistance where needed, ultimately it is down to the student to develop and carry out various tasks whether it be data collection, analysis or report writing. Through these processes I have developed key attributes such as time management, goal setting/achieving and problem solving which will hold me in good stead. I've also had the opportunity to tutor undergraduate students."*

*"I hope to one day obtain a professional position whether it be at a university or research facility to continue to studying the brain."*

**Ronan Mooney** is studying toward a PhD in Exercise Sciences after completing a Bachelor of Science (Honours) with the department.



# Helpful information

## Academic dates

[www.auckland.ac.nz/dates](http://www.auckland.ac.nz/dates)

## Academic Integrity Course

[www.auckland.ac.nz/academic-integrity](http://www.auckland.ac.nz/academic-integrity)

## Accommodation

[www.accommodation.auckland.ac.nz](http://www.accommodation.auckland.ac.nz)

## Apply for postgraduate study

[www.auckland.ac.nz/applynow](http://www.auckland.ac.nz/applynow)

## Career Development and Employment Services

[www.cdcs.auckland.ac.nz](http://www.cdcs.auckland.ac.nz)

## Childcare

[www.auckland.ac.nz/childcare](http://www.auckland.ac.nz/childcare)

## Degree planning and course advice

[www.science.auckland.ac.nz/student-centre](http://www.science.auckland.ac.nz/student-centre)

## Disability Services

[www.disability.auckland.ac.nz](http://www.disability.auckland.ac.nz)

## How to apply

[www.apply.auckland.ac.nz](http://www.apply.auckland.ac.nz)

## How to enrol

[www.auckland.ac.nz/enrolment](http://www.auckland.ac.nz/enrolment)

## Information for postgraduate students

[www.postgraduate.ac.nz](http://www.postgraduate.ac.nz)

## International students

[www.international.auckland.ac.nz](http://www.international.auckland.ac.nz)

## Libraries and Learning Services

[www.library.auckland.ac.nz](http://www.library.auckland.ac.nz)

## Māori and Pacific students

[www.science.auckland.ac.nz/tuakana](http://www.science.auckland.ac.nz/tuakana)

## Need help?

[www.askauckland.ac.nz](http://www.askauckland.ac.nz)

## Postgraduate Students' Association

[www.pgsa.org.nz](http://www.pgsa.org.nz)

## Rainbow Science Network for LGBTI students

[www.science.auckland.ac.nz/rainbowsience](http://www.science.auckland.ac.nz/rainbowsience)

## Scholarships, awards and fees

[www.scholarships.auckland.ac.nz](http://www.scholarships.auckland.ac.nz)

[www.auckland.ac.nz/fees](http://www.auckland.ac.nz/fees)

## Support for science students

[www.science.auckland.ac.nz/support](http://www.science.auckland.ac.nz/support)

**Questions about Exercise Sciences?  
[exercise-sciences@auckland.ac.nz](mailto:exercise-sciences@auckland.ac.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**  
Te Whare Wānanga o Tāmaki Makaurau  
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](mailto:scifac@auckland.ac.nz)

Web: [www.es.auckland.ac.nz](http://www.es.auckland.ac.nz)



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[www.facebook.com/science.uoa](https://www.facebook.com/science.uoa)