

PATHWAYS

Pathways give students the opportunity to progress to another level of study and to receive maximum credit transfer for study already taken.

If you have completed a TAFE Associate Diploma/Diploma in Engineering, and accepted into the Sports Engineering course, you can expect to be given credit for equivalent subjects passed.

ALTERNATIVE ENTRY:

Bachelor of Engineering VTAC CODE 41441 Alternative entry program for students who have:

- successfully completed year 12 with the required prerequisites, but may not have achieved the required study score in all prerequisites; or
- have not studied the required mathematics prerequisite.

All admissions are on an individual basis.

Prerequisites: Units 3 and 4 – English (any) and Mathematics (any).

Extra Requirements: Applicants accepted may be required to attend an appropriate summer bridging program or enrol in one or more subjects from the Foundation Year or undertake part or all of an appropriate TAFE program.

FOUNDATION YEAR:

This is a one year full-time course for students whose VCE results or subjects were not satisfactory to gain entry into a science or engineering course, or for those who want to return to study. Subjects covered are biology, chemistry, English language and communication skills, information technology, mathematics and physics. Mathematics and English subjects are compulsory but an English test may exempt some students from English. Successful completion of appropriate subjects will guarantee students entry to our Engineering & Science courses. Applications must be made direct to Victoria University, not through VTAC.

HOW DO I APPLY?

Applications should be made through VTAC:

40 Park Street, South Melbourne, 3205

Phone: 03 9690 7977 web: www.vtac.edu.au

NEED MORE INFORMATION?

Contact the Course Coordinator Ian Fairweather on 03 9919 5063 or

Email: ian.fairweather@vu.edu.au

OTHER INFORMATION

EXCHANGE PROGRAMS

Victoria University has exchange agreements with universities in many countries, such as Canada, United States of America, Mexico, United Kingdom, France, Italy, Netherlands, Sweden, Malta, China, Malaysia, Indonesia, Thailand, Philippines, Vietnam and Japan.

For those students who wish to study abroad there is the opportunity to experience living in a different “culture” and environment, and to develop self-responsibility and reliance skills. Many students achieve improved results in their remaining studies after returning home, having developed a clearer perception of their future career with a stronger determination to succeed. Some scholarships may be available for student participating in a study abroad.

INTERNATIONAL STUDENTS

For specific information relating to courses available, entry requirements and application procedures for international students, please visit www.vu.edu.au/ international for an updated list of courses offered to international students or contact Victoria University International (VUI) on +61 3 9919 1164.

CONTACT US

THE FACULTY OF HEALTH, ENGINEERING AND SCIENCE SCHOOL OF ENGINEERING AND SCIENCE

VICTORIA UNIVERSITY
FOOTSCRAY PARK CAMPUS
PO BOX 14428 MELBOURNE VIC 8001
PHONE: 03 9919 4703
FAX: 03 9919 4908

OR

VISIT THE WEBSITE
WWW.VU.EDU.AU

CRICOS Provider No. 00124X

This publication is an information document for prospective students of Victoria University. Every reasonable effort has been made to ensure that the information in this document is accurate, however it may be subject to change, June 2010. 3456.06.10.

SPORTS ENGINEERING



BACHELOR OF ENGINEERING SCIENCE (SPORTS ENGINEERING)

COURSE CODE: EBSG
VTAC CODE 40881 (CSP)

WHAT IS SPORTS ENGINEERING?

Sports Engineering is the blending of several traditional engineering disciplines, combined with an understanding of human physiology, human movement and the specialised needs of sports and exercise related systems.

COURSE AIM

To graduate highly skilled engineering technologists capable of crossing traditional discipline boundaries and who will be able to provide knowledge-based practical engineering services to the sports, sports science, and exercise and rehabilitation industries.

WHERE DO I STUDY?

This course is located at the Footscray Park Campus.

Students will be accessing the combined resources of mechanical and electronic engineering departments plus the extensive facilities of the School of Exercise and Sports Sciences.

WHAT IS UNIQUE ABOUT THIS COURSE

- No similar course offered in Victoria
- Course combines sports interests with engineering skills
- Fantastic new state-of-the-art facilities
- Strategic connections with elite sports institutions
- Strong relationships with top level sporting clubs
- 30 Years of Sport and Engineering Experience

WHAT'S IN IT FOR ME?

When you graduate, you will be qualified having advanced design skills for careers in sports engineering and related pursuits. Some of the potential employers could be:

- National & State Institutes of Sport
- Elite Sporting Organisations and Clubs
- University Sports or Engineering Related Departments
- Research Institutions
- Sporting Goods Manufacturers
- Sports Vehicle Manufacturers
- Sports Safety Products Manufacturers
- Sports Apparel Manufacturers
- Emerging Hi-Tech Sports Companies

HOW DOES IT WORK?

This course is offered over 3 years on a full-time basis (part time equivalent). The entire course can be completed on a part time basis, provided it is completed within eight years. The course is designed to provide an educational standard and vocational skill which will enable graduates to undertake professional practice in the discipline of Sports Engineering. Graduates are provided with a basis to progress through postgraduate studies, continuing education courses and participate in learned society endeavours.

- A 1.5 year Masters Degree is planned following completion of the undergraduate degree. This will allow students to become specialists in a particular area and further strengthen their skill set and knowledge.
- PhD studies would also be available to students wanting to pursue a particular line of in depth Sports Engineering related research.

COURSE STRUCTURE

FIRST YEAR

VES1001

ENF1101

ENF1102

RBM1174

FIRST YEAR

VAM2121

VAN2041

ENE2101

AHE2214

SECOND YEAR

VAM2121

VAN2041

ENE2101

AHE2214

SECOND YEAR

ENF1201

ENE2202

AHE1202

VES2201

THIRD YEAR

VES3111

VES3141

VES3131

VES3121

THIRD YEAR

VES3202

AHE2102

VES3232

VES3212

SEMESTER ONE

Introduction to Sports Engineering

Engineering Mathematics 1

Engineering Physics 1

Human Physiology

SEMESTER TWO

Mechanics of Engineering Materials

Thermofluids

Fundamentals of Electrical & Electronic Circuits

Sport and Fitness Delivery Systems

SEMESTER ONE

Mechanics Of Engineering Materials

Thermofluids

Fundamentals Of Electrical & Electronic Circuits

Sport And Fitness Delivery Systems

SEMESTER TWO

Engineering Mathematics 2

Electronic Systems

Biomechanics

Design & Ergonomics

SEMESTER ONE

Mechatronics & Sensors

Sports Dynamics

Computer Aided Engineering Design

Sports Materials

SEMESTER TWO

Mechatronics & Sensors 2

Sports Biomechanics

Sports Engineering Management

Sports Engineering Project

PROBLEM BASED LEARNING (PBL)

PBL creates the opportunity for students to form a holistic consideration of problems which are not only technical in nature but also exercise the students generic skills and encourages students to become independent learners, and self reflective about professional communication processes and practices. In this mode of subject delivery, students will drive their learning by working in small teams guided by an academic staff mentor.

HOW DO I GET IN?

You need to have successfully completed the Victorian Certificate of Education.

PREREQUISITES:

- Units 3 and 4—a study score of at least 24 in (any) English and;
- Any Mathematics (further mathematics, mathematical methods or specialist mathematics)
- Selection mode: CY12: ATAR and two-stage process with a middle-band of approximately 20%. NONY12. Middle-band: Completing physics and/or specialist mathematics = an aggregate 3 points higher per study