

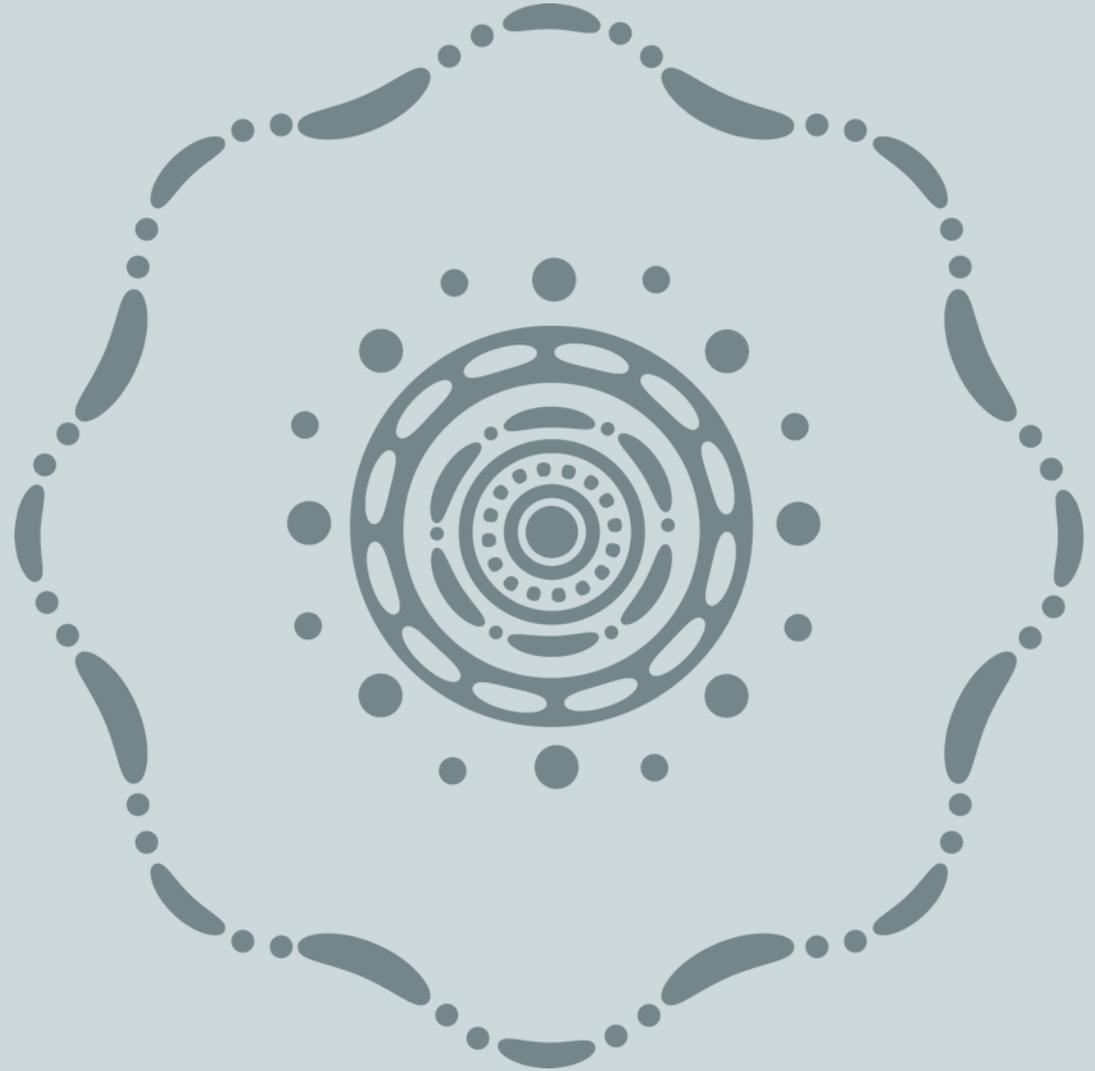
# ENGINEERING AT LA TROBE



# ACKNOWLEDGEMENT OF COUNTRY

La Trobe University acknowledges our campuses are located on the lands of many Traditional Custodians in Victoria and New South Wales. We recognise their ongoing connection to the land and value their unique contribution to the University and wider Australian society.

La Trobe University is committed to providing opportunities for Aboriginal and Torres Strait Islander people, both as individuals and communities, through teaching, learning, research and partnerships across all our campuses.





# DR ELSUIDA KONDO

Senior lecturer and Coordinator of the Work Integrated Learning program in the Department of Engineering.

I work closely with industry partners to help align student learning with workforce needs, creating talent pipelines that benefit both students and employers.



**DR ELSUIDA KONDO SENIOR LECTURER  
DEPARTMENT OF ENGINEERING, LA TROBE  
UNIVERSITY**



## HIGH EMPLOYABILITY

95.6 per cent of our engineering undergraduates found full-time employment within four months of graduation.

Quality Indicators for Learning and Teaching (QILT), 2023, ComparED: Engineering (Undergraduate)



## SCHOLARSHIP AVAILABLE

Successful candidates will be awarded a scholarship during the placement period, with a minimum of \$15,300.

### Students

- Practical experience
- Applied learning
- Skill/professional development
- Networking
- Career exploration
- An edge in the job market
- Enhanced transition into the workplace
- Future career success
- Personal growth
- Awareness of self



### Supervisor/Employer

- Access to high-quality students for temporary employment.
- Students bring new ideas and innovation to work projects.
- Access to current theoretical knowledge and resources.
- Development of the employer's coaching and leadership skills.
- Reinforces previous education and training



### BENEFITS OF WORK- INTEGRATED LEARNING

### Academic Institution

- Increased community engagement
- Increased communication with government and industry
- Opportunities for curriculum enhancement with applied content.
- Enhanced student education, satisfaction and engagement.
- Enhanced student recruitment.



### Worksite

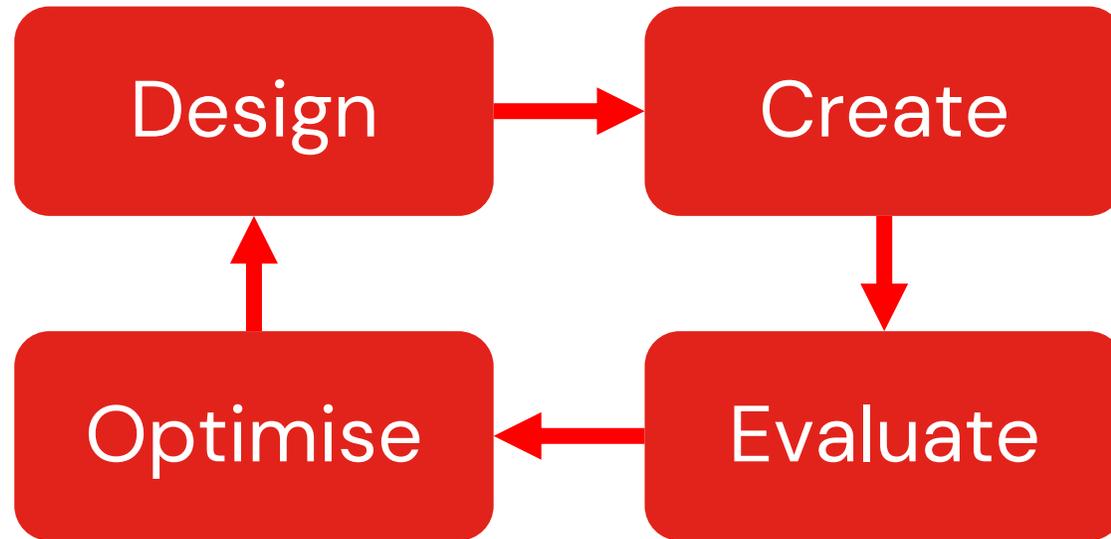
- Development and maintenance of a positive reputation.
- Application of theoretical knowledge to the workplace.
- Opportunities for evaluation• Improved employee morale.
- Opportunities for recruitment of strong 'work-ready' graduates



# WHAT DO ENGINEERS DO?

**I**  
**S**  
**T**  
**E**  
**M**

Use science and technology to solve problems to make the world a better place.



# DEMAND FOR SKILLS IN ENGINEERING

Demand for engineers is likely to be 50,000 – 100,000 within the next few years, across all sectors and across almost all disciplines.



# ENGINEERS IN AUSTRALIA

Engineering workforce in Australia:

- Around 62% of engineers in Australia were born overseas.
- In the last five years, approximately 115,000 new engineers joined the Australian workforce.
- Notably, 82,000 of these new engineers were born overseas (or 71%).

<https://engineersaustralia.org.au/sites/default/files/resource-files/2021-10/barriers-employment-migrant-engineers.pdf>



# WHY LA TROBE ENGINEERING?



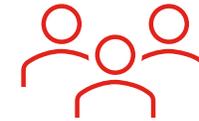
## EMPLOYERS LOVE LA TROBE GRADUATES

We're the best in Victoria and third in Australia for employer satisfaction, with a rating of 88.1 per cent.<sup>1</sup>



## MOST ADAPTIVE GRADS IN VICTORIA

Employers ranked our graduates the best in Victoria for their ability to adapt, apply skills and knowledge and work independently.<sup>2</sup>



## HIGH EMPLOYABILITY

95.6 per cent of our engineering undergraduates found employment within four months of graduation.<sup>3</sup>

1. Quality Indicators for Learning and Teaching (QILT), 2023, 2022 Employer Satisfaction Survey.
2. Quality Indicators for Learning and Teaching (QILT), 2022, 2021 Employer Satisfaction Survey.
3. Quality Indicators for Learning and Teaching (QILT), 2023, ComparED: Overall undergraduate results for La Trobe University.

# LA TROBE ENGINEERING

## Progressive and practical courses

La Trobe University has a long tradition of production engineering graduates of the highest calibre. Our graduates are lifelong learners, and they will be known for their:

- Solid technical expertise that includes a **MULTIDISCIPLINARY** flavour, critical thinking and problem-solving skills.
- Exceptional **PROFESSIONAL INTEGRITY** and safety culture.
- Ability to bridge the gap and transition between **INDUSTRY AND RESEARCH**.
- **EXCELLENCE AND INNOVATION** to create a positive impact on society.



# ENGINEERS AUSTRALIA ACCREDITATION

Our undergraduate and postgraduate courses are fully accredited by Engineers Australia, providing the qualification for entry to graduate practice and a start on the path to Chartered Engineer and professional registration.



# WHAT WILL I STUDY?

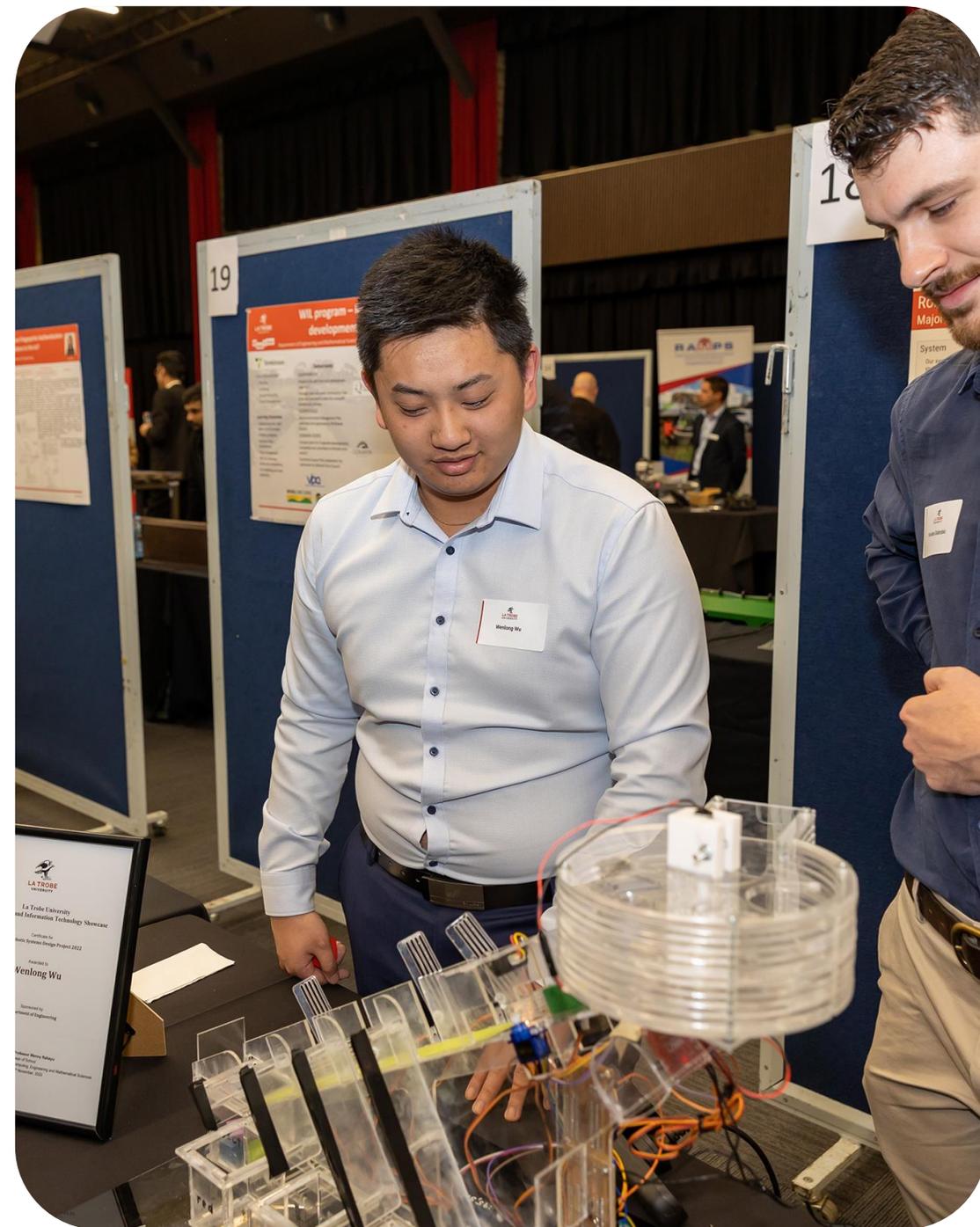
**Begin your studies with the fundamentals of engineering**

- Engineering Design and Problem Solving
- Introduction to Electrical and Electronic Engineering
- Mechanics of Solids and Fluids
- Mathematical tools for Engineers
- Principles of Physics
- Computer Aided Design
- Programming for Engineers and Scientists



# ENGINEERING DEGREE STRUCTURE

- Diverse range of core subjects (32)
- Every student completes a Final Year capstone research project
- Emphasis on collaborative learning environment
- Face-to-face teaching and blended delivery
- Small group tutorials
- Work Integrated Learning Placement



# BACHELOR OF CIVIL ENGINEERING (HONOURS)

**OUR CIVIL ENGINEERING DEGREE WILL HELP YOU MEET THE DIVERSE CHALLENGES OF CIVIL ENGINEERING ANYWHERE IN THE WORLD.**

Gain in-depth knowledge of geotechnical, hydraulic, transport and structural engineering. You'll be equipped to think and act beyond the boundaries of traditional engineering and deliver sustainable, creative solutions to complex technical problems.

As a civil engineering graduate, you'll be well placed to pursue roles that include:

- Structural engineer
- Water and wastewater engineer
- Transport engineer
- Geotechnical engineer
- Renewable energy engineer
- Project estimator
- Construction engineer



# MASTER OF ENGINEERING COURSES

**CONTINUE STUDYING TO A HIGHER LEVEL IN YOUR SPECIALISATION....**

**LA TROBE ENGINEERING OFFERS MASTERS COURSES IN:**

- **CIVIL**
- **CONSTRUCTION AND ENGINEERING MANAGEMENT**
- **ELECTRONICS**
- **MANUFACTURING**
- **TELECOMMUNICATIONS AND NETWORKS**



# FACILITIES

## Our laboratories allow our researchers to:

- Develop new methods and processes in manufacturing
- Equipment for testing and numerical analysis of structures, geotechnical and hydraulics engineering
- Facilitate design, fabrication and analysis of electronic and
  - Advanced Polymers and Composite Laboratory.
  - Extreme Engineering Metals, Materials, Ceramics and composites laboratory.
  - Field-induced extreme materials and spectroscopy laboratory.
  - Advanced manufacturing teaching laboratory.
  - Robotics, Automation, Mechatronics, Fluids, Prototyping and Sensing Laboratory.
  - Innovation and Entrepreneurship Foundry.
  - Radar and Remote Sensing Laboratory.
  - Construction and Engineering Management modelling



# WORK INTEGRATED LEARNING

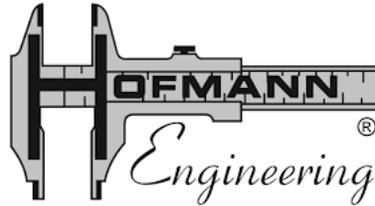


# PREPARING YOU FOR WORK

- **Degree content that reflects changing industry needs** – technical, design and commercial skills/knowledge to address challenges of Industry 4.0
- **\$12k work placement scholarships** available to students who pursue the option to undertake further on-the-job learning
- **Learn in world-class and state-of-the-art facilities** – including a brand new \$22m facility at our Bendigo campus
- **Work Integrated Learning (WIL)** – these work-based subjects put you directly into organisations.



Australian Centre for Education and Training - Global



leed



A photograph of two workers in a laboratory or industrial setting. The worker on the right is wearing a yellow high-visibility shirt and blue pants, leaning over a piece of equipment. The worker on the left is wearing a blue shirt and green gloves, also looking at the equipment. The background shows various pipes, tanks, and machinery. A red banner with white text is overlaid on the image.

# Work Integrated Learning (WIL)

# THANK YOU