# EXERCISE & SPORTS SCIENCE

ECU offers a diverse range of professionally accredited Exercise and Sports Science programs, and our facilities are some of the best you'll find at any university in Australia.

Our award-winning academics not only conduct world-leading research, but are active professionals in their fields with experience in national and international organisations. The expertise of our staff bridges the gap between science and application, providing a diverse and comprehensive educational experience for our students.

ECU's Sports Science program ranked in the world's top 25 in the 2018 ShanghaiRankings global survey of Sports Science Schools and Departments. High performance sports teams choose ECU for testing, including West Coast Eagles, Perth Wildcats and many other elite athletes.

Career pathways include exercise science, strength and conditioning, sports development, highperformance analysis, workplace health, corporate fitness, sports coaching, and exercise rehabilitation.

# Courses include:

- Bachelor of Science (Exercise and Sports Science)
- Bachelor of Science (Exercise Science and Rehabilitation)
- Bachelor of Science (Exercise and Sports Science) / Bachelor of Commerce (Sport Business)

## **PROFESSIONAL RECOGNITION**

Exercise and Sports Science Australia (ESSA) have accredited the following courses:

- Bachelor of Science (Exercise and Sports Science)
- Bachelor of Science (Exercise Science and Rehabilitation)

# ACCREDITATION

Students will need to graduate to be eligible to apply for accreditation credentialing with ESSA. Please refer to the ESSA website for further information regarding the application process: www.essa.org.au/Public/ APPLY\_NOW/Ways\_to\_Join\_ESSA/Public/APPLY\_ NOW/Ways\_to\_Join.aspx?hkey=2d376635-5322-4bcc-8473-39b7cab32cfa

## PRACTICUM

Students are required to complete practicum units as part of the Exercise & Sports Science courses. Clearance and/or Risk Management Protocols may be required and students on practicum must observe professional practice rules. For more information, see course details on our website.



School of

**Medical & Health Sciences** 



# **BACHELOR OF SCIENCE** (EXERCISE AND SPORTS SCIENCE)

**ATAR:** 70

Duration: 3 years full-time or part-time equivalent

## Availability & Campus:

	JO	ML	BU	OL
Full-time	ο		<b>O</b> *	
Part-time	0		<b>O</b> *	

\*8 units from the course structure will be offered at ECU's South West Campus, giving students the opportunity to then complete the remaining 16 units over a further 2 years at ECU's Joondalup Campus in Perth.

Prepares students for a variety of professional roles in the corporate and government sectors where high levels of competence are required in the area of exercise and sports science. Students will be able to specialise in the design, implementation and evaluation of programs targeted at improving general health and well-being, the prevention of chronic disease and the enhancement of sports and exercise performance.

## Majors available in the following disciplines:

- Football Performance
- Occupational Safety
- Health Promotion
- and Health
- Nutrition
- Sport Business

# **Employment Opportunities**

Graduates have successful careers in specialty areas such as exercise rehabilitation, sports administration, teaching, sports coaching, exercise science, strength and conditioning, corporate fitness, workplace health, sports development and sports performance analysis.

## Careers

Exercise Scientist, Exercise Physiologist, Biomechanist, Personal Trainer, Sports Coach, Sports & Exercise Scientist, Researcher, Strength & Conditioning Coach, Sports Medicine Trainer

## **Course Structure**

Year 1		Semester 1
MHS110	)1	Anatomy and Physiology 1
SPS152	5	Lifespan Growth and Developmen <sup>-</sup>
NUT112	1	Human Nutrition

1 x unit from Major, Minor or Recommended Elective

Year 1	Semester 2	
SPS1111	Foundations of Fitness and Training	
SPS1502	Biomechanics	
MHS1102	Anatomy and Physiology 2	
1 x unit from Major, Minor or Recommended Elective		

#### Year 2 Semester 1

SPS1217 SPS2203	Functional Anatomy Principles and Practices
3F3ZZUJ	of Resistance Training
SPS2505	Exercise Physiology
Unit from Mai	ior/

1 x unit from Major, Minor or Recommended Elective

#### Year 2 Semester 2

MAT2107	Statistical Research Methods
SPS2524	Exercise Delivery
SPS2516	Motor Learning and Control
Unit from Maj 1 x unit from N	or/ 1ajor, Minor or Recommended Elective

Year 3	Semester 1
SPS3101	Psychology of Sport and Exercise 15
SPS3112	Exercise and Sports Science Practicum
2 x units from	Major, Minor or Recommended Elective

#### Year 3 Semester 2

SPS3111	Physical	Activity	and	Health
SPS3111	Physical	Activity	and	Health

Unit from Major/

2 x units from Major, Minor or Recommended Elective Plus one unit from:

SPS3516^	Advanced Motor Learning and Control
SPS3502^	Advanced Biomechanics
SPS3505^	Advanced Exercise Physiology
SPS3105^	Advanced Resistance Training
SPS3601^	Advanced Social Psychology
	of Exercise and Sport

^Core Option

See more course information ecu.edu.au/courses/M89

# BACHELOR OF SCIENCE (EXERCISE SCIENCE AND REHABILITATION)

**ATAR:** 80

Duration: 4 years full-time or part-time equivalent

# Availability & Campus:

	JO	ML	BU	OL
Full-time	0			
Part-time	0			

Provides students with the opportunity to gain knowledge, skills and experience in clinical exercise delivery, healthy lifestyle intervention and wellness programs for people living with chronic conditions or injuries, and the healthy population.

# Careers

Accredited Exercise Physiologist, Exercise Rehabilitation Coordinator, Exercise Science Researcher, Compensation & Rehabilitation Officer, Exercise Rehabilitator, Workers' Compensation Officer, Health Care Officer, Occupational Rehabilitation Officer, Work Cover Services Manager

# **Course Structure**

Year 1	Semester 1
MHS1101 SPS1525 NUT1121 SPS2615	Anatomy and Physiology 1 Lifespan Growth and Development Human Nutrition Sports Injury Prevention and Management
Year 1	Semester 2
MHS1102 SPS1111 SPS1502 SCH1105	Anatomy and Physiology 2 Foundations of Fitness and Training Biomechanics Introduction to Pharmacology
Year 2	Semester 1
SPS1217 SPS2505 SPS2203	Functional Anatomy Exercise Physiology Principles and Practices

SPS2203	Principles and Practices
	of Resistance Training
SCH1104	Introduction to Pathophysiology

# Year 2 Semester 2

SPS2524	Exercise Delivery
MAT2107	Statistical Research Methods
SPS2301	Exercise Rehabilitation
SPS2516	Motor Learning and Control

# Year 3 Semester 1

- SPS3112 Exercise and Sports Science Practicum
- SPS3120 Psycho-social Aspects in Physical Activity and Chronic Disease
- SPS3101 Psychology of Sport and Exercise Elective Unit

Year 3	Semester 2				
SPS3111 SPS3604	Physical Activity and Health Human Movement - Participation and Inclusion				
SPS3121	Professional Skills in Clinical Exercise Physiology				
Select one u	Select one unit from:				
SPS3516^ SPS3502^ SPS3505^ SPS3105^ SPS3601^	Advanced Motor Learning and Control Advanced Biomechanics Advanced Exercise Physiology Advanced Resistance Training Advanced Social Psychology of Exercise and Sport				
Year 4	Semester 1				
SPS4203 SPS4116	Clinical Exercise Physiology: Musculoskeletal Clinical Exercise Physiology: Cardiovascular & Pulmonary				
SPS4117	Clinical Exercise Physiology: Neurological and Neuromuscular				
SPS4126	Clinical Exercise Physiology: Practicum				
Note: SPS4126 is a full-year unit.					
Year 4	Semester 2				
SPS4504	Clinical Exercise Physiology: Cancer and Metabolic Conditions				
Recommended Electives					
NUT2211 NUT3215 SCH2232 SCH2111	Metabolic Biochemistry Exercise Nutrition Medical Biochemistry Applied Physiology				
OR one unit f	OR one unit from the following:				
SPM2111	Sport Organisation Management				

SPM3221 Sport Business Planning

^Core Option

# **Admission Requirements**

All applicants are required to be assessed for entry by the course coordinator where the student has undertaken prior tertiary study. Students with no prior tertiary study will be assessed by University Admissions.

See more course information – ecu.edu.au/courses/M90







## BACHELOR OF SCIENCE (EXERCISE AND SPORTS SCIENCE) / BACHELOR OF COMMERCE (SPORT BUSINESS)

**Duration:** 4 years full-time or part-time equivalent

## Availability & Campus:

	JO	ML	BU	OL
Full-time	ο			
Part-time	ο			

This double degree includes concurrent study in the disciplines of Exercise and Sports Science, and Sport Business, and is ideal for those students seeking to work in management positions within the health, fitness, wellness and sport industries, and to operate their own businesses or franchises.

The Exercise and Sports Science core degree involves the design, implementation and evaluation of programs spanning from improving general health and well-being to enhancing sport performance in elite athletes. The course commences with the study of the human body and focuses on the application to exercise and sport including; exercise physiology, exercise and sports psychology, biomechanics, motor learning and control and strength and conditioning.

The Sports Business core degree equips students with the knowledge and practical skills required to function as professionals and industry leaders and to manage their own business. The course commences with an introduction to the sport industry and the application of key business principles and practices including; accounting, marketing, business analytics, sport delivery systems, strategic and human resource management, funding and finance, legal aspects, sport venue and event management, and sport business planning.

PHONE: 134 328 (61 8) 6304 0000 (International) EMAIL: futurestudy@ecu.edu.au

## **Employment Opportunities**

Managers in a range of global sport organisations and businesses, including professional sport organisations, national and state sport associations, high performance sports centres, health and wellness case management, private exercise, fitness, sport and rehabilitation franchise operations, personal training businesses, and elite and high performance sport organisations.

### Careers

Sport Business Owner/Manager, Sport Development Officer/Manager, Corporate Fitness Director, Physical Activity Director, Player Welfare Manager, High Performance Manager, Health and Wellness Case Manager, Health and Fitness Centre Leader, Sports Coaching Director

See more course information — ecu.edu.au/courses/W31

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