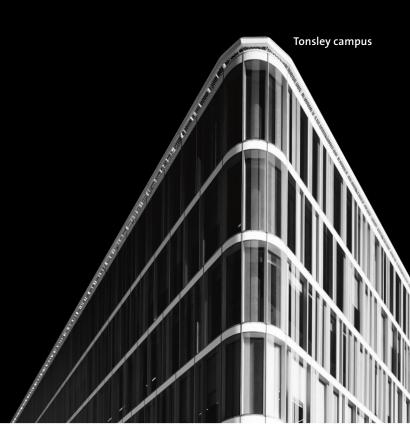




FOR MORE INFORMATION
FLINDERS.EDU.AU/ENGINEERING-EXCELLENCE



# **FLINDERS ENGINEERING**

### **CONNECT WITH INDUSTRY**

# Longest industry placement in Australia

Undergraduates are offered 20-week industry placement in their third year.

Postgraduates have opportunity to undertake 12-week industry placement.

We have developed close relationships with more than 200 local, national and international organisations including:

- SAGE Automation
- KPMG
- BAE Systems

# **Professional accreditation**

All Bachelor and Master of Engineering programs are accredited by Engineers Australia at level of professional engineer.

Recognised internationally by Washington Accord.

## Industry-led curriculum

Strong connections with industry informing course content, research areas and industry placements.

### **Interact with industry**

Opportunity to collaborate with industry during degree, including:

- · Cisco Network Academy
- Flinders Medical Device Research Institute
- Centre for Nanoscale Science and Technology
- New Venture Institute
- Flinders Autonomous Shuttle Trial

## **POWERED BY CREATIVITY**

### Orby

In a world-first study led by Flinders' lecturer, David Hobbs, Orby is an award-winning accessible gaming system and controller for people with hand impairments, including children with cerebral palsy and stroke patients.

### **Baxter**

Baxter is one of our demonstration and training robots designed by Rethink Robotics, a world leading technology company founded by Flinders graduate Professor Rodney Brooks.

### **Driverless vehicles**

The Flinders Autonomous Shuttle Trial is a collaboration between project partners Flinders University and RAA, together with eight industry partners.

### **Hexapod robot**

This award-winning robot, led by Flinders' Dr John Costi, was developed to enhance understanding of 3D performance of normal and diseased joints and their artificial replacements by simulating complex joint motion.

# Serval mesh

Dr Paul Gardner-Stephen has led project to develop a secure and inexpensive post-disaster deployment for remote locations.

### **Autonomous underwater vehicles**

Associate Professor Karl Sammut's team are developing a system to launch and recover unmanned rescue vessels in open seas around the world.

## **CULTURE OF COLLABORATION**

## **Innovation district**

Flinders is the first university to establish a campus at Tonsley, Australia's first innovation district.

Industries located at Tonsley include:

- Tesla Service Hub: local technicians will monitor and service the world's largest lithium ion battery, along with the superchargers installed across SA
- **Siemens Service Centre:** Ranked 63 on Fortune Global 500, this facility maintains turbomachinery equipment across Australasia
- Aurrigo Driverless Technology: a division of RDM Group, Aurrigo design, manufacture and deploy autonomous vehicles globally

# **Flinders at Tonsley**

World-class \$120 million teaching and research facility.

Home to over 150 staff and 2,000 students across engineering, computer science, and mathematics programs.

### **Specialised labs**

Tonsley has 28 specialist laboratories including:

- Biomechanics and Implants Lab
- Al and Robotics Research Lab
- Advanced Control Systems Lab
- Large Scale Materials Testing Lab
- Serious Gaming and Haptics Lab

# **COURSE AND ENTRY REQUIREMENTS**

	) (a	2019 FEE (AUD)	COURSE DURATION (YEARS)	INTAKE (SEMESTER)	ENGLISH REQUIREMENTS IELTS (ACADEMIC)			ACADEMIC REQUIREMENTS					
	(AU										Wd.	EC	OS
	2018 FEE (AUD)				OVERALL	SPEAKING	WRITING	ALEVELS	ATAR	IB (BEST 6)	MALAYSIA STPM (BEST 3)	MALAYSIA UEC	CRICOS
BACHELOR DEGREES													
Bachelor of Engineering Science	32,200	35,000	3	S1/2	6	6	6	6	65	24	6	28	063691B
Bachelor of Engineering (Biomedical) (Honours)	32,200	35,000	4	S1/2	6	6	6	8	75	26	8	23	083439D
Bachelor of Engineering (Civil) (Honours)	32,200	35,000	4	S1/2	6	6	6	8	75	26	8	23	083441K
Bachelor of Engineering (Computer and Network Systems) (Honours)	32,200	35,000	4	S1/2	6	6	6	8	75	26	8	23	058294B
Bachelor of Engineering (Electrical) (Honours)	32,200	35,000	4	S1/2	6	6	6	8	75	26	8	23	083443G
Bachelor of Engineering (Electronics) (Honours)	32,200	35,000	4	S1/2	6	6	6	8	75	26	8	23	083444G
Bachelor of Engineering (Mechanical) (Honours)	32,200	35,000	4	S1/2	6	6	6	8	75	26	8	23	083446E
Bachelor of Engineering (Maritime) (Honours)	32,200	35,000	4	S1/2	6	6	6	8	75	26	8	23	093433B
Bachelor of Engineering (Robotics) (Honours)	32,200	35,000	4	S1/2	6	6	6	8	75	26	8	23	083449B
Bachelor of Engineering (Software) (Honours)	32,200	35,000	4	S1/2	6	6	6	8	75	26	8	23	083450J
MASTERS DEGREES													
Graduate Diploma of Engineering Science	33,600	36,600	1	S1/2	6	6	6	Approved relevant bachelor degree in engineering, science, medical science or computer science; and pre-requisite topics					077361E
Master of Engineering Science (Biomedical)	33,600	36,600	2	S1/2	6	6	6						094010J
Master of Engineering Science (Civil)	33,600	36,600	2	S1/2	6	6	6						094010J
Master of Engineering Science (Electrical & Electronic)	33,600	36,600	2	S1/2	6	6	6						094010J
Master of Engineering Science (Materials)	33,600	36,600	2	S1/2	6	6	6						094010J
Master of Engineering Science (Software)	33,600	36,600	2	S1/2	6	6	6		094010J				
Master of Engineering (Biomedical)	33,600	36,600	2	S1/2	6	6	6		055942K				
Master of Engineering (Civil)	33,600	36,600	2	S1/2	6	6	6	and approved GPA					091861A
Master of Engineering (Electronics)	33,600	36,600	2	S1/2	6	6	6						061252G
Master of Engineering (Materials)	33,600	36,600	2	S1/2	6	6	6		088514B				

# **SPECIALISATIONS**

# **ENGINEERING OPPORTUNITIES**

## **Bachelor of Engineering - flexible entry**

This degree allows students to start their engineering degree but defer making decision about a specialist area until the end of their first year.

# **Engineering Science degrees**

The Bachelor of Engineering Science provides students with the foundations for further study in engineering or for a career in an enginering-related field. The Master of Engineering Science can be taken as a stand-alone degree or used as a pathway by graduates without an engineering degree to the University's accredited Master of Engineering awards.

# **ENGINEERING SPECIALISATIONS**

### **Biomedical**

Flinders was the first university in Australia to offer this accredited degree.

### Civil

Research strengths include future traffic systems and construction design.

# **Computer and Network Systems**

Blend of electronics, computer networks and computer science to design and analyze hardware systems and algorithms.

### Electrica

Niche areas include renewable technologies and electrical drive systems.

# Electronics

Strengths include embedded systems and instrumentation.

### **Maritime**

Specialise in naval architecture, ocean engineering, marine and offshore sytems.

## Materials

Materials connects to number of research areas including nanotechnology, chemical sciences, and civil engineering.

## Mechanical

Specialist areas include fluid dynamics and maritime applications.

## **Robotics**

Only SA robotics course based on electronics and autonomous intelligent systems.

### Software

Students can focus on either electronics or computer science.



