Duration: 1.5 years full-time or part-time equivalent

Availability: Online (full-time/part time)

This coursework degree provides sports science or related graduates with an opportunity for advanced study and to enhance their training in the field of strength and conditioning.

Admission Requirements:
All students are required to have successfully completed a Bachelor degree in Sports Science, Human Movement, Physical Education or a similar program of study. In particular, an undergraduate background in human anatomy and physiology is required. Alternatively students can apply if they possess a Bachelor degree in another area and have demonstrated strength and conditioning experience, at the discretion of the Course Coordinator.

Practicum Requirements:
Eight of the nine units are completed online. One unit is a two-week intensive workshop completed at ECU’s Joondalup Campus. This unit is completed toward the end of Semester 2 as part of the Strength and Conditioning Practicum.

Professional Recognition:
This course has been recognised by the Australian Strength and Conditioning Association (ASCA) and the National Strength and Conditioning Association (NSCA).

Employment Opportunities:
Personal trainer, sports coach, strength and conditioning coach (at amateur and elite level)


COURSE STRUCTURE
There are three units per semester that are worth 20 credit points each.

YEAR 1 SEMESTER 1

SPS5113 Research and Computer Methods in Strength and Conditioning
This unit focuses on utilising technology for research, measurement, data analysis and data presentation. Students will develop comprehensive skills and knowledge in the use of computer technologies to enhance their effectiveness as strength and conditioning professionals. Furthermore, the ability to search for research information, critically evaluate scientific literature and synthesise information relevant to the strength and conditioning profession will be developed.

SPS5133 Strength and Conditioning 1 – Physiology
This unit examines the physiological adaptations that occur in response to anaerobic, aerobic, and concurrent training. Specifically, the acute and chronic endocrinological, biochemical, immunological, molecular and biological responses and adaptations that occur as a result of training will be analysed. Additionally, the acute and chronic physiological responses that occur during periods of detraining will be explored.

SPS5134 Strength and Conditioning 2 – Biomechanics
This unit provides students with an opportunity to critically analyse the biomechanical influences on human movement. The laws of physics, which govern the interaction of the human body with its environment, will be examined in relation to strength and conditioning. The mechanics of the human body as a machine will be examined in terms of the impact on strength and conditioning practice.

YEAR 1 SEMESTER 2

SPS6104 Applied Biomechanics in Strength and Conditioning
This unit provides advanced knowledge and experiences for students in qualitative and quantitative methods for analysing human movement and biological and non-biological materials. Students will apply the principles of biomechanics to critically analyse and report on variables central to selected strength and conditioning exercises. In particular, students will develop skills in the use of video movement analysis methodologies, effective instructional feedback involving biomechanical and performance technique analysis.

SPS6105 Strength and Conditioning – Practicum
This unit builds upon and consolidates skills and knowledge learnt in the virtual classroom environment. Students further their understanding of theoretical concepts of strength and conditioning by undertaking a two-week series of workshops and practical experiences on the Joondalup Campus. Completion of this unit enables students to meet the requirements of the ASCA Strength Coaching Accreditation Process.

SPS6108 Physiological Tests for Elite Athletes
This unit is designed to provide students with advanced theoretical knowledge and practical skills required to effectively assess the physiological attributes of athletes. This will involve exposure to a variety of anthropometric, strength, power, and endurance testing protocols typically used in clinical and sporting settings. Students will also be trained in the interpretation and delivery of performance testing results to clients and coaches.

YEAR 2 SEMESTER 1

SPS6103 Advanced Resistance Training
This unit provides students with an opportunity to undertake advanced study of resistance training. Specifically, advanced resistance training programs will be critically analysed and discussed with an emphasis on the methods utilised to impact hypertrophy, strength and/or power development. Areas of focus include plyometric training methods, weightlifting movements and their variants, sports-specific resistance training, power optimisation techniques, and the theory and integration of periodisation concepts into the preparation of elite athletes and teams.

SPS6106 Injury Prevention and Rehabilitation
This unit is designed to provide the strength and conditioning specialist with an understanding of the prevention and rehabilitation of common musculoskeletal sporting injuries. Students will learn practical and theoretical aspects of exercise rehabilitation with an emphasis on the transition between acute management and exercise commencement, and to the long term management of injuries as part of a comprehensive strength and conditioning plan.

SPS6107 Current Issues in Strength and Conditioning
This unit addresses current and emerging issues within the strength and conditioning profession. Issues related to the use of strength and conditioning methods with various populations will be explored. Specific attention will be paid to the health and wellness effects of resistance training and issues related to cross-cultural and Indigenous populations will be addressed. Furthermore, management issues related to the design and layout of facilities as well as scheduling, policy development, and procedures will be addressed.

Further Information
Phone: 134 ECU (134 328) or for calls outside Australia, phone (61 8) 6304 0000
Email: studyecu@ecu.edu.au Website: ecugetready.com.au
See more course information:
ecu.edu.au/courses/U94

CRICOS IPC 00279B Information was correct at the time of printing and may be subject to change.