



From I  
wonder

Dr Gallo  
ACU graduate  
Head sport scientist



to I will.



# Executive Dean's welcome

The Faculty of Health Sciences at ACU is known for world-leading education and research, and for producing graduates who make a difference. Whether you want to gain new professional qualifications, change your career direction, or pursue a personal ambition, we've got the brightest minds waiting to help you on your way.

We're a young university, but we are making our mark. ACU is ranked in the top 50 of Generation Y universities worldwide<sup>1</sup> and in the top 10 Catholic universities<sup>2</sup>. We have more than 200 partners on six continents, community engagement opportunities around the globe, and a campus in Rome, Italy.

The faculty is deeply engaged with industry, government, and the community. And all our courses offer work placements, internships with leading companies, or volunteering opportunities.

Our curricula are developed and refined in conjunction with industry leaders, to ensure they reflect local and international knowledge, rapid changes in the health environment, and advances in student learning.

ACU has three research institutes focusing on health sciences – the Mary MacKillop Institute for Health Research, the Nursing Research Institute, and the Institute for Positive Psychology and Education. In the latest Excellence in Research for Australia (ERA) assessment, we received the top score for research in human movement and sports science, nursing, psychology and public health and health services<sup>3</sup>.

At ACU, it's education, but with a bigger purpose. We're a university committed to standing up for people in need and causes that matter. If you've got the desire to make an impact, we'll give you the skills to change the world.

I look forward to welcoming you to our university.

**Professor Michelle Campbell**  
Executive Dean, Faculty of Health Sciences



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You're just getting started

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# Think you know ACU?

You're just getting started.  
It's education, but not as you know it.



## Meaningful education, not mass production

At ACU, it's education, but with a bigger purpose. We're a university committed to standing up for people in need and causes that matter. If you've got the desire to make an impact, we'll give you the skills to change the world. And if you want to start making an impact now – you can. Research within our faculties and institutes tackles enduring and pressing issues in society, in Australia, and around the world.



## We see the whole person

Everyone is welcome at ACU. We're inclusive and supportive of everyone, every day, and our students feel it – giving us five stars for overall experience, learner engagement, skills development and full-time employment.\* We'll get to know you, and we will make sure you get the most out of your uni experience.

\*Good Universities Guide 2019



## Flexible study

Study needs to be flexible. We get that life changes fast, and you need to find the right balance of family, work and study. Many of our courses offer part-time and full-time options, as well as online learning, travel opportunities, intensive units, and flexible start dates.



## We've got your back

Whether it's figuring out how to enrol, or finding the best coffee on campus, we'll help you out in person, online, by phone, live chat, or even SMS. And if you need support with your studies, career advice, or counselling services, we've got that covered too. [acu.edu.au/askacu](http://acu.edu.au/askacu)



## Connections that count

Our partnerships around Australia and overseas provide rich learning experiences for our students. These relationships enhance student learning and provide opportunities for practical work experience and collaborative research.



## The world is our campus

We're young, but we are making our mark. We're ranked in the top 50 of Generation Y universities worldwide\* and in the top 10 Catholic universities\*\* - alongside Georgetown University and Boston College in the US. We've got more than 200 partners on six continents, community engagement opportunities around the globe, and a campus in Rome, Italy.

\*Times Higher Education Young University Rankings 2018

\*\*Times Higher Education World University Rankings 2018/2019, IFCU members



## Scholarships

We know that balancing the cost of living and study can be tricky. So we offer nearly 400 scholarship opportunities which recognise academic achievement, community participation, and help out students from a range of backgrounds. See page 8.

# Our neighbourhoods

We've got seven campuses around Australia, and a campus in Rome, Italy. Each one is unique, but they're all dynamic, inviting and great places to learn.

Head to [acu.edu.au/locations](https://acu.edu.au/locations) to take a virtual tour of your campus.

## BALLARAT

Our Ballarat Campus is located in the centre of Ballarat. Situated amid historical gardens, beautiful old buildings, and a block from Lake Wendouree, it has a lot to offer. Explore the grounds, enjoy a home-cooked meal at the canteen, and soak up the community vibe.

- Central location
- Free parking
- Modern physiotherapy building with labs and simulation rooms

## BRISBANE

Whether you want to get involved in campus life, create a professional network, or just find a quiet place to study — our Brisbane Campus has you covered. Set on 40 hectares of parklands, the campus has ample parking, state-of-the-art learning facilities, and places to hang out like cafes and a swimming pool.

- Free parking and shuttle bus
- Modern health labs
- ACU Health Clinic

## CANBERRA

Just five kilometres from the city centre, our Canberra Campus has a lot on offer. With a campus lounge, swimming pool and beautiful landscaped gardens, you'll have plenty to keep you busy between classes.

- State-of-the-art nursing and health sciences labs
- High-tech exercise science lab
- Modern library and 300-seat lecture theatre

## MELBOURNE

Our Melbourne Campus is right next to the cafes, art galleries and live music venues of Brunswick Street. Kick back with a coffee on our rooftop garden or hang out with friends in one of our cafes.

- Close to six tram routes, bus routes and Parliament Railway Station
- Award-winning library
- Art gallery and media production studios

## NORTH SYDNEY

Just across the Harbour Bridge from the city centre, our North Sydney Campus is a great place to study and relax.

- Modern nursing simulation labs
- High-tech speech pathology and occupational therapy labs
- Moot court, for simulating real-life law court proceedings

## STRATHFIELD

Our Strathfield Campus is set amid beautiful landscaped grounds and historical buildings, with excellent transport links. Whether you want to have a friendly match on our rugby and soccer ovals or take in a show at our art gallery, there's always something going on.

- Free parking and shuttle bus
- Popular art gallery
- High-tech biomechanics lab

## ADELAIDE

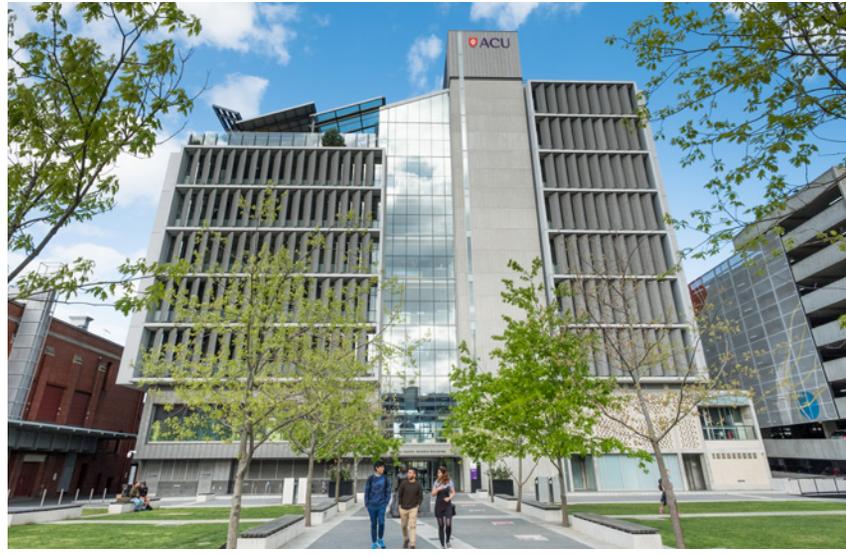
Our Adelaide Campus is one of our newest additions, and primarily offers postgraduate courses in theology.

## ROME

Our Rome Campus is located on Janiculum Hill, a site that has a rich history dating back to the 3rd century. It sits on a sprawling property that boasts extensive gardens and terraces to enjoy beautiful views of the city.

- Close to the Vatican and popular tourist sites
- Modern, onsite residential accommodation
- Community engagement opportunities

**Committed  
to community**





IN AUSTRALIA

## 5 stars

FOR FULL-TIME EMPLOYMENT, OVERALL EXPERIENCE, LEARNER ENGAGEMENT AND SKILLS DEVELOPMENT

*Good Universities Guide 2019*



IN THE WORLD

## Top 3%

UNIVERSITIES

*Times Higher Education World University Rankings 2018/2019\**



## Top 50

GENERATION Y UNIVERSITIES

*Times Higher Education Young University Rankings 2018*



## Top 30

SPORTS SCIENCE

*ARWU 2018*



## Top 80

UNIVERSITIES IN ASIA-PACIFIC

*Times Higher Education Asia-Pacific University Rankings 2019*



## Top 10

CATHOLIC UNIVERSITIES

*Times Higher Education World University Rankings, IFCU members 2018/2019*



RESEARCH

## Above world standard

HUMAN MOVEMENT AND SPORTS SCIENCE

*ERA 2015*



# Numbers that count

\*Percentage calculated as ACU's world rank as a proportion of the total number of universities in the world: *International Handbook of Universities 2018*, Palgrave MacMillan.

# Postgraduate study pathways

In general, postgraduate study falls into two main categories: coursework and research.

## Coursework

- Programs are generally six months to two years full-time (or equivalent part-time).
- You can expect classes (including online classes), units, and set assessments, similar to an undergraduate degree.
- To apply you usually need to have completed an undergraduate degree first. However, professional experience can also be taken into account.
- The graduate certificate, graduate diploma and masters degree are connected and can build on each other.
- If you're considering a masters degree but don't initially qualify, you may be accepted into the graduate certificate or diploma in the same area of study.
- If you choose to study a masters degree but your circumstances change, you may be able to exit the degree early with the relevant graduate certificate or graduate diploma.
- Coursework programs are ideal for gaining new skills and getting ahead in your career.

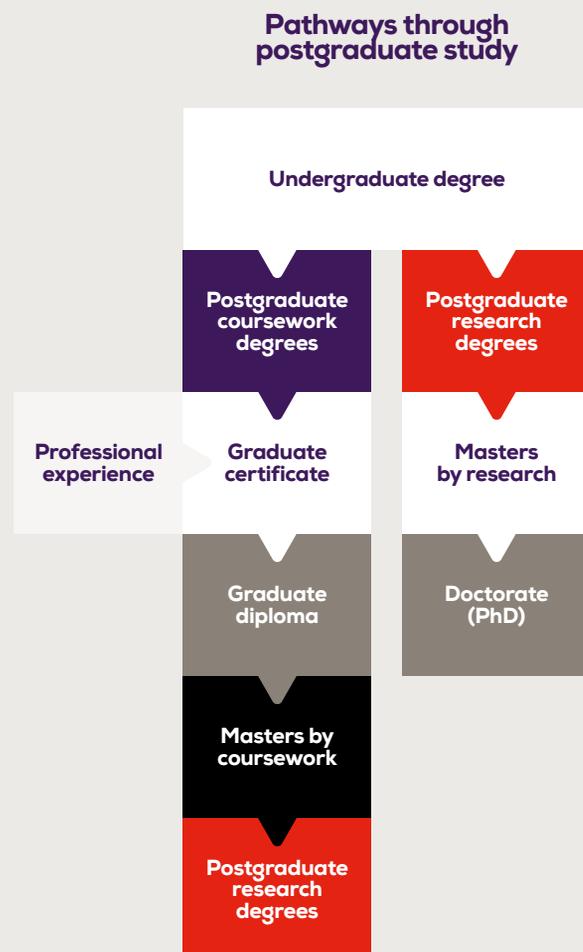
## Research

- Programs are generally two to four years full-time (or equivalent part-time).
- You can expect independent research and exploration of original ideas under the guidance of a supervisor.
- To apply you usually need to have completed an undergraduate degree with honours or a masters.
- ACU offers supervised research at either masters or doctoral level.
- Research programs are ideal for making a new contribution to an academic field. They can be a pathway to research or an academic career, or help you get ahead at work.

Honours degrees are also available. They are a one-year degree for high-achieving students who have already completed a bachelor degree, and allow you to build upon your knowledge, develop research skills, and work closely with an academic expert. The main focus of the degree is to produce a research thesis under supervision from experienced academic staff.

If you're studying at another university and would like to switch to ACU, or you have relevant knowledge and skills acquired in the workplace, you may be able to get credit towards your degree.

[acu.edu.au/priorlearning](https://acu.edu.au/priorlearning)



# Fees and scholarships

There are many options to help you manage the cost of study. Tuition fees depend on the course you enrol in, and there are two placement offer types: fee-paying place, and Commonwealth Supported Place (CSP).



## FEE-PAYING PLACE

A fee-paying place is not subsidised by the government, so you pay the full cost of the course. As a domestic fee-paying student, you may be eligible to defer payment of your fees through the FEE-HELP government loan scheme. Repayment of the loan occurs through the tax system once your income exceeds the minimum threshold. Your employer may also consider assisting with the cost of study if the course is related to your current position.

[studyassist.gov.au](http://studyassist.gov.au)



## COMMONWEALTH SUPPORTED PLACE (CSP)

A small number of postgraduate courses at ACU offer CSPs, where the government pays a proportion of tuition costs. The remainder of the fees are paid by the student, but eligible students can defer their payment through the HECS-HELP government loan scheme. Repayment of the loan occurs through the tax system once your income exceeds the minimum threshold.

[studyassist.gov.au](http://studyassist.gov.au)



## RESEARCH TRAINING PROGRAM FEES OFFSET SCHOLARSHIPS

If you are enrolling in a masters by research or doctorate program at ACU, you may be exempt from paying tuition fees. Our Research Training Program Fees Offset Scholarships are for high-achieving domestic students whose research proposal aligns with our priority areas.

[acu.edu.au/research-scholarships](http://acu.edu.au/research-scholarships)



## FACULTY ALUMNI REBATE

If you're an ACU graduate, you may be eligible for a 10 per cent rebate on postgraduate fees.

[acu.edu.au/alumni-rebate](http://acu.edu.au/alumni-rebate)



## POSTGRADUATE COURSEWORK SCHOLARSHIPS

We offer scholarships to help support you financially during your studies. Use our online scholarships portal to find the ones that are right for you.

[acu.edu.au/scholarships](http://acu.edu.au/scholarships)



## RESEARCH TRAINING PROGRAM STIPEND SCHOLARSHIPS

We offer competitive scholarships with a stipend to help support you financially during your research, and to reward outstanding academic achievement. For international students, this includes a tuition fee waiver and an Overseas Health Care Policy.

[acu.edu.au/research-scholarships](http://acu.edu.au/research-scholarships)

Got questions? We're waiting with the answers.

[acu.edu.au/askacu](http://acu.edu.au/askacu)

# Applying to ACU

## Postgraduate coursework degrees

- 1.**  Choose the course you would like to study by browsing this guide and visiting [acu.edu.au/courses](https://acu.edu.au/courses) for more details.
- 2.**  Check important dates and application requirements carefully – some courses also require supporting documentation.
- 3.**  Check out the postgraduate scholarships available at [acu.edu.au/scholarships](https://acu.edu.au/scholarships)
- 4.**  Apply online direct to ACU at [acu.edu.au/courses](https://acu.edu.au/courses)
- 5.**  Accept your offer and enrol.

## Postgraduate research degrees

Application to ACU higher degrees by research, including the Master of Philosophy and Doctor of Philosophy, is by direct application to Candidature Services at ACU.

- 1.**  Visit [acu.edu.au/research/apply](https://acu.edu.au/research/apply)
- 2.**  Check the program requirements, application deadlines, and your eligibility.
- 3.**  Complete an application for admission and provide your documents.
- 4.**  Organise your two referee reports.
- 5.**  Submit the completed application.

For more information on how to apply for postgraduate coursework degrees, visit [acu.edu.au/apply](https://acu.edu.au/apply)

For more information and to apply for postgraduate research degrees, visit [acu.edu.au/research/apply](https://acu.edu.au/research/apply)

If you still have questions or need help with your application, visit [acu.edu.au/askacu](https://acu.edu.au/askacu)

# Faculty of Health Sciences

The Faculty of Health Sciences works to prepare highly skilled graduates who promote health and wellbeing, and manage illness and injury, for the health and sports industries both in Australia and internationally.

**We give our students the skills, knowledge, and practical experience they need to succeed. Our graduates are helping improve the health of individuals, families, and communities with their expertise and passion. Our students come from diverse backgrounds, and receive tailored support from their supervisors in an environment known for rigorous and robust intellectual inquiry. They are valued as individuals and teaching staff are directly involved with their academic development.**

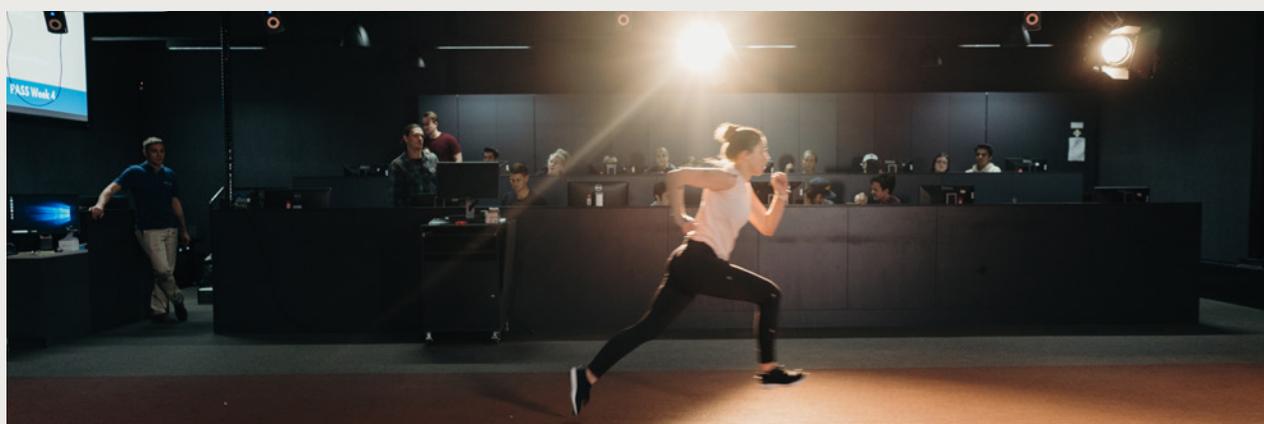
We get that life is busy, and you need to find the right balance of family, work and study. Flexible learning options are available across six campuses in Ballarat, Brisbane, Canberra, Melbourne, and Sydney (Strathfield and North Sydney). Many of our postgraduate programs can be accessed from anywhere in the world.

Cross-disciplinary study units bring together current and new knowledge from a range of professions including: sports psychology, skill acquisition, nutrition and dietetics, exercise physiology, sports

science, sports business/management, strength and conditioning, data analytics, physiotherapy, sports medicine, and rehabilitation. Our curriculum is developed and refined in conjunction with industry leaders.

The faculty has a growing research agenda, with opportunities for masters and doctoral students to join current research projects. Our exercise science researchers, lecturers, practitioners, and clinical supervisors consult and conduct research in areas such as sports science, elite athlete preparation and career development, and the clinical applications of exercise in healthy populations, those with chronic disease, and/or injured populations.

Our clinical exercise physiology clinics, supervised by our team of accredited exercise physiologists (AEPs), provide invaluable practical experience for our masters students and high-quality exercise services to ACU staff, students and members of the general public.





## ASSOCIATE PROFESSOR STUART CORMACK

Associate Professor Stuart Cormack from ACU's School of Behavioural and Health Sciences has spent 15 years working in the Australian Football League, including eight years as the fitness coach at the West Coast Eagles, highlighted by two grand final appearances and winning the 2006 AFL Premiership. He also spent four years as a strength and conditioning coach at the Australian Institute of Sport, where he worked with elite athletes in a variety of team and individual sports in preparation for the Sydney 2000 Olympic Games.

Associate Professor Cormack is also a Level 3 Strength and Conditioning Coach and a Life Member of the Australian Strength and Conditioning Association. He has published numerous papers in scientific journals and co-authored several book chapters, including *Physiological tests for elite athletes* (2nd Edition), *High performance training for sports*, and *Strength and conditioning – biological principles and practical applications*.

Associate Professor Cormack regularly presents at sports science and coaching conferences in addition to providing consultancy support to various organisations, including the International Cricket Council, Australian Institute of Sport Combat Centre, and Melbourne Football Club. He has an interest in all areas of athletic preparation, with a particular focus on monitoring training load and fatigue in elite athletes, and its impact on performance.



## ASSOCIATE PROFESSOR MICHAEL BAKER

Associate Professor Michael Baker from ACU's School of Behavioural and Health Sciences is an exercise scientist whose research, clinical, and teaching career has focused on the integration of exercise, medicine, lifestyle, and behaviour change as a means to improve quality of life – particularly among older adults.

Associate Professor Baker is a member of Exercise and Sport Science Australia (ESSA) and is an accredited exercise physiologist. He has participated in the coordination and implementation of several randomised trials of exercise in clinical populations, including participants with prostate cancer, breast cancer, osteoarthritis, type 2 diabetes, osteopenia, NAFLD, and cognitive decline. He currently supervises a number of masters and PhD students in projects examining the role of exercise and lifestyle in chronic disease and cancer. The translation of this work into clinical practice, international policy, and community program implementation is central to his goals as a researcher.

Associate Professor Baker's commitment to university service is demonstrated by his mentorship of students at all levels and by his roles on a number of research and advisory committees. He has independently developed and taught complete courses at the undergraduate level.

# Exercise science partnerships

Our partnerships around Australia and overseas provide rich learning experiences for our students. These relationships enhance student learning, practical work experience opportunities and collaborative research.

Over the past few years we've worked with the following partners in sports science delivery, industry experience, and research collaborations:

- ACT Academy of Sport
- Austin Elite Rugby, Major League Rugby, USA
- Austin Health
- Australian Ballet School
- Australian Institute of Sport Combat Centre
- Australian Rugby Union
- Brisbane Lions Football Club
- Brisbane Roar Football Club
- Centre for Healthy Ageing
- Collingwood Football Club
- Cricket Australia
- Cumberland Hospital
- England Rugby Union, UK
- Epworth Health
- Greater Western Sydney Football Club
- Gymnastics Australia
- Houston Dynamo SC, Major League Soccer, USA
- International Cricket Council
- Louisville Cardinals, USA
- Melbourne Football Club
- Melbourne Rebels Rugby Union
- Melbourne Storm Rugby League Club
- Melbourne United Football Club
- Melbourne Victory Football Club
- Monash Health
- New South Wales Institute of Sport
- North Melbourne Football Club
- Norths Devils Rugby League Football Club
- Notre Dame Irish, USA
- Oklahoma City Thunder (NBA)
- Optimum Rehab
- Orygen Youth Health
- Queensland Academy of Sport
- Queensland Rugby League
- Real Salt Lake FC, Major League Soccer, USA
- Socceroos
- South Sydney Rabbitohs Rugby League Club
- Spinal Cord Injuries Australia
- Tennis Australia
- The Exercise Clinic
- The Football Association, UK
- Toronto FC, Major League Soccer, USA
- UFC Performance Institute, USA
- Victorian Institute of Sport
- Western Sydney Wanderers Football Club
- Wests Tigers Rugby League Club



## MonashHealth



## Orygen YOUTH Health

### **MONASH HEALTH**

“Monash Health is a very large public health organisation offering exercise physiology services across sub-acute, outpatients, mental health, paediatrics, community rehab and community health.

Every year we take a number of students from ACU across all of our clinical placement areas. The students from ACU continuously demonstrate the utmost professional approach to their learning experience. They pride themselves on their ability to develop skills as young clinicians, maximise their opportunities to practice in the real world and are always eager to succeed and grow over the course of their placements.”

**Samantha Lancaster**  
Accredited exercise physiologist  
and exercise physiology community  
lead

### **EPWORTH REHABILITATION**

“Epworth rehabilitation specialises in neurological rehabilitation, including acquired brain injury (ABI) and traumatic brain injury (TBI), multi-trauma orthopaedic rehabilitation, and amputee rehabilitation.

We focus on achieving high-level outcomes with patient populations including return to running and cycling to improve independence and high-level mobility.

The skills and attributes we notice in ACU students include a professional approach to the placement, an eagerness to learn, and the drive to develop professional skills over the course of the placement.”

**Chris Byrne**  
Senior exercise physiologist

### **ORYGEN YOUTH HEALTH**

“Orygen Youth Health (OYH) is a world-leading youth mental health program based in Melbourne. Exercise physiology students from ACU have demonstrated high levels of creativity, willingness to learn and a commitment to enriching the lives of young people. They bring excitement, energy and a fresh perspective on health promotion and recovery.”

**Lauren Foote**  
Exercise physiologist

# Research institutes

ACU has prioritised research intensification. The work within our faculties and institutes tackles enduring and pressing issues in society, in Australia, and around the world. The following institutes and centres are linked to the School of Behavioural and Health Sciences, and provide opportunities for research collaboration.

## The Mary MacKillop Institute for Health Research



### Director: Professor John Hawley

The Mary MacKillop Institute for Health Research (MMIHR) is focused on undertaking research that discovers and promotes effective strategies to create a healthier Australia. Our work aims to address critical public health issues by identifying and responding with innovative programs that deliver better health outcomes and transform lives.

We bring national and international health experts together with leading organisations across a broad portfolio of health-related research areas. By fostering an environment of collaborative research, without discipline-based boundaries, the impact we can make is profound and extensive.

MMIHR emphasises the importance of translating research findings into practical health initiatives that produce real outcomes. Our team of prominent researchers are driven to improve the quality of health interventions through research that tests and improves the effectiveness of existing health-related programs, health service delivery, health education, and community planning and design. Our research enables us to develop and shape individual, social and community programs based on a rigorous analysis and synthesis of observational and experimental data, from the molecular to societal level.

Our research emphasises the complex interactions between individuals, the social and physical aspects of their communities and the available health care systems. This broad-based approach includes:

- clinically based exercise-nutrition intervention studies to:
  - improve and maintain bone and skeletal muscle health for healthy ageing
  - maximise health benefits through the optimal timing of nutrition and exercise
  - prevent and manage the adverse effects of cancer and chronic metabolic diseases
  - discover the biological mechanisms underlying the health benefits of exercise and nutrition
- environmental and behavioural epidemiological studies aimed at:
  - identifying key physical and social aspects of urban environments that promote physical and cognitive health across the lifespan
  - understanding how genetic, psychosocial and behavioural factors interact with the environment to impact on health
  - identifying optimal person- and environment-tailored intervention strategies for the promotion of health-related behaviours
- MRI intervention studies to:
  - improve cognitive and motor skills, quality of life and participation in brain-injured patients
  - mitigate the adverse effects of chemotherapy in cancer patients
  - uncover the biological mechanisms, the active ingredients and the duration of action underpinning training-induced gains
- focused studies to understand and describe the individual impact of risk behaviours and disease
- the promotion of equitable access to health services and active-friendly communities.

[acu.edu.au/mmihr](http://acu.edu.au/mmihr)

## Exercise and Nutrition Research Program

### Director: Professor John Hawley

As the incidence of chronic lifestyle-related diseases continues to rise worldwide, the work of ACU's Exercise and Nutrition Research Program has never been more critical. The program's research team conducts clinically based exercise and nutrition intervention studies directed at:

- maximising health benefits through the optimal timing of nutrition and exercise
- discovering the biological mechanisms underlying the health benefits of appropriate exercise and nutrition
- maintaining bone and skeletal muscle health during ageing

- preventing and managing the adverse effects of cancer, and other chronic metabolic diseases.

Experimental and clinical trials undertaken by the Exercise and Nutrition Research Program are conducted in state-of-the-art laboratory facilities using a range of contemporary equipment and techniques. Human, animal and cell models are utilised by our international team of researchers, who are dedicated to achieving research excellence using a holistic approach that considers molecular, cellular and whole-body physiology.

## Exercise Oncology Research

### Lead: Associate Professor Prue Cormie

Associate Professor Prue Cormie is an accredited exercise physiologist whose research and clinical work focuses on the role of exercise in the management of cancer. Her research seeks to understand the application of exercise as medicine for the management of cancer and involves

the convergence of exercise science, cancer care, and innovation in allied health services. Associate Professor Cormie has produced influential research exploring the efficacy of targeted exercise prescriptions in counteracting significant side effects of cancer and cancer treatments.



### Research success

Health sciences research at ACU is seeing results. In the Excellence for Research in Australia (ERA) initiative\*, we were rated well above world-standard in human movement and sports science, nursing, psychology, public health and health services.

#### Research in the school

These PhD projects are currently being supervised in the School of Behavioural and Health Sciences.

- The efficacy of a trunk-based exercise program for improving postural stability in people with Parkinson's disease.
- An investigation of the relationship between changes in lower limb strength and walking ability following stroke.
- The use of wearable microtechnology to detect collisions and other contact events in rugby union.
- An examination of ways to optimise the post-operative management of Parkinson's disease patients following deep brain stimulation.
- The contribution of lower limb muscle forces to knee joint loading.
- An investigation of the physical qualities and match demands of women's Australian football.
- The relevance of perceptual-motor calibration in successful movement control.
- The use of wearable technology to examine the exploration behaviour of association footballers.
- Developing technology to investigate exploration and perception-action expertise for interpersonal decision-making in field hockey.
- An investigation of skill-based movement variability differences in the performance of the putting stroke.
- Muscle force contributions to knee joint loading.
- Assessing hamstring function throughout rehabilitation from anterior cruciate ligament reconstructive surgery: association with age and sex.
- Statistical modelling of the probability of injury in elite Australian football.
- Optimising rehabilitation of hamstring strain injury.
- Development of clinical assessment tools to evaluate movement patterns following ACL injury.
- Using motor control theory in the application of healthy aging and falls prevention.
- Examining the exploration behaviour of footballers in representative task designs and using novel technology.
- Visual exploratory behaviours, posture and physiological load in field hockey athletes.

\* ERA 2015

# Courses

ALL OUR COURSES ARE COMPLIANT WITH THE



# CLINICAL EXERCISE PHYSIOLOGY

## Master of Clinical Exercise Physiology

 Brisbane, Melbourne, Strathfield  1.5 yrs FT (or equivalent PT)

Gain knowledge and appropriate skills in screening, assessment, and provision of exercise intervention in multiple applications across the lifespan, including prevention and management of chronic disease, workplace conditioning, and sport injury rehabilitation.

**Accreditation:** This sequence gives you the required training, skills, competencies, and clinical experience in exercise prescription and rehabilitation for accreditation as an exercise physiologist by Exercise and Sports Science Australia (ESSA). This course is accredited by ESSA and is currently undergoing re-accreditation for graduates in the program from 2019 to 2023.

**Entry requirements:** To apply for this course, you must:

- a. i. have completed a bachelor degree that is accredited by ESSA at exercise science level, with a grade point average (GPA) of at least 4.6 on the ACU 7 point scale  
or
- ii. have attained ESSA graduate assessment, and a non-ESSA accredited bachelor degree with a GPA of at least 4.6 on the ACU 7 point scale  
or
- iii. have attained exercise science accreditation and a non-ESSA accredited bachelor degree with a GPA of at least 4.6 on the ACU 7 point scale  
or
- iv. have completed a bachelor degree that is accredited by ESSA at exercise science level, with a GPA of at least 4.2 on the ACU 7 point scale, AND have evidence of substantial relevant industry experience for at least one year post-bachelor graduation  
or
- v. have attained ESSA graduate assessment and a non-ESSA accredited bachelor degree, with a GPA of at least 4.2 on the ACU 7 point scale, AND have evidence of substantial relevant industry experience for at least one year post-bachelor graduation  
or
- vi. have attained exercise science accreditation and a non-ESSA accredited bachelor degree, with a GPA of at least 4.2 on the ACU 7 point scale, AND have evidence of substantial relevant industry experience for at least one year post-bachelor graduation.
- b. submit evidence of a current first aid and CPR certificate or proof of current enrolment in a first aid and/or CPR course
- c. submit a letter of application (300 to 500 words) outlining the reasons for your interest in the course
- d. submit a supporting professional referee's report\*.

### Entry pathways and partnerships:

- ACU's Bachelor of Exercise and Sports Science degree is NUCAP-accredited for exercise science from 2014 to 2018 and is currently undergoing re-accreditation for 2019 to 2023. It is therefore an entry pathway to the Master of Clinical Exercise Physiology.
- Degrees at other Australian universities that are NUCAP-accredited at the exercise science level act as entry pathways.
- Students who attain exercise scientist membership or graduate entry assessment through ESSA can apply for entry to the Master of Clinical Exercise Physiology.
- Entry via successful completion of other allied health programs will be considered on a case-by-case basis.

**Practical experience:** As part of this program you will gain professional experience in organisations such as hospitals, community health services, private practice, worksites, sports medicine clinics, and aged-care facilities.

You will need to complete 360 hours of clinical placement with requirements to complete a set number of hours in target pathology areas.

You will work with clients who have chronic and complex conditions to develop client-centred, safe, and effective exercise interventions. You will refine your clinical decision-making skills that incorporate the use of effective motivation interviewing, along with valid and reliable outcome measures.

**Career outcomes:** On completion of this degree, you will enter the job market as an accredited exercise physiologist (AEP). AEPs work across the lifespan of client needs in:

- hospital or community health environments as part of a multidisciplinary team in the management and treatment of complex and chronic disease
- private practice as part of a multidisciplinary care of clients
- workplace/industrial settings in injury prevention, injury management, and occupational rehabilitation
- aged care in the prevention of physical decline and maintenance of independence, as well as management of chronic disease
- any work environment that requires an allied health professional who can prescribe effective exercise prescription for the management of complex and chronic disease
- any environment that requires the prevention of injury and disease and the promotion of healthy lifestyle practices
- a sport rehabilitation setting.

\*This report is to be submitted by your chosen referee. For more information please visit our website: [courses.acu.edu.au/postgraduate/master\\_of\\_clinical\\_exercise\\_physiology](https://courses.acu.edu.au/postgraduate/master_of_clinical_exercise_physiology)

## MASTER OF CLINICAL EXERCISE PHYSIOLOGY – SAMPLE COURSE MAP

YEAR 1	Semester 1	Lifestyle and exercise counselling Neurological analysis, prescription and rehabilitation	Musculoskeletal analysis, prescription and rehabilitation Applied anatomy for clinical exercise physiologists
	Semester 2	Responsible clinical practice Cardiometabolic analysis and rehabilitation	Occupational assessment and rehabilitation Clinical experience 1
YEAR 2	Semester 1	Clinical experience 2	

### Lifestyle and exercise counselling

This unit aims to address three key challenges in exercise physiology: how can practitioners use evidence-based strategies to promote adherence to their prescriptions; how do they respond to the unique needs and stages of change for different clients; and how do they play a role in the management of mental health within their scope of ethical practice. This is consistent with the professional standards for accredited exercise physiologists. This unit will give you concrete, evidence-based skills and strategies for promoting adherence to exercise prescriptions. These include theory and research-driven interventions for evoking motivation for change, for enhancing commitment to programs, and for multidisciplinary management of mental health concerns.

### Neurological analysis, prescription and rehabilitation

The aim of this unit is for you to become proficient in the knowledge and techniques for the determination of neurologic injury and exercise-based rehabilitation of general neurological impairments, as well as specific neurological disorders. Injury to the nervous system is often devastating. However, extensive recovery of function within this system is possible with appropriate diagnosis and rehabilitation. Within their scope of practice, accredited exercise physiologists must be able to design and prescribe safe, evidence-based exercise interventions for individuals suffering a range of neurological disorders. This unit builds upon a framework of the human nervous system at gross anatomical and fundamental elemental levels, with a focus upon the sensory and motor components of movement control. This unit will extend the principles of physiology, motor control and biomechanics, and build upon skills gained during undergraduate studies. You will explore the use of exercise in the rehabilitation of individuals with neurological disorders (including stroke, spinal cord injury, acquired brain injury, Parkinson's and multiple sclerosis). Specifically, pathophysiology of neural injury, general impairments commonly suffered, as well as specific neurological disorders will be examined.

### Musculoskeletal analysis, prescription and rehabilitation

This unit aims to develop your knowledge and skill to become proficient in the prescription of exercise as a prevention and management strategy for musculoskeletal disease, as a treatment strategy for injury, including sports injuries, and as a means of sustaining functional independence throughout the lifespan in a safe and effective manner. Within their scope of practice, accredited exercise physiologists must be able to design and prescribe safe, evidence-based exercise interventions for individuals suffering a range of musculoskeletal disorders. In this unit, you will analyse current scientific knowledge and understanding of musculoskeletal disorders and diseases, examine the mechanisms involved, and the processes that lead to dysfunction and pain. Functional restoration, maintenance or adaptation forms a major focus of the unit. Methodological aspects of the clinical assessment of musculoskeletal disorders and diseases will be discussed together with the theory and practice of available exercise prescriptions and treatment therapies.

### Applied anatomy for exercise physiologists

The aim of this unit is to provide an advanced understanding of the applications of anatomy to clinical assessment, investigation, and decision-making. The ability to apply anatomical knowledge is integral to effective clinical decision-making and exercise prescription. Within their scope of practice, accredited exercise physiologists must be able to explain the relationship between human anatomy and clinical decision-making and subsequent exercise prescription. This unit advances your knowledge and skills in surface, structural, functional, cross-sectional and radiographic anatomy, relevant to physical examination, exercise testing, clinical imaging studies, and other clinical investigations. You will use a case-based approach in developing proficiency in the application of anatomical knowledge to clinical situations.

### Responsible clinical practice

The aim of this unit is to develop your knowledge, understanding and skills to become proficient in professional practice. Ethical and legislative parameters within the broader health care system framework are used to establish the professional standards under which an accredited exercise physiologist works. Within their scope of practice, accredited exercise physiologists must be able to work within local, government and industry policy, address individual client needs, and conduct themselves as a professional in the practice environment. In this unit, you will examine the ethical and core legal responsibilities that face the professional exercise physiologist in a clinical setting. Emphasis is placed on understanding and applying ethical and legal decision-making in clinical exercise physiology practice.

### Cardiometabolic analysis and rehabilitation

This unit aims to develop your knowledge and skills to become proficient in the prescription of exercise as a prevention and management strategy for a range of cardiovascular, respiratory, and metabolic conditions. Cardiovascular, respiratory, and metabolic conditions represent the most prevalent conditions encountered by exercise physiologists. Within their scope of practice, accredited exercise physiologists must be able to design and prescribe safe, evidence-based exercise interventions for individuals with or at risk of cardiovascular, respiratory, and/or metabolic disorders. This unit presents current medical and scientific knowledge of cardiac, respiratory and metabolic disorders and diseases. An examination of the aetiology, incidence, epidemiology and pathophysiology of the disease process, as well as the adaptations that lead to management of the disease, are a major focus of the unit. Current evidence and guidelines for exercise testing and exercise prescription as related to cardiovascular, cardiopulmonary, and cardiometabolic disorders will be discussed in detail. Methodological aspects of clinical assessment will be discussed and applied together with the principles of available exercise prescriptions and other treatment therapies.

### Occupational assessment and rehabilitation

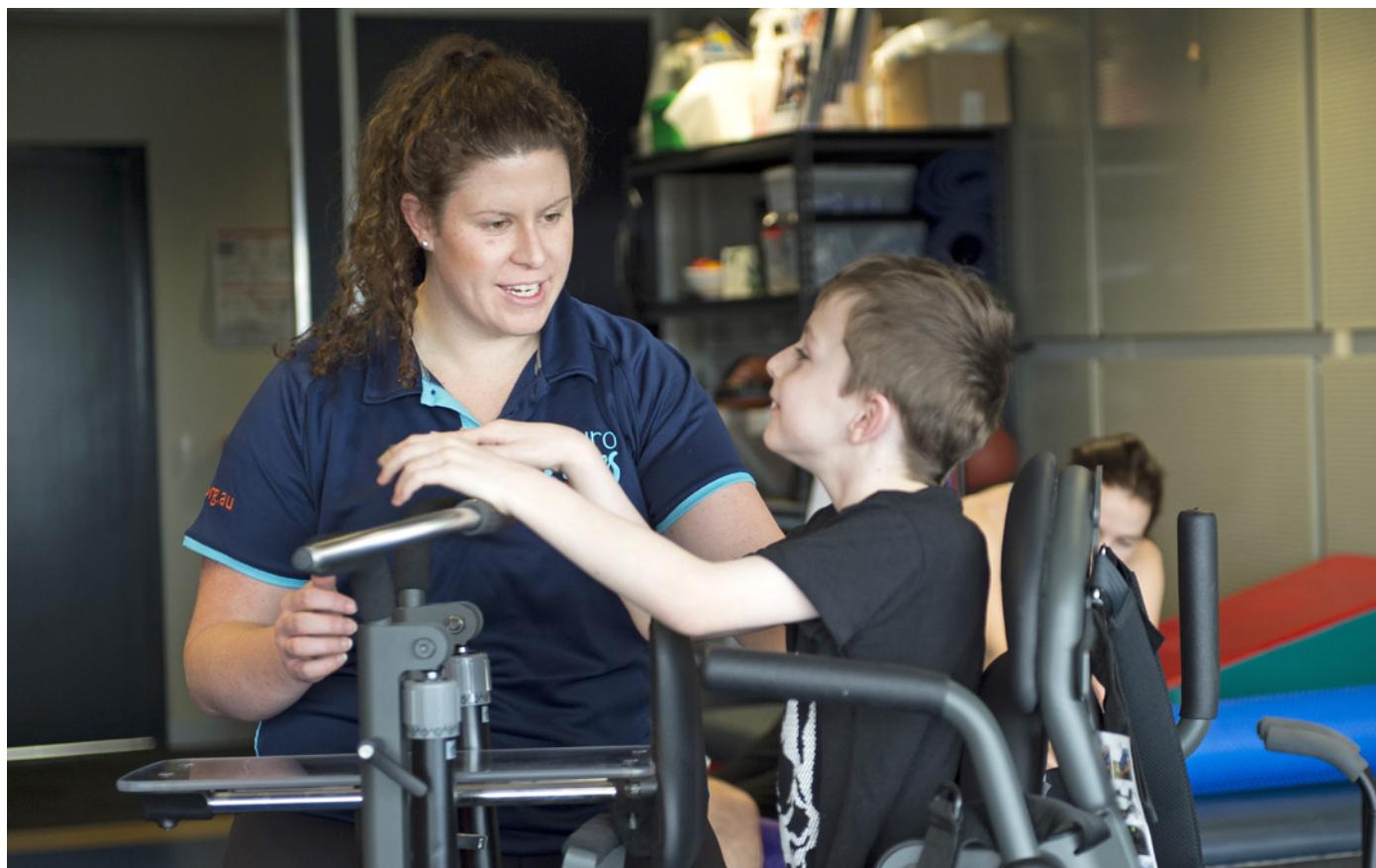
The aim of this unit is to extend your knowledge and skill base of exercise prescription to manage return to work programs and deliver workplace and functional capacity assessments. The professional standards for accredited exercise physiologists incorporate elements of workplace rehabilitation and functional capacity assessment to perform work-related tasks. Functional movement capacity is limited by the mechanical characteristics and structures of the human body, as well as the design characteristics of facilities and equipment in work, sport, exercise, and everyday life. This unit provides knowledge of, and develops skills in, occupational rehabilitation, including ergonomic principles as well as assessment and analysis within the workplace and other environments.

### Clinical experience 1

This unit aims to facilitate your transition toward practicing entry-level exercise physiology, consistent with the professional standards for accredited exercise physiologists. Clinical exercise physiologists must be able to consider ethical, clinical and scientific parameters for their practice. Clinical experience 1 bridges the knowledge gap between theory and practice by focusing on the professional qualities that clinical exercise physiologists must demonstrate within hospital systems, community health, private practice, occupational health and safety, and/or relevant sporting and educational settings. Exposure to the multidisciplinary nature of Australian health care models is important and you will be supervised to conduct assessments and provide safe and effective exercise prescription in a team environment. You will prepare for your first external clinical placement by reflecting on your continuing professional development across semester with respect to your clinical performance during the exercise lifestyle clinic.

### Clinical experience 2

Clinical exercise physiologists must be able to consider clinical, scientific, ethical and legislative parameters, and the broader health care system framework, for their practice. Clinical experience 2 provides a capstone to student learning; building on the essential clinical competencies of student practitioners established in Clinical experience 1. The unit of study provides you with opportunities to demonstrate evidence-based practice and professional clinical practice principles in a variety of exercise physiology practice environments. You will interact with, learn from, and be supported by experienced allied health professionals and clinical educators aimed at broadening your scope of practice in your transition to entry-level exercise physiology.



# HIGH PERFORMANCE SPORT

 Online with an on-campus intensive component in Melbourne in February or offshore (overseas) by invitation in UK (May) and USA (June) each year

The high performance sport suite of programs includes relevant, professional practice-related learning, independent research and project work, and an opportunity for an industry-based internship. The Master of High Performance Sport can also provide a pathway into further research study (eg PhD).

A series of study units focus on the technological advances for athlete monitoring, advanced principles of strength and conditioning, and the relationships between fatigue, adaptation, performance and injury. The application of this knowledge to the planning and delivery of meaningful interventions for athletes to enhance performance and reduce the likelihood of injury and illness is essential for a professional working in the high performance sport environment. This includes using appropriate techniques of analysis to accurately interpret competition and training information, with advanced information literacy skills to communicate ideas and outcomes.

## Career outcomes:

- High performance manager
- Head of athletic department
- Elite sports team manager
- Sports science manager
- Professional coach
- Rehabilitation coach
- Athlete wellbeing manager
- Strength and conditioning coach
- Performance analyst

## Graduate Certificate in High Performance Sport

 6 months FT (or equivalent PT)

**Entry requirements:** To apply for this course, you must:

- have completed a bachelor degree (or higher) in exercise science, sports science, human movement or a related discipline, or
- have completed a bachelor degree (or higher) in a different discipline and have evidence of substantial relevant industry experience, or
- submit a written proposal alongside a formal application, demonstrating suitability for study and evidence of relevant industry experience.

## Graduate Diploma in High Performance Sport

 1 yr FT (or equivalent PT)

**Entry requirements:** To apply for this course, you must:

- have completed a bachelor degree (or higher) in exercise science, sports science, human movement or a related discipline and have evidence of substantial relevant industry experience and submit a supporting professional referee's report regarding suitability for this postgraduate program and/or experience in the industry, or
- have completed a bachelor degree in exercise science, sports science, human movement or a related discipline, with a grade point average (GPA) of at least 4.8 on the ACU 7 point scale and submit a supporting professional referee's report regarding suitability for this postgraduate program and/or experience in the industry, or
- have completed ACU's Graduate Certificate in High Performance Sport, Graduate Certificate in Performance Analysis, Graduate Certificate in High Performance Leadership or Graduate Certificate in Exercise Rehabilitation for Sports Injuries.

Note 1: Applicants having completed a bachelor degree (or higher) in a related allied health discipline may be considered, dependent on specific qualifications and evidence of substantial industry experience.

Note 2: Applicants having completed ACU's Graduate Certificate in High Performance Sport, Graduate Certificate in Performance Analysis, Graduate Certificate in High Performance Sport Leadership or Graduate Certificate in Exercise Rehabilitation for Sports Injuries will be eligible for recognition of prior learning of up to 40 credit points.

# Master of High Performance Sport

🕒 1.5 yrs FT (or equivalent PT)

**Entry requirements:** To apply for this course, you must:

- have completed a bachelor degree (or higher) in exercise science, sports science, human movement or a related discipline and have evidence of substantial relevant industry experience and submit a supporting professional referee's report regarding suitability for this postgraduate program and/or experience in the industry, or
- have completed a bachelor degree normally in exercise science, sports science, human movement or a related discipline, with a grade point average (GPA) of at least 4.8 on the ACU 7 point scale and submit a supporting professional referee's report regarding suitability for this postgraduate program and/or experience in the industry, or
- have completed ACU's Graduate Diploma in High Performance Sport, Graduate Certificate in High Performance Sport, Graduate Certificate in Performance Analysis, Graduate Certificate in High Performance Sport Leadership, or Graduate Certificate in Exercise Rehabilitation for Sport Injuries.

Note 1: Applicants having completed a bachelor degree (or higher) in a related allied health discipline may be considered, dependent on specific qualifications and evidence of substantial industry experience.

Note 2: Applicants having completed ACU's Graduate Diploma in High Performance Sport will be eligible for recognition of prior learning of 80 credit points.

Note 3: Applicants having completed the Graduate Certificate in High Performance Sport, Graduate Certificate in Performance Analysis, Graduate Certificate in High Performance Sport Leadership or Graduate Certificate in Exercise Rehabilitation for Sports Injuries will be eligible for recognition of prior learning of 40 credit points.

HIGH PERFORMANCE SPORT – SAMPLE COURSE MAP		
GRADUATE CERTIFICATE IN HIGH PERFORMANCE SPORT – YEAR 1		
Semester 1	Strength and conditioning for performance and rehabilitation Contemporary issues in sports science	Sports injury prevention Data analysis and interpretation for high performance sport
GRADUATE DIPLOMA IN HIGH PERFORMANCE SPORT – YEAR 1 ADDITIONS		
Semester 2	Fatigue, recovery, adaptation and performance Leadership and culture in high performance sport settings	Performance nutrition Elective unit
MASTER OF HIGH PERFORMANCE SPORT – YEAR 2		
Semester 1	Major research project part A and Major research project part B, <i>or</i> Minor project and two elective units, <i>or</i> Industry internship and two elective units, <i>or</i> Minor project and industry internship	

## Strength and conditioning for performance and rehabilitation

The aim of this unit is to develop your knowledge and skills relating to the use of contemporary methods of field and laboratory-based testing in a number of areas, including aerobic/anaerobic capacity, repeated sprint ability, and strength and power. In addition, this unit will explore innovative practices in training program design across the spectrum of capacities required for performance in various athletic events. Sports scientists and strength and conditioning coaches who work with high performance athletes require the ability to prescribe and deliver safe and effective exercise programs. To meet specific performance goals, these programs must be evidence-based with a best practice approach. This unit develops an in-depth understanding of the theoretical concepts and practical application of capacity assessment and program design as they relate to athlete performance.

## Contemporary issues in sports science

High performance sport systems and practices vary greatly between specific sports, organisations and cultures. To optimise athlete and/or team performance, practitioners require evidence-based knowledge, practical skills to apply this knowledge, and an understanding of the roles of other support staff to effectively integrate these knowledge and skills. This unit will introduce you to the multidisciplinary/interdisciplinary environment of high performance sport and you will reflect on your own practice. A seminar series of experts from sports science and related allied health professions (eg sports psychology, skill acquisition, nutrition/dietetics, physiotherapy, and sports medicine) will introduce the contemporary knowledge and practices from their field of expertise relevant to athlete and team preparation and performance. You will gain an understanding of how these specialist professions that operate in sporting organisations integrate and communicate with respect to athlete management.

## **Sports injury prevention**

This unit will develop your understanding of common injuries that are seen in high performance sport. You will improve your ability to critically analyse relevant literature and you will advance your skills in delivering evidence-based programs for injury prevention. The ability to develop evidence-based, best practice strategies to prevent sporting injury is essential in high performance sport. This unit will develop knowledge and critical thinking pertinent to the prevention of common injuries seen in high performance sport. This requires understanding and interpreting sports injury epidemiology research, as well as detailed knowledge of the aetiology, mechanisms, risk factors and prevention strategies of common injury types.

## **Data analysis and interpretation for high performance sport**

The ability to make sound decisions in high performance sport is critical to maximising performance outcomes. In order to do this, practitioners need specific knowledge and skills in data analysis techniques, in addition to the ability to present data in a meaningful way to a variety of audiences. This unit is based on contemporary data analysis techniques focusing on determining practically meaningful differences in athletic performance. A range of approaches will be explored to allow for analysis of both individual and group data. You will gain the knowledge, understanding and skills to analyse and interpret data of relevance to sports science and athletic performance and effectively present the results.

## **Fatigue, recovery, adaption and performance**

To effectively design training programs, practitioners require an understanding of the interactions between training load, fatigue, performance, and injury. Sports scientists and others working in high performance sport need to be able to identify the different models that can explain fatigue and its severity, as well as how different variables can be used to measure fatigue status in response to training and competition. Practitioners also need to prescribe contemporary methods for enhancing recovery. You will gain the knowledge, understanding and skills to design and implement a load and fatigue monitoring and recovery protocol relevant to specific high performance environments.

## **Leadership and culture in high performance settings**

To achieve success and longevity in the industry, professionals working in high performance sport must have an appreciation of its particular cultures as well as the professional standards required. This unit will introduce perspectives of culture and leadership in the high performance sport environment, with the aim to develop your understanding of the relationship that culture and values has with the behaviour of individuals and the organisation. Leadership styles frequently used in professional settings will be addressed, as will strategies for effective communication and conflict management in high performance sport organisations. An emphasis will be placed on professionals as socially responsible leaders, who exercise concern for the wellbeing of their clients, colleagues and the community, within appropriate standards of ethical practice.

## **Performance nutrition**

In high performance sport, athletes and coaches recognise that optimal nutrition is critical to sporting success. Sports nutrition links food with physical performance, providing the fuel for exercise and recovery, and the essential elements for tissue growth, maintenance and repair. This unit will address contemporary scientific and applied aspects of nutrition for sports performance. The composition, amount and timing of food intake for different sports and activities are explored, given the influence that these and others factors have on athletic performance. The aim of the unit is to provide specialist knowledge, understanding and skills for critically evaluating dietary practices for sports performance, and for communicating and delivering general nutritional advice to athletes, coaches and other support staff, within appropriate scope of practice and referral pathways. These outcomes are consistent with the professional standards of several accreditation bodies.

## **Major research project part A and part B**

Research in high performance sport settings is critical for providing athletes and practitioners with evidence-based strategies for improving performance and maintaining athlete wellbeing. The aim of these units is to provide you with a capstone experience that involves the completion of a research project that is of interest to you and is of relevance to the industry. Projects may take the form of an investigative study, systematic review or meta-analysis, and will include the preparation of a manuscript for publication. The project will be conducted under the supervision of a member of staff appointed by the head of school. You will apply knowledge and skills developed in previous units to identify a research problem of interest and formulate an ethical and defensible research proposal. The major research project units (part A and part B) is a 12-month commitment. You must enrol in part A as a prerequisite to part B.

## **Minor project**

To optimise athlete and/or team performance, practitioners in high performance sport require advanced knowledge of theoretical concepts and evidence-based approaches to its application. This unit aims to provide you with a capstone experience that gives you a research-based learning opportunity involving the investigation of an area relevant to the industry. You will research a topic of interest, critically analyse relevant theories, concepts and/or data, and communicate the outcomes and its application in a meaningful way to a variety of audiences. You will apply knowledge and skills developed in previous units to address the specific area of interest, with the results reported in a form consistent with industry expectations.

## **Industry internship**

Professional practice is an integral aspect of the transition from learner to practitioner. It gives you opportunity to apply your knowledge, understanding and skills in a work and/or organisational context. This unit delivers a capstone experience by providing a professional placement in a high performance sport organisation. You will engage in a work environment to provide experiential contexts for the development and application of your learnings. You will develop professional/workplace skills and networks to meet the goals of the professional or industry body. The experience also enhances the reciprocal flow of knowledge and its application between the University and the workplace or community setting where you are placed. The unit is designed to create a safe experience in peer review because of the importance of maintaining standards of professional and ethical practice in the workplace.

### **Sports analytics and visualisation (elective)**

This unit aims to provide you with evidence-based, ethically grounded, industry-relevant knowledge and skills in data handling, analysis and reporting. You will examine how to effectively communicate ideas and outcomes to specialist and non-specialist stakeholders in high performance sport settings. The use of advanced techniques for data collection, storage, analysis and visualisation, to accurately interpret competition and training information, is essential when working in high performance sport. In addition, it is essential to be able to communicate these outcomes in meaningful ways, so they can be implemented by athletes, coaches and support staff to optimise athlete and team performance. The unit addresses specialised statistical, coding and management principles for the collection and analysis of data in field and laboratory settings. The types of data collected in elite sport will be explored, as well as techniques and systems used in storing, analysing and visualising the data, and advanced information literacy skills for summarising and presenting the data.

### **Contemporary practice in strength and conditioning (elective)**

To optimise athlete and/or team performance, strength and conditioning coaches working in high performance sport require advanced knowledge of theoretical concepts, and the practical skills to apply this knowledge. This unit develops your skills for contemporary practice, with a focus on emerging research, innovation and practical application in areas such as warm up, heat and altitude training, high-intensity interval training, and speed and agility training. This focus on innovation and application also addresses evidence-based and ethical challenges faced by the practitioner. You will undertake both field/court and resistance training-based practical sessions in order to develop the skills to deliver high-quality training sessions. This unit is delivered online, with practical sessions delivered as a one-day intensive at ACU's Melbourne Campus and in the USA at an ACU partner organisation.

### **International experience in high performance sport (elective)**

High performance sport systems and their practices vary greatly between specific sports, organisations, and cultures. Given the global focus of high performance sport, gaining exposure to a range of organisations (and specialist professions) and cultures operating in this environment will give you professional development experiences and international perspectives to inform your future practice. This off-shore experience will provide access to high performance sport environments for exposure to different practices in athlete preparation and management. It will also facilitate knowledge sharing between yourself and organisations. Additionally, it will provide insights into the knowledge sharing between yourself and organisations, and provide insights into the communication, relationship and cultural challenges faced by individuals and organisations operating in high performance sport. These international experiences will be organised and offered by our School of Behavioural and Health Sciences.

### **Exercise rehabilitation for return to sports performance (elective)**

The aim of this unit is to give you the knowledge, understanding and skills to develop individualised, safe and effective exercise prescription for return to sport performance. The unit integrates the use of current research, critical thinking, and the interpretation of that research to inform evidence-based practice in exercise rehabilitation program development. You will apply current principles of strength and conditioning to enhance performance as part of exercise rehabilitation to manage an injury or reduce the risk of injury. Further, the impact of the human-surface environmental interface and psychological readiness will be incorporated into the return to performance process. The use of mechanical analysis concepts to performance testing will guide exercise prescription and return to sport.

### **Project design for high performance sport (elective)**

The aim of this unit is to develop skills in reviewing appropriate literature and the appraisal of available field, laboratory and/or software technologies for data acquisition and analysis, with a focus on developing scientific/report writing and presentation skills. Research in high performance sport settings is critical for providing athletes and practitioners with evidence-based strategies for improving performance and maintaining athlete wellbeing. This unit addresses evidence-based approaches to the formulation, design and conduct of projects in the high performance sport environment. You will develop your ability to critically appraise the process and planning of projects designed to investigate questions in the applied setting, and gain awareness of alternative approaches used in sports science research. You will develop an implementation plan for a project designed to investigate a problem of practical relevance to your industry, workplace or research goals.

### **Performing under pressure (elective)**

In high performance sport, athletes and coaches recognise that psychological preparation and associated performance strategies are critical to sporting success. Therefore, the aim of this unit is to develop your understanding of theoretical concepts and their practical application of sport and performance psychology as they relate to high performance athletes and the environments in which they operate. The unit will address basic and contemporary skill-acquisition and performance psychological concepts related to sport performance in high-pressure situations and their application into practice in a variety of high-pressure contexts. By developing evidence-based knowledge of performance psychology and skill-acquisition concepts and ideas, and their application in high performance sport, you will discover that psychology is as much about understanding the contexts, tasks, and environments of high performance sport as it is about the individual athlete's mind and behaviour. The emphasis is on translating theory into practice with a means to determining the power of understanding and applying psychology in the arena of high performance sport, within appropriate scope of practice and referral pathways.

### **Athlete development: strategies, capabilities and wellbeing (elective)**

The development of elite sports systems has traditionally focused on the optimal performance of the athlete. However, sport has increasingly been faced with the need to consider the development of its star performers from a much more holistic and human perspective. This unit highlights the importance of understanding the context of sport and the athlete as a person in relation to the effectiveness of sports scientists and administrators. The unit aims to address holistic athlete development from three perspectives. Firstly, from an organisational perspective, examining developed structures within Australian sport that cater to the needs of athletes both on and beyond the playing field. Secondly, from the perspective of the legal and ethical responsibilities that sport is obliged to assume for employee wellbeing. Thirdly, a more strategic perspective that draws on contemporary human resources knowledge will be addressed. This perspective proposes an array of benefits for organisations that develop and implement an athlete welfare program. This program would be based on recognising the human dignity of the athlete and the spirit of sport.

### **Team dynamics (elective)**

The aim of this unit is to establish your industry-relevant awareness, and to develop understanding, skills and behaviours for effective leadership, communication and socially responsible practice in high performance sport environments. In high performance sport environments, success is dependent upon the ability of leaders to leverage the capabilities and self-awareness of individuals and effectively coordinate them into a team-oriented system. This unit explores the roles, responsibilities, structures and relationships that influence the team environment, as well as the individual within that team.

### **The business of high performance sport (elective)**

This unit aims to develop your understanding of business model structures, strategies and activity systems that operate in and are relevant to the high performance sport industry. This includes the contribution the industry makes from a social and community perspective. Within society, high performance sport can be viewed through both economic and social lenses. The dominance of the economic lens means that, in many cases, the business model developed by high performance sport organisations will determine the engagement approach adopted and the value provided to stakeholders.

### **Theoretical foundations of performance analysis (elective)**

This unit aims to develop your understanding of key performance concepts as well as your skills in applying these concepts to high performance sport. With a theoretical focus, there will be an emphasis on what performance is, the evolution of performance analysis, and different techniques that can be utilised in high performance sport settings. Contemporary knowledge and skills in performance analysis is required by professionals operating in applied and analytic roles in high performance sport organisations. Constant evolution of tactics and strategic innovations in high performance sport means that performance analysis is a sought-after skill set.

### **Application, measurement and evaluation in performance analysis (elective)**

The aim of this unit is to develop your industry-relevant knowledge and skills for effective data handling interpretation and reporting for a variety of high performance sport audiences. Contemporary knowledge and skills in performance analysis is required by professionals operating in applied and analytical roles in high performance sport organisations. The application of performance analysis practices will be examined as well as effective and creative approaches to data management analysis, interpretation and reporting. These are key to successful implementation and outcomes in sporting organisations.



# HIGH PERFORMANCE SPORT LEADERSHIP

## Graduate Certificate in High Performance Sport Leadership

📍 Online\* 🕒 1 year PT only

The high performance sport industry is increasingly focused on developing employees and athletes with strong leadership skills and training in ethics. Proposed regulatory changes within the industry may make these skills a necessity. The Graduate Certificate in High Performance Sport Leadership has been designed specifically to address these industry demands.

This course prepares you for the following roles: elite sport board member, elite sport executive committee member, head of athletic department, high performance manager, team manager, sports scientist, professional coach, rehabilitation coach, athlete wellbeing manager, and strength and conditioning coach.

**Entry requirements:** To apply for this course, you must:

- have completed a relevant bachelor degree (or higher), or
- have completed a bachelor degree in a different discipline and have evidence of substantial relevant industry experience, or
- submit a proposal alongside your formal application, demonstrating evidence of substantial relevant industry experience over a sustained period.

\*Depending on elective choice, you may be required to attend an on-campus intensive at the Melbourne Campus.

### GRADUATE CERTIFICATE IN HIGH PERFORMANCE SPORT LEADERSHIP – SAMPLE COURSE MAP

YEAR 1	Semester 1	The business of high performance sport	Athlete development: strategies, capabilities and wellbeing
	Semester 1	Leadership and culture in high performance settings	Elective unit

#### The business of high performance sport

This unit aims to develop your understanding of business model structures, strategies and activity systems that operate in and are relevant to the high performance sport industry. This includes the contribution the industry makes from a social and community perspective. Within society, high performance sport can be viewed through both economic and social lenses. The dominance of the economic lens means that, in many cases, the business model developed by high performance sport organisations will determine the engagement approach adopted and the value provided to stakeholders.

#### Athlete development: strategies, capabilities, and wellbeing

The development of elite sports systems has traditionally focused on the optimal performance of the athlete. However, sport has increasingly been faced with the need to consider the development of its star performers from a much more holistic and human perspective. This unit highlights the importance of understanding the context of sport and the athlete as a person in relation to the effectiveness of sports scientists and administrators. The unit aims to address holistic athlete development from three perspectives. Firstly, from an organisational perspective, examining developed structures within Australian sport that cater to the needs of athletes both on and beyond the playing field. Secondly, from the perspective of the legal and ethical responsibilities that sport is obliged to assume for employee wellbeing. Thirdly, a more strategic perspective that draws on contemporary human resources knowledge will be addressed. This perspective proposes an array of benefits for organisations that develop and implement an athlete welfare program. This program would be based on recognising the human dignity of the athlete and the spirit of sport.

#### Leadership and culture in high performance settings

To achieve success and longevity in the industry, professionals working in high performance sport must have an appreciation of its particular cultures as well as the professional standards required. This unit will introduce perspectives of culture and leadership in the high performance sport environment, with the aim to develop your understanding of the relationship that culture and values has with the behaviour of individuals and the organisation. Leadership styles frequently used in professional settings will be addressed, as will strategies for effective communication and conflict management in high performance sport organisations. An emphasis will be placed on professionals as socially responsible leaders, who exercise concern for the wellbeing of their clients, colleagues and the community, within appropriate standards of ethical practice.

#### ELECTIVE UNITS

See electives for high performance sport on pages 23 to 24.

# PERFORMANCE ANALYSIS

## Graduate Certificate in Performance Analysis

📍 Online (with a four-day intensive at the Melbourne Campus) ⌚ 6 months FT (or equivalent PT)

Performance analysis is a rapidly growing area of specialisation in the high performance sport industry, both nationally and internationally. Knowledge and skills in performance analysis are becoming an expectation for industry employment.

This course prepares you for the following roles: performance analyst, sports scientist, strength and conditioning coach, professional coach, high performance manager, sports science manager, fitness advisor, and rehabilitation coach.

**Entry requirements:** To apply for this course, you must:

- have completed a bachelor degree (or higher) in exercise science, sports science, human movement or a related discipline, or
- have completed a bachelor degree (or higher) in a different discipline and have evidence of relevant industry experience, or
- submit a proposal alongside your formal application, demonstrating evidence of substantial relevant industry experience.

### GRADUATE CERTIFICATE IN PERFORMANCE ANALYSIS – SAMPLE COURSE MAP

<b>YEAR 1</b>	Semester 1	Sports analytics and visualisation Data analysis and interpretation for high performance sport	Theoretical foundations of performance analysis Application, measurement and evaluation in performance analysis
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#### Sports analytics and visualisation

This unit aims to provide you with evidence-based, ethically grounded, industry-relevant knowledge and skills in data handling, analysis and reporting. You will examine how to effectively communicate ideas and outcomes to specialist and non-specialist stakeholders in high performance sport settings. The use of advanced techniques for data collection, storage, analysis and visualisation, to accurately interpret competition and training information, is essential when working in high performance sport. In addition, it is essential to be able to communicate these outcomes in meaningful ways, so they can be implemented by athletes, coaches and support staff to optimise athlete and team performance. The unit addresses specialised statistical, coding and management principles for the collection and analysis of data in field and laboratory settings. The types of data collected in elite sport will be explored, as well as techniques and systems used in storing, analysing and visualising the data, and advanced information literacy skills for summarising and presenting the data.

#### Data analysis and interpretation in high performance sport

The aim of this unit is to provide you with the knowledge, understanding and skills to analyse and interpret data of relevance to sports science and athletic performance and effectively present the results. The ability to make sound decisions in high performance sport is critical to maximising performance outcomes. In order to do this, practitioners need specific knowledge and skills in data analysis techniques, in addition to the ability to present data in a meaningful way to a variety of audiences. This unit is based on contemporary data analysis techniques focusing on determining practically meaningful differences in athletic performance. A range of approaches will be explored to allow for analysis of both individual and group data.

#### Theoretical foundations of performance analysis

This unit aims to develop your understanding of key performance concepts as well as your skills in applying these concepts to high performance sport. With a theoretical focus, there will be an emphasis on what performance is, the evolution of performance analysis, and different techniques that can be utilised in high performance sport settings. Contemporary knowledge and skills in performance analysis is required by professionals operating in applied and analytic roles in high performance sport organisations. Constant evolution of tactics and strategic innovations in high performance sport means that performance analysis is a sought-after skill set.

#### Application, measurement and evaluation of performance analysis

The aim of this unit is to develop your industry-relevant knowledge and skills for effective data handling interpretation and reporting for a variety of high performance sport audiences. Contemporary knowledge and skills in performance analysis is required by professionals operating in applied and analytical roles in high performance sport organisations. The application of performance analysis practices will be examined as well as effective and creative approaches to data management analysis, interpretation and reporting. These are key to successful implementation and outcomes in sporting organisations.

# EXERCISE AND CANCER

## Graduate Certificate in Exercise and Cancer

📍 Online (with an on-campus intensive at the Melbourne Campus) ⌚ 1 yr PT

The Graduate Certificate in Exercise and Cancer aims to address key theoretical concepts of exercise and physical activity and how these can be applied in clinical settings among cancer patients and survivors. The application of exercise prescription to the management and treatment of cancer is examined in a range of contexts. An evidence-based approach to data interpretation and communication is emphasised for effective practice.

The course provides industry-relevant, research-led teaching of knowledge and skills that are immediately applicable to relevant contexts. The contemporary curriculum will address the ever-changing problems in the industry and enable you to drive creative solutions that provide leadership in the area of exercise therapy for cancer.

**Entry requirements:** To apply for this course, you must:

- be an accredited exercise physiologist or registered physiotherapist, or
- have a postgraduate degree in exercise science (or equivalent) with relevant industry experience.

**Career path:** There are a range of potential employment settings and roles for graduates, including exercise and cancer specialist, senior exercise physiologist/physiotherapist or rehabilitation manager working in hospitals, private exercise clinics and/or oncology practices.

### GRADUATE CERTIFICATE IN EXERCISE AND CANCER – SAMPLE COURSE MAP

YEAR 1	Semester 1	Cancer rehabilitation 1: exercise and survivorship	Cancer rehabilitation 2: advanced exercise therapy
	Semester 2	Leadership in health care	Exercise oncology practice

#### Cancer rehabilitation 1: exercise and survivorship

Cancer and cancer treatment have many effects on the body. Clinicians need to understand these effects and how exercise modifies these processes in order to develop effective interventions. In this unit you will develop advanced theoretical knowledge of physiological adaptations, and the applications of exercise prescription skills for cancer rehabilitation. The unit presents the most common cancers encountered in a clinical setting. The process of the patient journey from risk factors, to diagnosis, to treatment and recovery will be explained. The role of exercise throughout the cancer journey will be explored. This unit incorporates the application of advanced concepts of exercise testing and prescription to enhance wellbeing as part of exercise rehabilitation. Finally, this unit integrates the use of current research, critical thinking and the interpretation of that research to inform evidence-based practice in program development.

#### Cancer rehabilitation 2: advanced exercise therapy

Clinical exercise physiologists working in an oncology context must have extensive theoretical knowledge. This unit extends the content contained in Cancer rehabilitation 1 and provides an opportunity to apply your knowledge to other cancers. The role of exercise throughout the cancer journey will be explored, including the differing approaches across the lifespan from children to older adults. This unit integrates the use of current research, critical thinking and the interpretation of that research to inform evidence-based practice in program development, particularly in areas where the level of available evidence is low.

#### Leadership in health care

The aim of this unit is to introduce you to contemporary theory-based leadership practices in order to develop knowledge and skill necessary for leading health service transformation. Health care leaders must develop sound knowledge and skills to lead service transformation through transforming themselves and others. Today's leaders must demonstrate personal leadership characteristics, as well as the ability to empower others through role modelling and support to achieve their potential. This unit is necessary for future leaders who are required to lead others in planning, implementing and evaluating strategies and tools designed to resolve complex problems. Additionally, these leaders are asked to optimise health for diverse population communities, such as Aboriginal and Torres Strait Islander peoples, through innovative health administration practices that shape and improve health care systems.

#### Exercise oncology practice

Clinical exercise physiologists working in an oncology context are required to demonstrate ethical, legal, and evidence-based decision-making. Clinicians will often be working in a multi-disciplinary setting and encounter patients, carers and families from diverse cultural backgrounds. In this unit you will examine the role and responsibilities that face the exercise professional in a clinical setting. Emphasis is placed on understanding and applying ethical, legal, and evidence-based decision-making in clinical exercise physiology practice. This unit provides a capstone experience in which you will be applying the hands-on skills learned in previous units.



# EXERCISE REHABILITATION

## Graduate Certificate in Exercise Rehabilitation for Sports Injuries

 Online with a two-day on-campus intensive component in Melbourne or offshore (overseas) in the USA in June.  1 yr PT

The Graduate Certificate in Exercise Rehabilitation for Sports Injuries provides specialist knowledge and skills in biomechanics, metabolic and physiological-psychosocial aspects of the person. This is in order to develop exercise programs for the enhancement and improved performance of individuals who are engaged in sporting or exercise activities. The course integrates specialist knowledge and skills to develop safe and effective exercise prescriptions. This includes interventions for injury prevention in active individuals who may have activity restrictions due to injury or disease limitations or who want to

return to sport performance. You can begin this course at the start of Semester 1 or 2.

**Entry requirements:** To apply for this course, you must:

- be an accredited exercise physiologist or registered physiotherapist, or
- have completed a postgraduate degree in sports science, exercise science or related discipline, and provide evidence of relevant industry experience.

### GRADUATE CERTIFICATE IN EXERCISE REHABILITATION FOR SPORTS INJURIES – SAMPLE COURSE MAP

YEAR 1	Semester 1	Sports injury prevention	Exercise rehabilitation for return to sports performance (online, with a two-day intensive at ACU's Melbourne Campus and in the USA at an ACU partner organisation)
	Semester 2	Strength and conditioning for performance and rehabilitation	Exercise prescription for sports injury management across the lifespan

#### Sports injury prevention

This unit will develop your understanding of common injuries that are seen in high performance sport. You will improve your ability to critically analyse relevant literature and you will advance your skills in delivering evidence-based programs for injury prevention. The ability to develop evidence-based, best practice strategies to prevent sporting injury is essential in high performance sport. This unit will develop knowledge and critical thinking pertinent to the prevention of common injuries seen in high performance sport. This requires understanding and interpreting sports injury epidemiology research, as well as detailed knowledge of the aetiology, mechanisms, risk factors and prevention strategies of common injury types.

#### Strength and conditioning for performance and rehabilitation

The aim of this unit is to develop your knowledge and skills relating to the use of contemporary methods of field and laboratory-based testing in a number of areas, including aerobic/anaerobic capacity, repeated sprint ability, and strength and power. In addition, this unit will explore innovative practices in training program design across the spectrum of capacities required for performance in various athletic events. Sports scientists and strength and conditioning coaches who work with high performance athletes require the ability to prescribe and deliver safe and effective exercise programs. To meet specific performance goals, these programs must be evidence-based with a best practice approach. This unit develops an in-depth understanding of the theoretical concepts and practical application of capacity assessment and program design as they relate to athlete performance.

#### Exercise rehabilitation for return to sports performance

The aim of this unit is to provide you with the knowledge, understanding and skills to develop individualised, safe and effective exercise prescription for return to sport performance. The unit integrates the use of current research, critical thinking, and the interpretation of that research to inform evidence-based practice in exercise rehabilitation program development. You will apply current principles of strength and conditioning to enhance performance as part of exercise rehabilitation to manage an injury or reduce the risk of injury. Further, the impact of the human-surface environmental interface and psychological readiness will be incorporated into the return to performance process. The use of mechanical analysis concepts to performance testing will guide exercise prescription and return to sport.

#### Exercise prescription for sports injury management across the lifespan

The aim of this unit is to apply specialist concepts of strength and conditioning to develop safe and effective rehabilitation programs, exercise prescriptions and interventions to allow a person to return to pre-injury performance levels. With increased participation in sport across the lifespan, there is an increased need for rehabilitation programs that support an individual's recovery from injuries sustained during sport. The purpose of this unit is to support specific populations (eg children, adolescents, adults, older adults, postnatal women etc) and those individuals who present with changes in performance during sport participation due to injury or pre-existing conditions. In this unit you will apply principles of sport performance under adversative environments and conditions. You will develop specialised skills in specific populations, as well as interpret the link between decline in physiology and sport performance. Finally, this unit integrates the use of current research, critical thinking and the interpretation of that research to inform evidence-based practice.



## Master of Philosophy (MPhil)

 Ballarat, Brisbane, Canberra, Melbourne, North Sydney  2 yrs FT (or equivalent PT)

The Master of Philosophy (MPhil) is a two year research degree in any field covered by the University. It is assessed on the basis of a written thesis, which is submitted at the conclusion of the degree.

**Entry requirements:** An applicant for admission to candidature for the Master of Philosophy must have completed one of the following:

- an appropriate undergraduate degree with honours at a minimum level of Second Class Division A (distinction average), or
- postgraduate research training (eg coursework completed to distinction level or higher or a master by coursework degree), or
- demonstrated research experience with evidence of capacity to undertake independent research work (eg an authored publication).

## Doctor of Philosophy (PhD)

 Brisbane, Canberra, Melbourne, Strathfield  3 to 4 yrs FT (or equivalent PT)

The Doctor of Philosophy (PhD) is awarded for high-level research and, as such, it is expected that candidates will make a contribution to knowledge in their chosen field.

A PhD may be undertaken by two different means:

- traditional PhD: a PhD candidate's work is assessed on the basis of a thesis, or
- PhD with publication: a PhD candidate's work is assessed on the basis of a thesis submission containing a number of papers written up as journal articles.

Domestic research candidates may be offered a Research Training Program Fee Offset Scholarship under the Australian Government's Research Training Program.

**Entry requirements:** To apply for admission to candidature for the Doctor of Philosophy, you must have completed one of the following:

- an appropriate undergraduate degree with honours at a minimum level of Second Class Division A (Honours 2A) or equivalent, or
- a masters degree with appropriate research training in a relevant field, or
- an equivalent qualification.



Pierre-Cedric  
MBA (Executive) graduate

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postgraduate qualifications uniquely created for today's busy professionals.

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# Got a question or feeling social?

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