

# FACULTY OF SCIENCE, ENGINEERING AND BUILT ENVIRONMENT

The Faculty of Science, Engineering and Built Environment at Deakin University places great emphasis on excellence in its teaching and learning, research and research training, community engagement, and staff empowerment. We pride ourselves on our national and international activities and the partnerships we have formed with industry, community, government, and the professions.

The Faculty of Science, Engineering and Built Environment consists of four schools, each with a multi-discipline mix of teaching and research offerings and a strong emphasis on research excellence that informs our teaching programs.

## **School of Architecture and Built Environment**

- Architecture
- Construction management
- Landscape architecture

## **School of Engineering**

- Civil
- Electrical and electronics
- Electrical and renewable energy
- Engineering Management
- Environmental Engineering
- Mechanical
- Mechatronics
- Mechanical Design

## **School of Information Technology**

- Artificial intelligence
- Computer science
- Creative technologies
- Cyber security
- Data science
- Information technology
- Internet of things
- Mathematics
- Software engineering
- Virtual and augmented reality

## **School of Life and Environmental Sciences**

- Biological science
- Biomedical science
- Biotechnology
- Fisheries and aquaculture
- Forensic science
- Environmental management and sustainability
- Marine biology
- Science
- Sustainable regional development
- Wildlife and conservation biology
- Zoology and animal science.

The Faculty Executive includes the Executive Dean, the four Heads of School, the four Associate Deans (Teaching and Learning; International and Partnerships; Research; International Research Engagement), the Director of Research Partnerships, and the Faculty General Manager. Collectively, this leadership team establishes and delivers on the Faculty's strategic activities.

## Deakin's Promise to Equity, Diversity and Inclusion

At Deakin we value diversity, embrace difference and nurture a connected, safe and respectful community. We recognise that our academic workforce is increasingly diverse with a variety of backgrounds, experiences and responsibilities. In many cases, academic careers can be put on hold through career breaks or part-time work arrangements to take on caring duties, gain experience in other industries, for medical reasons or other personal circumstances.

Achievement relative to opportunity places more emphasis on the quality as opposed to the quantity of research outputs. In your application, we encourage you to comment on your achievements relative to opportunity.

# School of Engineering

The School of Engineering is proud to offer a unique approach to its educational delivery based on a philosophy of Project Oriented Design Based Learning (PODBL) where students experience real-world engineering challenges and deliver creative and novel solutions.

The School of Engineering delivers future-forward courses in Civil Engineering, Electrical and Electronics Engineering, Mechanical Engineering and Mechatronics Engineering that provide our graduates with a sound platform for the diverse employment opportunities that will exist in the future. These undergraduate programs are complemented by our Master of Engineering postgraduate specialisations in Engineering Management, Mechanical Engineering Design, Electronics Engineering and Electrical and Renewable Energy Engineering. In 2019, the School will offer a new Additive Manufacturing stream within the Masters of Engineering (Professional) course.

Project Oriented Design Based Learning (PODBL) in collaboration with industry is a fundamental feature of our engineering degrees. Integrating the concepts of creativity, innovation and design to engineering education, PODB� enables teams of students to design, research, test and evaluate solutions to real-world industry problems.

Our Centre for Advanced Design in Engineering Training (CADET) provides some of the best future-focused engineering and design facilities in the university sector. Our vision and passion is to be revolutionary in Australian engineering education. CADET houses virtual and rapid prototyping facilities allowing creative design solutions to be moved almost seamlessly from imagination to reality, and then to manufacture, in a single journey. Be it new wind turbines, sustainable infrastructure, medical devices, alternative vehicles or robotic aids, CADET provides the key elements to 'imagineer' the ultimate solution.

Industry plays a significant role in our direction. Engagement with organisations such as Barwon Water, AusNet, Ford ISCAR, Vic Roads, Quicksilver, SEW Eurodrive, Thales, Viva Energy and many others, enables us to develop industry-ready graduates who are in high demand. Industry placements and industry projects all culminate in an experience that can be life changing as well as career shaping.

Research with impact is another cornerstone of the school's approach. Our programs are not merely research informed but are genuinely research led. Deakin is a significant leader in a number of engineering research areas including water engineering, advanced manufacturing, design engineering and power engineering. Coupled with modern state-of-the-art facilities, the experience gained by our students can be considered the best in class and provides opportunities for research degrees or research careers in Australia or overseas.

If you are seeking a creative and energetic career with modern, purpose-built facilities, collaborating with your colleagues and building your expertise, while contributing to training engineering graduates with respected skills and credentials, Deakin's School of Engineering is a great choice to grow your career.



# APPOINTMENT OF SENIOR LECTURER IN MECHATRONICS

The Senior Lecturer in Mechatronics will be responsible for undertaking high quality teaching at the undergraduate and post-graduate levels and undertaking significant and high quality research in Mechatronics aligning with the School of Engineering's research strengths.

## TEACHING AND RESEARCH LEVEL C

Level C members of staff typically perform these duties at the following levels:

### RESEARCH AND SCHOLARSHIP

- A reputation at the national level in research and scholarship, through publication or exhibition in high quality and high impact outlets
- Making a significant contribution within their specific areas of research, scholarship or creative activity

- Making a significant contribution to research projects, including internal and external collaboration to create new insights and opportunities
- Making a significant contribution to research collaborations and partnerships which have demonstrable outcomes
- Making a significant contribution to successful development of research programs or partnerships
- Making a significant contribution to the supervision, management and timely completion of HDR students
- Making a significant contribution to a culture of research excellence in the University
- Making a significant contribution to the successful application of scholarly and research expertise to innovation and invention, with appropriate involvement in the commercialisation of outcomes

### LEARNING AND TEACHING

- Demonstrating excellent scholarly learning and

- teaching across all levels and modes (including for example in the cloud and in clinical settings) with an emerging reputation at the national level
- Making a significant contribution to the moderation and maintenance of academic standards, and the development of course and unit curriculum that exemplifies Deakin's curriculum framework, and meets external requirements such as the Higher Education Standards Framework and professional accreditation
- Researching and publishing in learning and teaching, including testing the effectiveness of innovations designed to improve student and graduate outcomes including graduate employment
- Designing and implementing best practice assessment and evidence of student learning outcomes at Unit and Course level, and leading assessment panels
- Counselling and mentoring students, including

## Performance expectations

Annual performance objectives and expected outcomes will be defined for this role in accordance with the Minimum Standards and Typical Duties for Academic Levels (MSTDALs) and Faculty Research Expectation Models (FREMs). Specific duties will be allocated with reference to the applicable Workload Allocation Model (WAM). These documents are updated from time to time and are available on request.

referring students to University services

- Providing leadership in teaching and learning through roles such as Course Director or Unit Chair of high enrolling courses or units

## SERVICE

- Making a significant contribution to the implementation of the University's Strategic Agenda
- Making a significant contribution to effective high performing teams
- Making a significant contribution to projects within or on behalf of the University
- Making a significant contribution to external partnerships
- Making a significant contribution to University or Faculty committees
- Representing the Faculty or University at academic, professional and civic forums
- Making a significant contribution to community engagement activities

## ORGANISATIONAL RELATIONSHIPS

The appointee will be actively involved in research, teaching and service related activity. The appointee will contribute to consulting, industry partnerships and professional activities. The appointee may interact with other staff within the School and the Faculty, their peers in other universities, both nationally and internationally, and with community, professional and industry organisations. The appointee will liaise with students at all levels.

## ORGANISATIONAL CONTEXT

The appointee will form part of the teaching and research team within the

School of Engineering. Staff within the School report to the Executive Dean through the Head of School.

## SELECTION CRITERIA

### QUALIFICATIONS

- PhD in Mechatronics or a related area

### RESEARCH

- Experience in leading teams, with a strong international scholarly publication record based on research or practice in the area of Mechatronics
- Demonstrated ability to lead engagement with industry, and produce significant outcomes
- Successful track record of attracting nationally competitive or industry research funding in Mechatronics
- Successful track record of research publications in highly ranked academic journals
- Significant experience in supervising PhD and Masters students to timely completion

### TEACHING

- Demonstrated ability to make a significant contribution to the Faculty's undergraduate and postgraduate teaching programs in a manner that influences, motivates and inspires students to learn, through both conventional teaching and Project Oriented Design Based Learning (PODBL) methods
- Experience in leading the development of curricula and resources that reflect a design oriented approach to the understanding of Mechatronics Engineering
- Expertise in teaching effectively in a technology-enhanced contemporary higher education environment
- Demonstrated ability to lead, develop and administer assessment regimes and provide

feedback that fosters independent learning

- Experience of efficiently administering academic programs

### OTHER

- Ability to contribute to the development and maintenance of partnerships with professional associations, with industry and with education and research institutions
- Ability to actively participate in and contribute towards positive service and culture within the University and wider community
- Demonstrated industry engagement and connectivity
- Demonstrated commitment to Equal Opportunity principles and practices, and Occupational Health and Safety
- Active involvement in relevant committees or boards

### PERSONAL QUALITIES

- Demonstrated personal qualities of leadership, innovation and high motivation
- Interpersonal skills that support the ability to establish and maintain highly effective working relationships with a diverse range of people including students, the staff of the
- Faculty and School and with other members or the University
- Ability to adapt to changes in the environment and effectively meet new challenges
- Commitment to the University's Mission, core commitment and Values which include - excellence, academic freedom, collegiality, continuous improvement, ethical behaviour, accountability and environmental responsibility.



# Appointment process and how to apply

## Application

Thank you for your interest in the position of Associate Professor of Mechatronics.

Please direct all correspondence and enquiries to;

Associate Professor Ben Horan  
**Course Director Mechatronics**  
School of Engineering  
Telephone +61 3 5227 2907  
[ben.horan@deakin.edu.au](mailto:ben.horan@deakin.edu.au)

## How to apply

Please apply online via:

[deakin.edu.au/about-deakin/work-atdeakin](https://deakin.edu.au/about-deakin/work-atdeakin)

Include cover letter, curriculum vitae and a response to the Selection Criteria.

Please quote reference number:

[Insert reference number]

## Interview process

An initial screening of prospective candidates will take place.

Short-listed candidates will be interviewed by a panel of esteemed colleagues.

Details of professional referees will be required prior to interview.

## Remuneration and benefits

An attractive remuneration package is offered. Salary will be commensurate with qualifications, experience and research record.

Relocation support may also be available.

## Term of appointment

Appointment is for a continuing position which is subject to an initial three (3) year probationary period.

## Special Requirement/s

This role has been identified as having contact with children and requires the incumbent to apply for and maintain a Working With Children Check (refer to Deakin's Recruitment Procedure for further details).



# Our locations

Deakin has five campuses, one in **Burwood**, two in Geelong (**Waterfront** and **Wauru Ponds**), one in **Warrnambool** and the vibrant Cloud Campus through which 20% of our students study.

Melbourne has been named the world's most liveable city for more than 5 years running\*.

Further information regarding our locations and relocating to Victoria can be found here:

[Our locations](#)

[Considering Relocation](#)

[Geelong/SurfCoast timelapse](#)

*\*The Economist's annual study*

## GEELONG WAURN PONDS CAMPUS

Our Geelong Wauru Ponds Campus is located on the western edge of Geelong and is a thriving regional campus attracting over 8,000 undergraduate and postgraduate on-campus students. It boasts open and inviting spaces for socialising and studying, innovative architecture and spacious new buildings. The Campus features expansive landscaped grounds and extensive sporting facilities. It is home to the Geelong Future Economy Precinct, which provides research and development capabilities and opportunities for university-industry partnerships and new enterprises in the region.

