

# BUILDING CAREER READINESS – How Engineering students are connecting with industry

Careers Practitioners Seminar 2023

## TODAY'S SESSION

- Welcome & introduction Helen O'Keeffe, Senior Student Recruitment Coordinator
- Student perspectives Austin, Brendan & Rashmika
- New Monash Smart Manufacturing Hub; what it will deliver and how students can benefit – Grace Diep, Student Industry Linkage Manager
- Questions





## CONTINUOUS PROFESSIONAL DEVELOPMENT (CPD)

#### COMPULSORY FOR ALL ENGINEERING STUDENTS

- •Professional practice requirement providing an opportunity to engage in engineering and business-related activities
- 420 hours required (12 weeks)
- 50% of the minimum hour requirement must come from Engineering related activities
- Students develop teamwork, leadership, communication and networking skills, as well as learn about ethical conduct and professional accountability
- The more CPD students do, the more employable they will be on graduation





## Monash Industry Team Initiative (MITI)

- A team-based program that partners students with a leading industry host where they will be tasked with solving a business problem
- Multi-disciplinary group of Monash students that work on an industry problem and present results at the end
- Undertaken over the summer break, 10-12 weeks.



## **SUMMER RESEARCH PROGRAM (SRP)**

- Students work on a research project under the supervision of a Monash University academic
- Gain skills that can be applied to future career or studies, and an insight into what a career in engineering research might look like
- 12 weeks over the summer break
- \$500 per week scholarship





## CO-OPERATIVE EDUCATION INTERNSHIP PROGRAM

- 3, 6, 9 or 12 month paid work placement
- Develop technical engineering, teamwork and communication skills
- Gain exposure to different industries, workstyles, technical problems and solutions
- Employability skills training is provided
- Students go through an application and interview process to secure a placement
- Dedicated faculty staff are available to help







## **30 TEAMS AND CLUBS**

- Precious Plastics
- Young MedTech Innovators
- Uncrewed Aerial systems

- **Brew Lab**
- Solar Decathlon •
- High Powered Rocketry
- Robogals

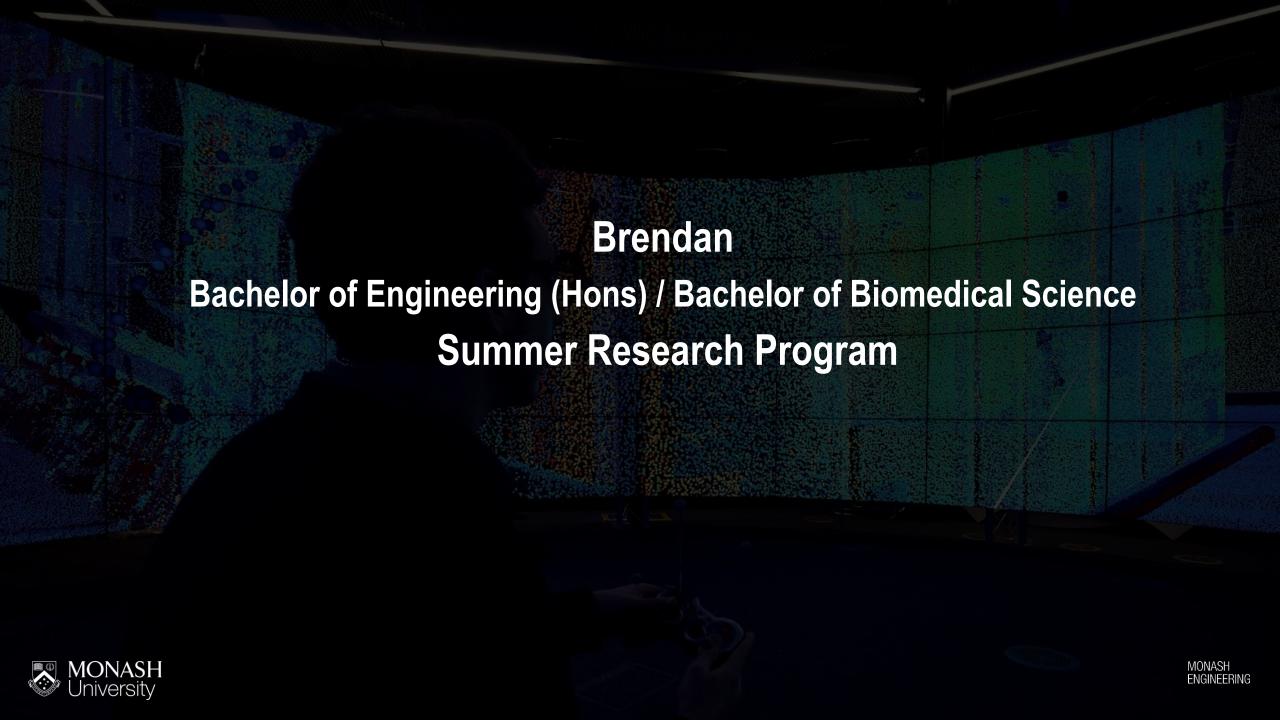
- Motorsport
- Nova Rover
- Human Power
- Forge



## Austin (Hons) / Bachelor of Biomedic

## Bachelor of Engineering (Hons) / Bachelor of Biomedical Science Monash Industry Team Initiative







### Rashmika

Bachelor of Chemical Engineering (Hons)/Bachelor of Pharmaceutical Science

Cooperative Education Internship





### YOUR ACCESS TO

Innovative Companies on Campus

Expertise (3,000 researchers)

Monash technology

Monash facilities

Industry Innovation Program Dedicated Student Area







## ACCESS DIGITAL TWIN TECHNOLOGY

Digital Twin: Manufacturing

Digital Twin: Processing

**Digital Twin: Infrastructure and Built Environment** 

Digital Twin: Enabler

Digital Twin: Visualisation Lab

- It can create a digital twin of a physical production line, equipment or processing.
- Student Team in development

MONASH SMART MANUFACTURING HUB





## Co-operative Education Placement Program (Co-op)

- 3, 6, 9 and 12 month paid internship opportunities
- Supported and Inclusive Process Career Readiness
- Opportunities from different industries and companies

| Year | Internship Enrolments |
|------|-----------------------|
| 2018 | 21                    |
| 2019 | 30                    |
| 2020 | 22                    |
| 2021 | 56                    |
| 2022 | 106                   |







## **Employer Evaluation Highlights**

- **92%** would take a student again for another internship
- □ 97% would recommend the student to a future employer
- **97%** said students were well prepared for their internship
- **99%** wanted to take another student for a future internship
- ☐ 100% reported they were well supported by the Co-op team

#### 98% of our Co-op Students are retained by their employer

'A well run program that achieved positive outcomes for HRL and the intern, good job!'

----- HRL Technologies

'This is a great program with two main dimensions - help students get critical real-world experience in the workforce prior to completion of their degree, as well as helping firms identifying potential graduate-level talent, which is important in our sector given there is a resource shortfall across the industry.'

----- SMEDTECH Ltd.

'As always, very pleased with the caliber of students.'

----- Mitsubishi Heavy Industries

I like the structured approach and how Monash supports finding suitable students for the right fields / right drivers.

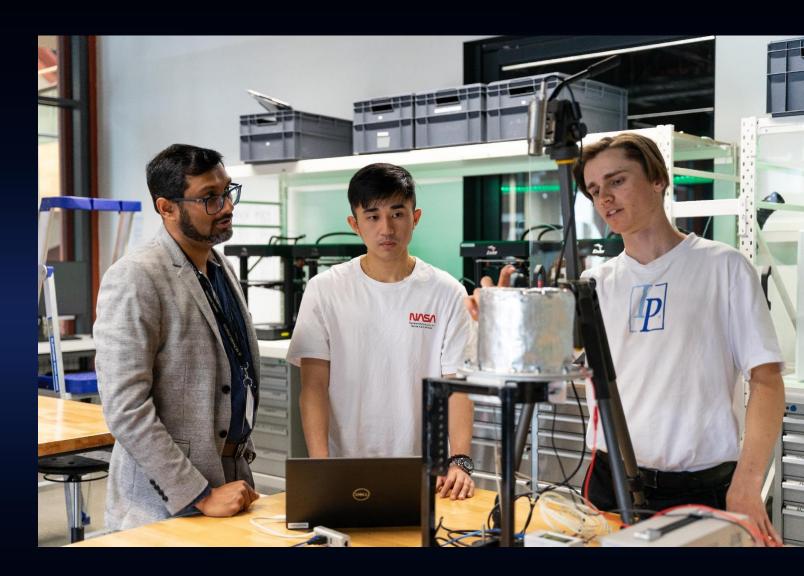
----- Mott McDonald





## INDUSTRY INNOVATION PROGRAM (IIP)

- Industry projects with an innovation focus
- Student Teams working with Industry on R&D and Innovative Concepts
- Guidance from Registered Engineer and Academic Supervisor
- 3, 6, 12 month projects full time or part time options available
- Scholarships to be awarded to participating students from Industry







#### **OUR INDUSTRY PARTNERS**





































**HEXAGON** 























## ACCESS TO TALENT ACCESS TO EXPERTISE ACCESS TO FACILITIES





### MONASH SMART MANUFACTURING HUB

**ACCESS TO INNOVATE** 



#### **CONTACT US**



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## **QUESTIONS?**

#### **More Information:**

Monash Smart Manufacturing Hub



**Professional Development Programs** 



