

# Redefine What's Possible

Faculty of  
Engineering & IT



THE UNIVERSITY OF  
SYDNEY

# Discover your future in engineering and technology

Faculty of Engineering and  
Information Technologies



THE UNIVERSITY OF  
SYDNEY



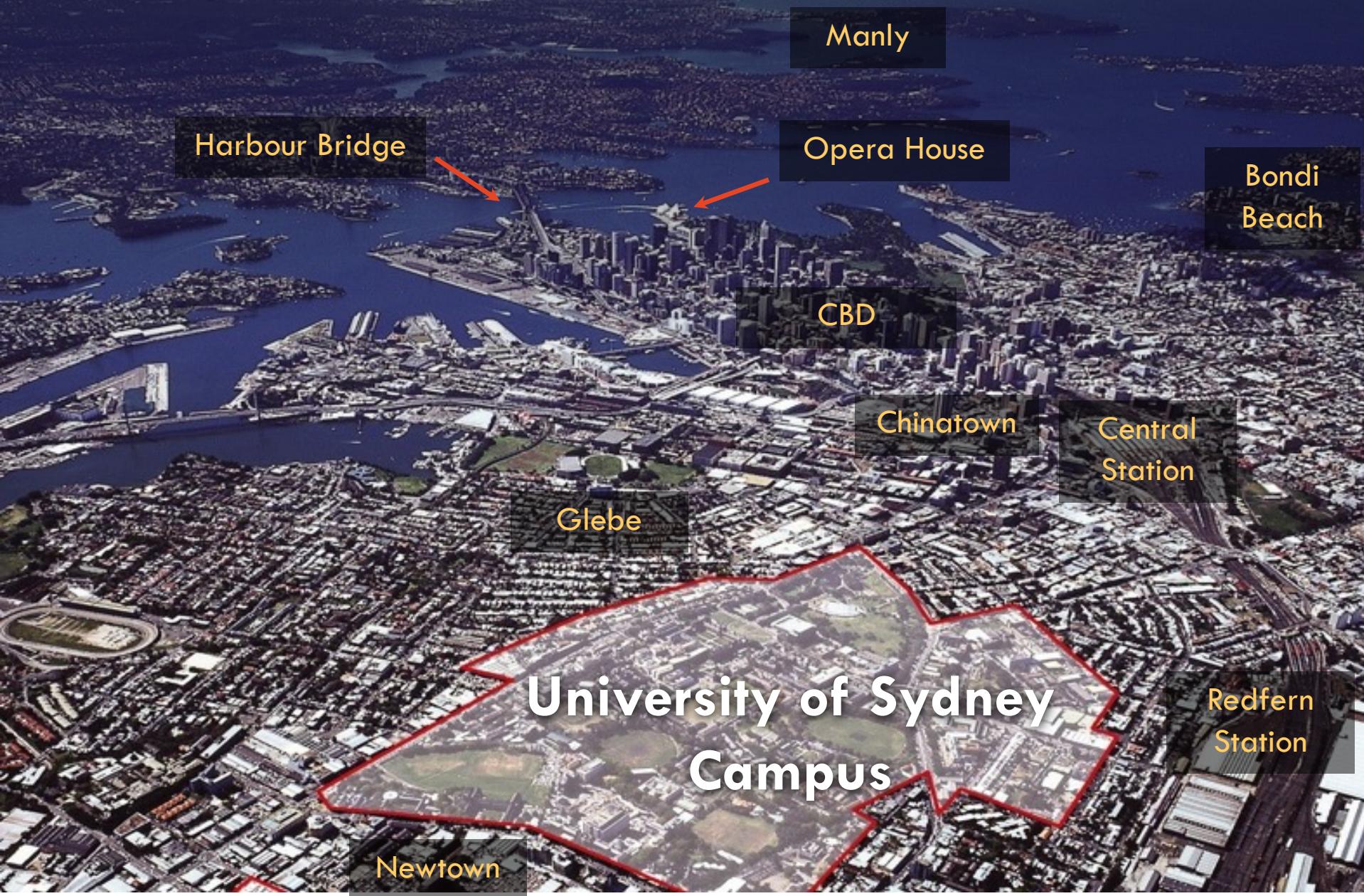




“Sydney is the 9th most desirable destination in the world for international students”

-- 2018 QS Best Student Cities Index

In the heart of Sydney - near everything the city has to offer

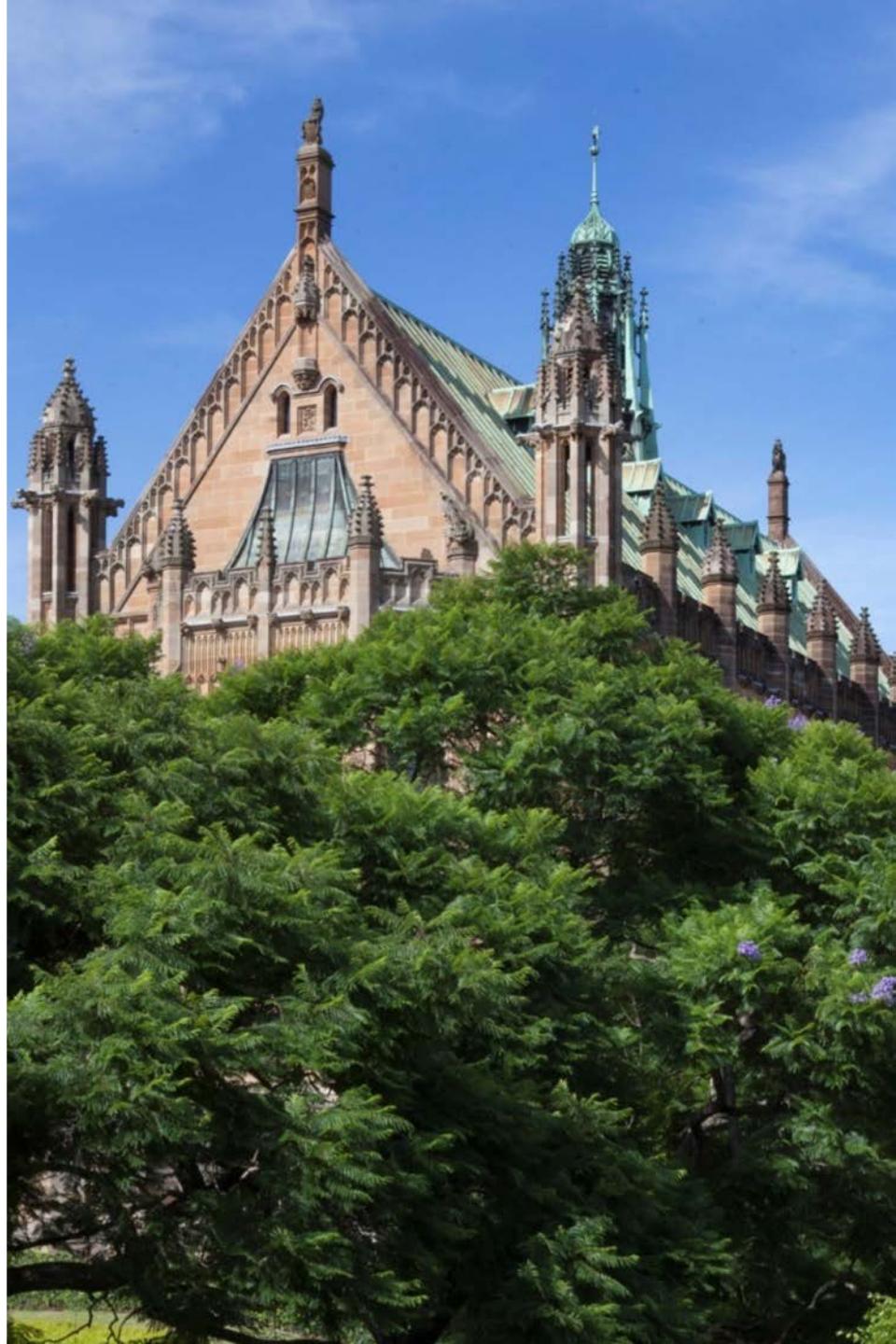


# Faculty of Engineering & IT

Australia's oldest engineering school  
founded in **1920**:

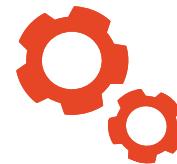
- 5176 undergraduates
- 2109 postgraduates
- 615 PhD students
- 50% of students international
- 430 staff

We've taught notable alumni  
including John Bradfield, designer of  
**the Sydney Harbour Bridge** and  
Matt Barrie, CEO of **Freelancer**





## 5 Schools



School of Aerospace,  
Mechanical and Mechatronic  
Engineering



School of Chemical and  
Biomolecular Engineering



School of Civil Engineering



School of Electrical and  
Information Engineering

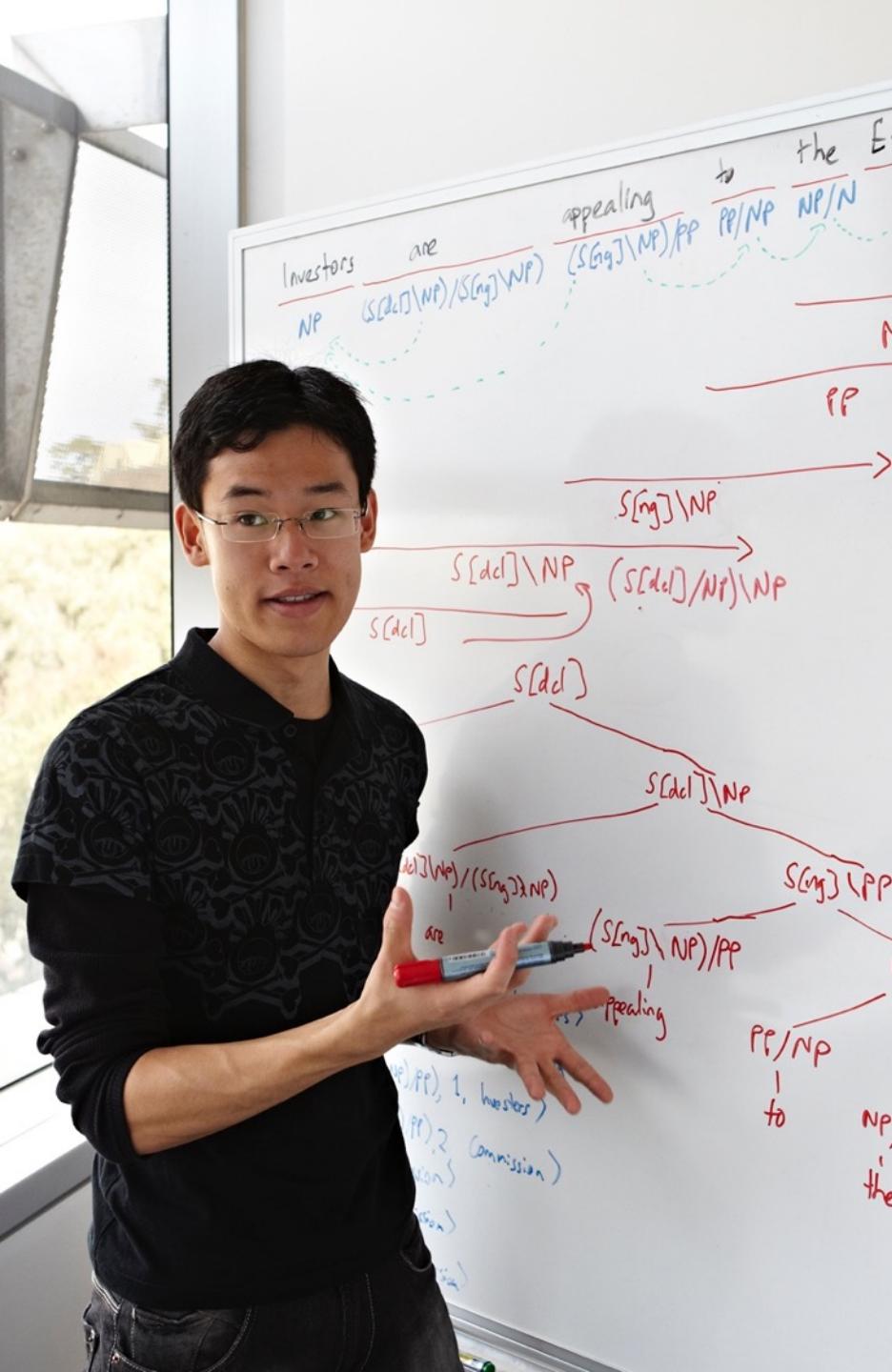


School of Information  
Technologies

# Why study engineering and technology?

- 75% of fastest growing occupations require STEM skills and knowledge\*
- modern transport, medicines, Wi-Fi and smartphones all created thanks to fields collectively known as STEM
- studying STEM enables you to tackle the biggest issues facing the world today – and into the future.

\*Australian Industry Group research report: Lifting our Science, Technology, Engineering and Mathematics (STEM) Skills.



# 2018 Highest Paying Jobs



Source: Seek.com, August 2018

Rank	Industry	Role type	2018 salary
1	Info & Comm Technology	Architects	\$138,144
2	Engineering	Management	\$133,927
3	Info & Comm Technology	Management	\$132,307
4	Mining, Resources & Energy	Management	\$131,462
5	Legal	Generalists - In-house	\$128,988
6	Accounting	Strategy & Planning	\$128,373
7	Accounting	Financial Man. & Controllers	\$126,906
8	Construction	Management	\$126,122
9	Construction	Project Management	\$124,603
10	Insurance & Superannuation	Management	\$124,432
11	Legal	Construction Law	\$124,041
12	Info & Comm Technology	Security	\$122,753
13	Mining, Resources & Energy	Mining - Engineering & Maint.	\$121,912
14	Consulting & Strategy	Manag. & Change Consulting	\$121,232
15	Engineering	Project Management	\$120,752
16	Info & Comm Technology	Product Manag. & Development	\$120,740
17	Info & Comm Technology	Programme & Project Manag.	\$120,554
18	Info & Comm Technology	Team Leaders	\$119,078
19	Legal	Corporate & Commercial Law	\$118,558
20	Legal	Tax Law	\$118,212

**Where will your journey take you?**



THE UNIVERSITY OF  
**SYDNEY**



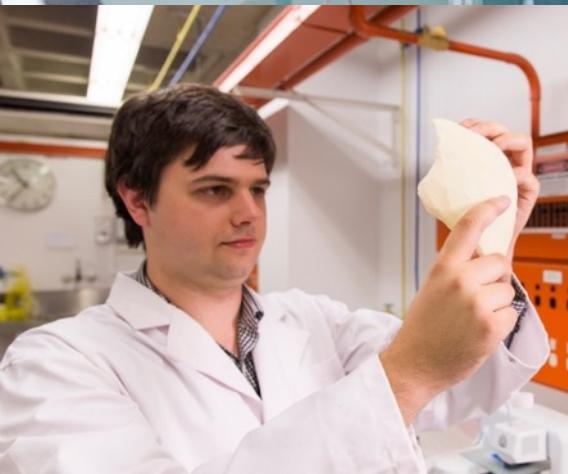
## Careers in tomorrow's technologies

- data analytics, space, software and nanotechnologies
- biomedical engineering and IT studies can lead to career options in fast-growing biotechnology sector



## Careers in the corporate world

- finance, banking and insurance
- professional and management roles



## Careers in health

- biomedical engineering is one of the fastest growing branches of engineering, working alongside medical professionals to design and develop medical devices and implants.



## Careers in agriculture

- our engineers are working with Australian farmers to develop robots with intelligent software to weed and harvest crops autonomously
- you could design production processes that improve the quality and shelf life of our food or minimise waste

## Careers in mining and resources

- mining and resources is one of Australia's most technologically advanced and dynamic industries.
- currently employs about **254,000** people in Australia

## Career in humanitarian and sustainability

- sustainability is a growing field, with many major companies hiring environmental engineers, or sustainability and corporate responsibility managers to maximise the eco-efficiency of their businesses.

# Why study with us?



THE UNIVERSITY OF  
SYDNEY

# Why study with us?

**1st in Australia  
& 4<sup>th</sup> in the  
world for  
graduate  
employability<sup>1</sup>**

**1st in Australia  
& 28<sup>th</sup> globally  
for research  
innovation<sup>2</sup>**



Connect with a  
**network of over  
1200**  
engineering,  
technology &  
government  
organisations



More than **double  
the national  
average of  
women** are  
studying engineering  
& technology with us

**#1 in Australia  
for student  
experience<sup>3</sup>**

**\$10 million in  
scholarships  
offered every  
year<sup>5</sup>**

**Top 3  
universities in  
Australia for  
Engineering &  
Technology<sup>4</sup>**



**ENGINEERS  
AUSTRALIA**

1 QS Graduate Employability Rankings 2017  
2 Thomson Reuters' Top 75: Asia's Most 3 Innovative Universities 2016  
3 National Union of Students Quality Survey 2010, 2011, 2013, 2015  
4 QS World University Rankings 2016–17

# Innovative Learning Environment

Our labs and teaching spaces incorporate the latest technology and equipment to foster **interactive study, research and collaboration.**



The Australian Centre for Field Robotics is one of the largest robotics institutes in the world.



Aeronautical (Space) Engineering student Jeremy chose Sydney because of our motion and static flight simulators, 2 wind tunnels, the aerial systems lab and the two-seater aircraft students get to assemble.



THE UNIVERSITY OF  
**SYDNEY**

Our Sydney Lunabotics team travelled to the Kennedy Space Center to compete in the **NASA Lunabotics Mining Competition**



Rory Green is completing a semester of his degree on **exchange** at Imperial College London

Students undertaking a humanitarian-aid project, **Water for Life Peru**, as part of their Engineering (Civil) honours degree.

## Global Opportunities

- Field trips to developing parts of the world, exciting global projects but also opportunities in rural and remote Australia
- International professional placements
- Short term programs
- Semester & year long exchanges with more than 300 partner universities worldwide



## Why study with us? > Global Accreditation

### Study at a highly ranked university

- Regularly ranked in top 0.3% of universities worldwide
- In top 50 in the world for engineering and technology in both QS and Times Higher Education rankings
- Number 1 in employability in Australia (QS world employability rankings)

### Globally recognised qualifications accredited by:

- Engineers Australia
- Institute of Chemical Engineers
- Australian Computer Society
- Project Management Institute



## Why study with us? > Leadership

### **Leadership development: The Student Leadership Academy**

- Led by students for students
- Collaborate with others from diverse discipline backgrounds
- Leadership development to complement the expertise and knowledge you will gain through your degree
- Insights from industry through guest speaker events, workshops, projects and competitions.

## Why study with us? > Professional Engagement

The conventional parts of the degree

***gives students the tools to tackle engineering challenges.***

The Professional Engagement Program

***ensures students know how and when to apply those tools.***

Leads to graduates who:

- Have the courage and vision to tackle complex problems
- Create innovative solutions to societies challenges
- ***Are career-ready rather than work-ready***



Google

THALES



World Health  
Organization

IBM



NORTHROP  
GRUMMAN

ARUP



accenture



Microsoft



KPMG



ResMed

# Professional Engagement Program (PEP)

The P.E.P. is **mandatory** for **all** Bachelor of Engineering students and begins in their first semester. All commencing students must enrol in ENGP1000.

The program requires students to develop a deep understanding of the professional and social contexts in which their engineering skills and knowledge can be applied and how these contexts shape the application of their knowledge and skills.

**Result:** career-ready graduates with industry contacts and the ability to confidently tackle real world problems and make a difference

PEP consists of:

- **Units of Study** - 3 additional 0 CP units of study
- **PEP Workshops** - related to UoS, each 2 hours long
- **PEP Activities** - minimum of **600 hours** (e.g. work experience, guest lectures, site visits, industry projects, graduate mentoring)

# Professional Engagement Program - 600 hours

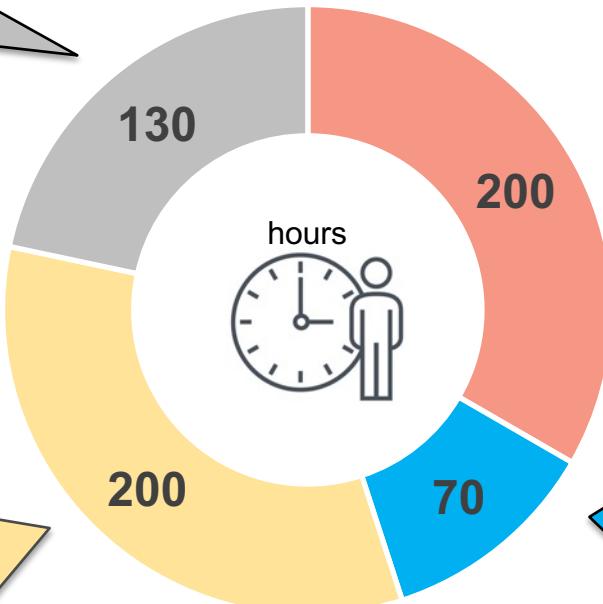
## Your choice

Can be any combination of the other categories

## Engineering Work Experience

Companies:  
Albergeldie, Commbank,  
Douglas and partners,  
GHD, John Holland,  
Lendlease, Mirvac,  
Transport for NSW,  
ResMed, and many others

Helps students transition  
into engineering practitioners



## Engineering focused activities

Can be in/extra curricular

- Site visits
- Guest lectures
- Industry projects
- Industry seminars, workshops, conferences
- Competitions, challenges

## Non-Engineering focused activities

Must be extra-curricular

- Employment skills
- Transferable skills
- Casual / PT work
- Volunteering
- Mentoring
- Overseas exchange

# Flexible First Year

Our Flexible First Year program gives you time and freedom to discover where your strengths and interests lie.

- get exposure to several fields of engineering, trialling the areas you are most interested in
- then transfer at end of first semester or first year
- complete degree in normal time



"I chose the Flexible First Year Program as I had no idea which stream I wanted to study. It definitely helped me, as I was able to experience all the different disciplines over a semester and discover which one I enjoyed the most. I don't think I would ever have thought of choosing Mechanical Engineering, my current stream, if I hadn't done the program."

**Ella Kerr, Mechanical Engineering student**

# Dalyell Scholars Program

The Dalyell Scholars stream rewards high achieving students – allowing you to draw on the rich interdisciplinary depth and breadth on offer at the University, cultivating the leadership and professional expertise to become a part of our global network of leaders.



Elsie Jean Dalyell OBE (1881-1948) was a Sydney medical graduate and our first full-time female academic. She travelled to London on a University scholarship and served in World War I. Her academic excellence and commitment to creating her own path are hallmarks of our Dalyell Scholars program.

# Dalyell Scholars Program

- Specialist accelerated and advanced units with like-minded students
- Specific recognition on your testamur
- \$2,000 Global Mobility Scholarship to support international exchange during your degree
- Entry requires 98 ATAR (40 IB score)



THE UNIVERSITY OF  
**SYDNEY**

# **Undergraduate Coursework Degrees**

# Bachelor of Engineering (Honours)

## Clearest pathways, widest choice:

- simply entry pathways
- flexibility to choose combinations of specialist majors
- ability to tailor your degree with **24** majors
- option to broaden career options even further by combining your degree with studies in arts, law, architecture, science, commerce, music or medical science.



# Bachelor of Engineering (Honours) + available optional majors

## Choose your stream



Aeronautical



Biomedical



Chemical & Biomolecular



Civil



Electrical



Mechanical



Mechatronic



Software



Flexible First Year



Space Engineering



## Choose your major once you enrol

- Chemical
- Computer
- Computational Engineering
- Construction Management
- Electrical
- Energy and the Environment
- Engineering Design
- Environmental
- Fluids
- Geotechnical
- Humanitarian Engineering
- Info Technology
- Internet of Things
- Materials Science
- Mechanical
- Mechatronic
- Power
- Process Intensification
- Robotics and Intelligent Systems
- Space (\*Separate entry)
- Structures
- Telecommunications
- Transport
- Water & Environmental Treatment Processes

\* New for 2019

# Bachelor of Engineering (Honours) streams + aligned majors

## Biomedical

- Chemical
- Electrical
- Humanitarian
- Information Technology
- Mechanical
- Mechatronic

## Electrical

- Computer
- Internet of Things
- Power
- Telecommunication

## Civil

- Construction Management
- Environmental
- Humanitarian
- Geotechnical
- Structures
- Transport

## Aeronautical

- Space
- Computational
- Engineering Design

\* New for 2019

## Mechanical

- Space
- Energy and Environment
- Fluids
- Material Science

## Mechatronic

- Space
- Robotics and Intelligence Systems

## Software

- Computer

## Chemical and Biomolecular

- Water and Environmental Treatment Processes
- Process Intensification

# Bachelor of Advanced Computing

## Prior to 2018

B Computer Science & Tech  
B Computer Science & Tech (Advanced)  
B Information Technologies



## 2018 & beyond

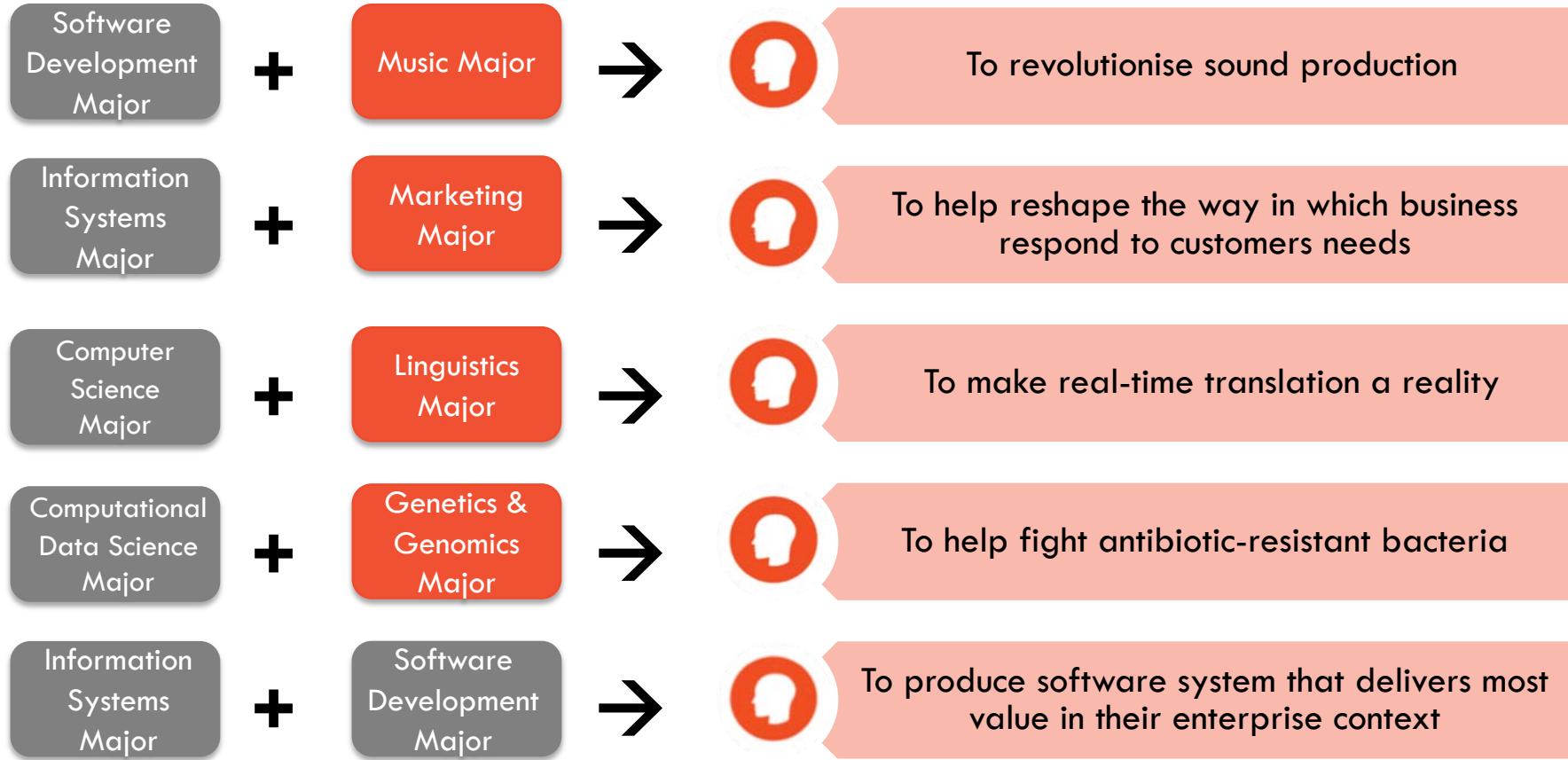
### B Advanced Computing Majors (also in shared pool):

Computer Science  
Information Systems  
Software Development  
Computation Data Science

## A new way to study IT:

- 4 years full time (exit point after 3 years for B Computing)
- embedded honours thesis
- develop and connect practical and theoretical skills across the computing industries
- learn from leaders in computing field
- highly flexible: options for computing depth; enriching breadth; and research pathways
- choose 2<sup>nd</sup> major from shared pool

# Bachelor of Advanced Computing



Fosters **creativity, originality** and **problem solving** through the flexibility of a second major, while cultivating specialist **industry knowledge** and computing **expertise**.

# Shared Pool of Majors and Minors



## Architecture and interaction design

- Design



## Arts and social sciences

- Agricultural and resource economics
- American studies
- Ancient Greek
- Ancient history
- Anthropology
- Arabic language and cultures
- Archaeology
- Art history
- Asian studies
- Biblical studies and classical Hebrew
- Chinese studies
- Cultural studies
- Digital cultures
- Econometrics
- Economic policy
- Economics
- English
- European studies
- Film studies
- French and Francophone studies
- Gender studies
- Germanic studies
- Hebrew (modern)
- History
- Indigenous studies
- Indonesian studies
- International and comparative literary studies



## Music

- Music



## Business

- International relations
- Italian studies
- Japanese studies
- Jewish civilisation, thought and culture
- Korean studies
- Latin
- Linguistics
- Modern Greek
- Philosophy
- Political economy
- Politics
- Socio-legal studies
- Sociology
- Spanish and Latin American studies
- Studies in religion
- Theatre and performance studies
- Visual arts
- Accounting
- Banking
- Business analytics
- Business information Systems
- Business law
- Finance
- Industrial relations and human resource management
- International business
- Management
- Marketing



## Health, medicine and dentistry

- Anatomy and histology
- Applied medical science
- Health
- Hearing and speech
- Immunology and pathology
- Infectious diseases
- Neuroscience
- Pharmacology
- Physiology



## Education and social work

- Education



## Engineering and information technology

- Computer science
- Information systems
- Project management
- Software development



## Science, agriculture, environment and veterinary science

- Animal health, disease and welfare
- Animal production
- Behavioural sciences
- Biochemistry and molecular biology
- Biology
- Cell and developmental biology
- Chemistry
- Data science
- Ecology and evolutionary biology
- Environmental studies
- Financial mathematics and statistics
- Food science
- Genetics and genomics
- Geography
- Geology and
- geophysics
- History and philosophy of science
- Marine sciences
- Mathematics
- Medicinal chemistry
- Microbiology
- Nutrition science
- Physics
- Plant production
- Quantitative life sciences
- Soil sciences and hydrology
- Statistics



# Bachelor of Project Management - Renewed for 2019 intake

## Available Majors:

Construction

Built Environment

Choose from Shared Pool  
(100+)

- The only multi-disciplinary bachelors program in Australia **not** tied to a single industry
- Option to choose a major outside of project management (choosing from the University shared pool) and/or Honours year
- Addition of curated internships for the best and brightest students (by invitation)
- Complete a capstone project over two semesters in the final year with subject matter experts from industry.
- Subjects include project finance, statistics, analytics, risk management, organisational behaviour and psychology.



THE UNIVERSITY OF  
SYDNEY

# Combined Degrees

- Approximately 50% of our students study a combined degree
- This allows pursuit of other academic interests, and to broaden career prospects for the future

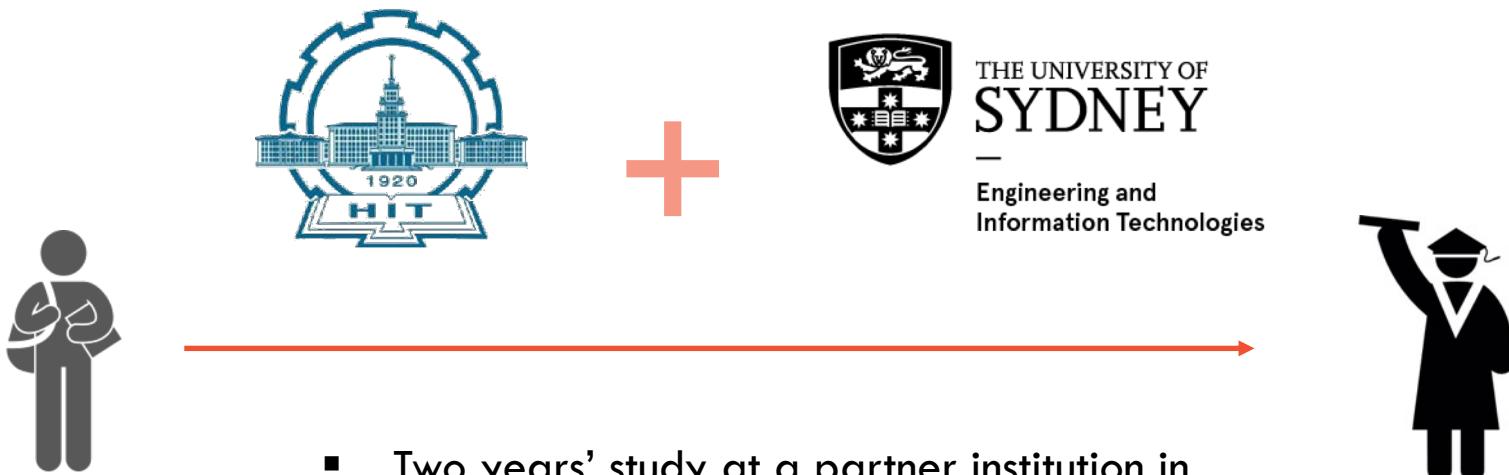
## 5 Years Full Time

- B. Advanced Computing / B. Commerce
- B. Advanced Computing / B. Science
- B. Advanced Computing / B. Science (Health)
- B. Advanced Computing / B. Science (Medical Science)
- B. Engineering Honours / B. Arts
- B. Engineering Honours / B. Commerce
- B. Engineering Honours (Civil) / B. Design in Architecture
- B. Engineering Honours / B. Project Management
- B. Engineering Honours / B. Science
- B. Engineering Honours / B. Science (Health)
- B. Engineering Honours / B. Science (Medical Science)

## 6 Years Full Time

- B. Engineering Honours / B. Laws

# USYD 2+2 Program



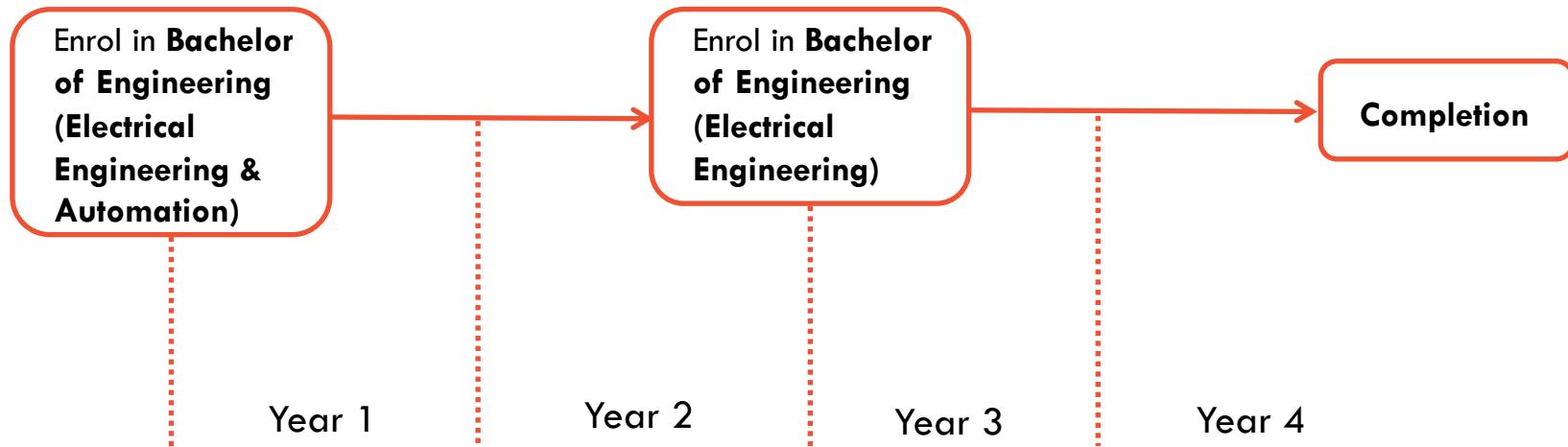
- Two years' study at a partner institution in China
- Two years' study at the Faculty of Engineering and IT, University of Sydney

# If you start your degree at Harbin Institute of Technology



THE UNIVERSITY OF  
**SYDNEY**

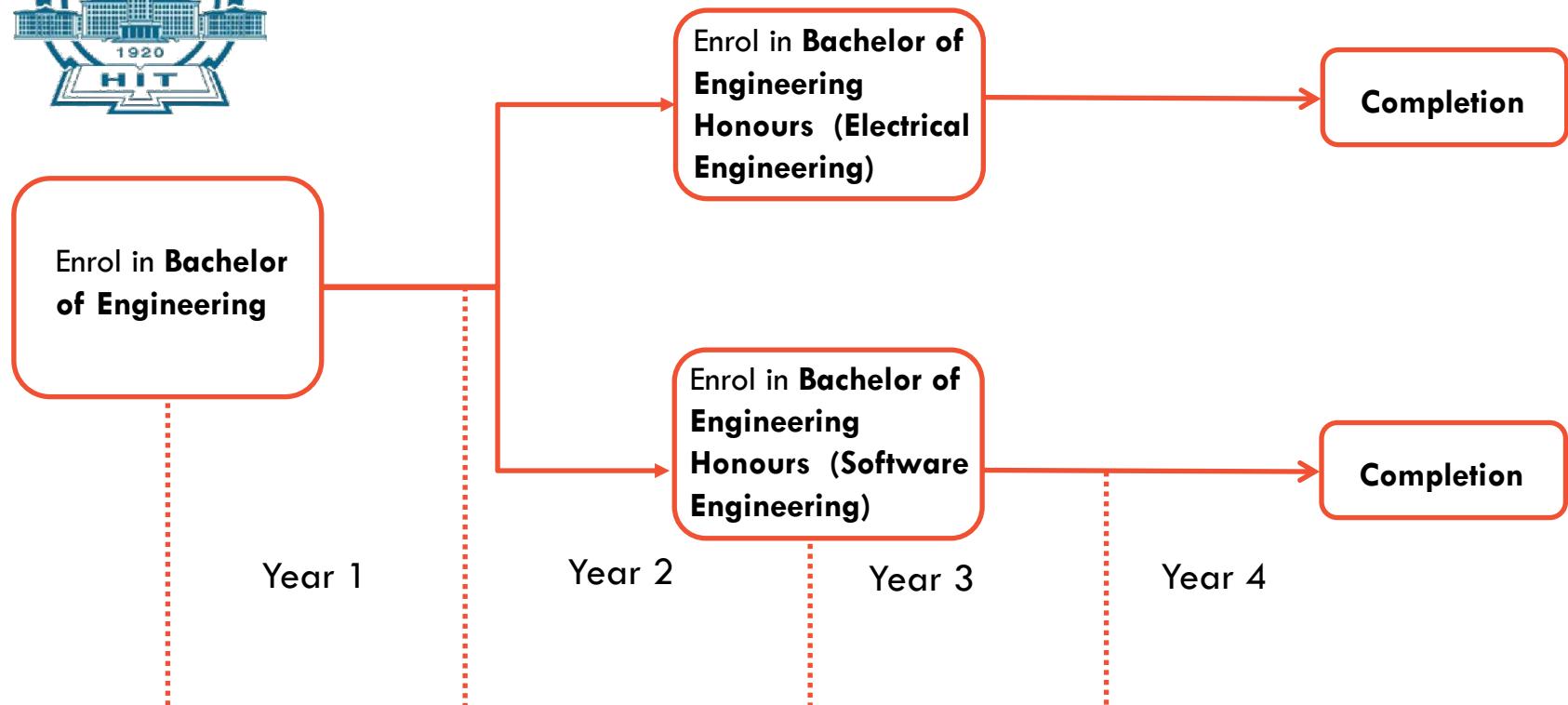
Engineering and  
Information Technologies



# If you start your degree at HIT (Weihai)



THE UNIVERSITY OF  
**SYDNEY**  
—  
Engineering and  
Information Technologies



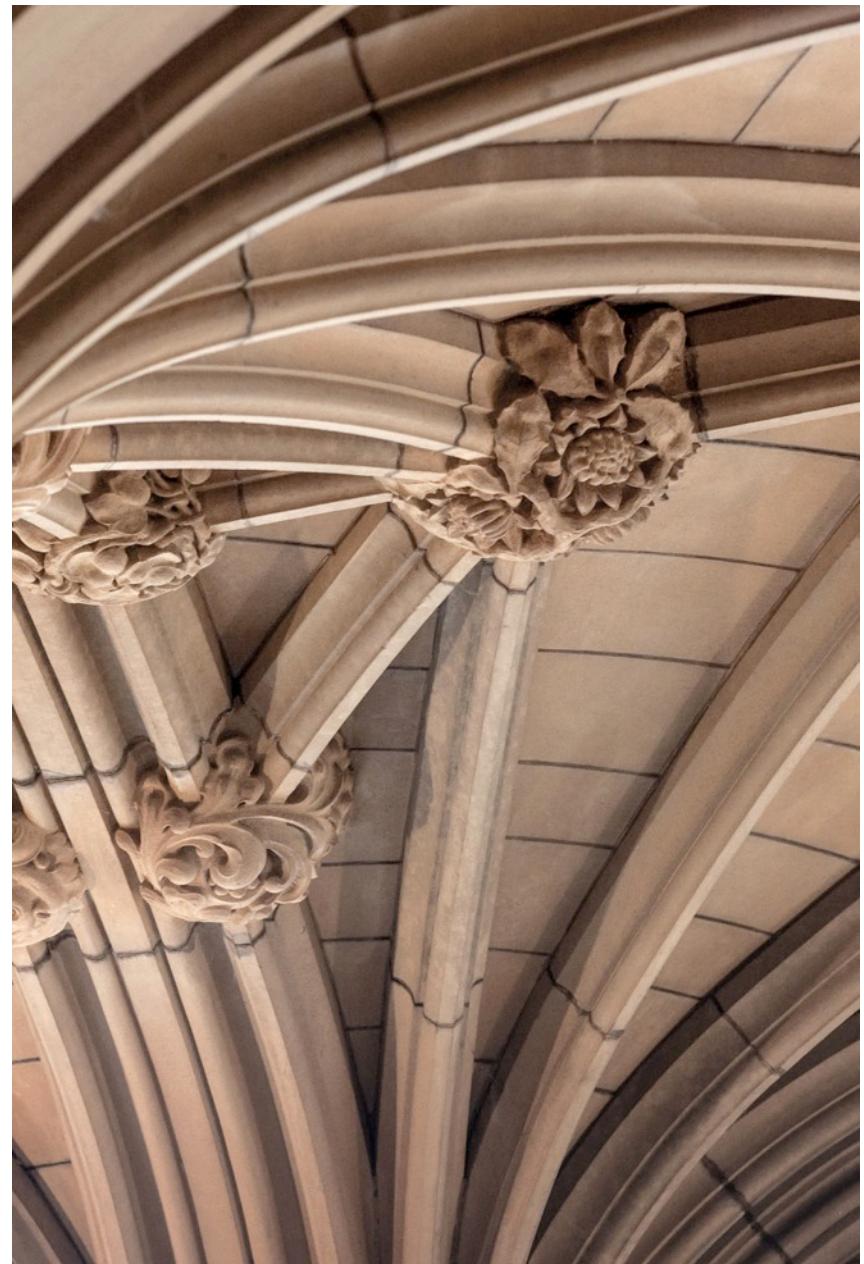
# Credit Recognition Agreement Scholarship (HIT and HIT Weihai only)

## Eligibility

- Enrol in the USYD 2+2 program degree at HIT or HIT (Weihai)
- Achieve a weighted average mark (WAM) higher than 75% in the first two years' study
- Maintain a WAM higher than 65% while studying at USYD in the final two years

## Amount

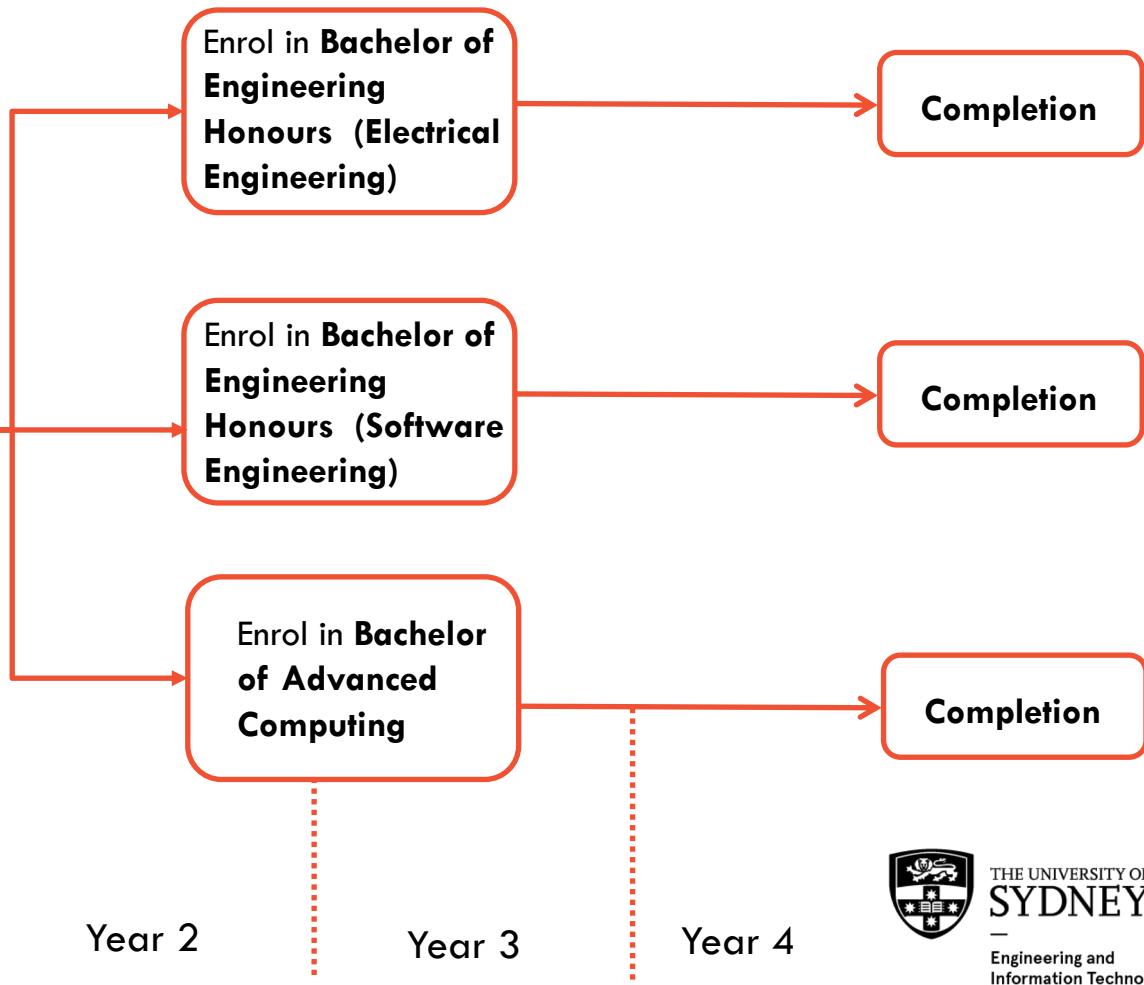
\$5,000 Australian dollars per annum during the final two years studying at USYD



# If you start your degree at Harbin Engineering University\*



Enrol in an **Engineering** degree (specialising in Computer Science & Technology or Electrical Engineering & Automation)





Australian Government  
Department of Defence  
Defence Science and  
Technology Organisation

## Industry Partnerships & Opportunities

- Guest lecturers/networking sessions
- Careers Fairs on campus
- Sydney Industry Project Placement Scholarship
- Engineering/IT Student Societies
- Research Conversazione – chance for students to showcase research to industry
- John Grill Centre for Project Leadership joint-initiative with Sydney Business School



ARUP



lendlease



Google



Johnson & Johnson



THALES

IBM®

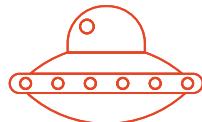
accenture



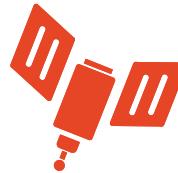
# Where can our degrees take you?



Enrolled in a Bachelor of Aeronautical (Space) Engineering



PhD in Aerospace Engineering – Robotic Navigation



Facilitating Zero Robotics Programming Competition in Australia



**Dr Ben Morell**  
Researcher

Completed Honours in Computational aerodynamics



Visiting Researcher at Texas A&M University



Visiting Researcher at NASA Jet Propulsion Laboratory

## Why choose USYD?

“When I got to USYD – Prof. Ron Johnston who runs the Dalyell Scholars subjects for engineering summed USYD Engineering up really well:

‘anywhere that offers an engineering degree will teach you to be a problem solver, but Sydney’s a bit different - **we teach you where to find those problems in the first place.**

At the end of the day that’s what differentiates between a good engineering and a great engineer.””



**Jack Naylor**  
Bachelor Engineering  
Honours (Space Major) /  
Bachelor of Science  
(Advanced)

## Why choose USYD?

The primary inventor of two technologies that led to significant areas of application and start-up companies — a FFT chip that led to Lake Technologies and the 802.11a/g wireless LAN, where he solved problems considered intractable by the major companies in the space globally.



**Dr John O'Sullivan**  
B.E., PhD (1974)  
Department of Electrical  
Engineering  
The University of Sydney

# **Postgraduate Coursework Degrees**



THE UNIVERSITY OF  
**SYDNEY**

# Master of Professional Engineering (MPE)

- Accredited by Engineers Australia and recognized globally
- 3 year full time program for:
  - Students who do not have an Engineering degree and would like to become an engineer
  - Students who have an engineering degree but would like to move to a different engineering discipline
- Also have 2 year version for applicants with an undergraduate engineering degree



- Aerospace
- Biomedical
- Chemical & Biomolecular
- Civil
- Electrical
- Fluids
- Geomechanical
- Mechanical
- Power
- Software
- Structural
- Telecommunications

# Master of Professional Engineering (Accelerated) - new

- 2-year version of the existing Master of Professional Engineering
- Same learning outcomes, costs, and entry requirements as MPE
- shorter path for applicants with an undergraduate engineering degree who want to obtain an Australian accredited degree in a related field of engineering
- Specialisations:



- Aerospace
- Biomedical
- Chemical & Biomolecular
- Civil
- Electrical
- Fluids
- Geomechanical
- Mechanical
- Power
- Software
- Structural
- Telecommunications

# Master of Engineering (ME)

- 1.5 year full time program:
- Allows students to build on their undergraduate engineering degree by developing specialised technical knowledge
- The program also includes four professional engineering management subjects



- Biomedical
- Chemical & Biomolecular
- Civil
- Electrical
- Fluids
- Geomechanical
- Mechanical
- Power
- Risk Management
- Software
- Structural
- Sustainability & Environmental
- Telecommunications Engineering
- Automation and Manufacturing

# Master of Project Management (MPM)

- 1.5 year full time program
- For those with 0-2 years work experience
- Developed to equip students with the fundamental methodologies, modelling and analytical techniques for the design and implementation of projects across a wide range of industries
- Taught online or in intensive block mode



- Global
- Organisational Project Management
- Portfolio and Program
- Risk and Control
- Strategic Change Implementation
- Sustainability



THE UNIVERSITY OF  
**SYDNEY**

# **Master of Project and Program Management (MPPM) - new**

- 1 year full time program
- For project managers with 2+ years of work experience
- Developed to take students beyond conventional concepts of project management to expand strategic thinking capability and gain organisation skills to manage larger projects and program portfolios
- Capstone project plus optional international study tour opportunity
- Taught online or in intensive block mode



THE UNIVERSITY OF  
**SYDNEY**

# Master of Complex Systems (MCS)

- 2 year full time program
- Gain expertise in modelling, analysing and designing resilient technological, socioeconomic and socioecological systems
- Develop your skills in quantitative modelling and computational simulation of system dynamics, complementing your existing skills in engineering, computer science, information technology, physics, mathematics, health, biology or business.



- Biosecurity
- Ecology
- Engineering
- Research Methods
- Transport



THE UNIVERSITY OF  
**SYDNEY**

# Master of Data Science (MDS)

- 1 year full time program
- Professional degree for people who are passionate about drawing meaningful knowledge from data to drive business decision-making or research output.
- Develop your analytical and technical skills to use data science to guide strategic decisions in your area of expertise.



- Principles of Data Science
- Machine Learning and Artificial Intelligence
- Visual Communication
- Natural Language Processing
- Database Management Systems
- Data Mining
- Visual Analytics
- Statistics and Statistical Methods



THE UNIVERSITY OF  
**SYDNEY**

# **Master of Information Technology (MIT)**

- 1.5 year full time program
  - For IT professionals seeking to extend & update their technical knowledge of advanced computing subjects
  - Advance your career in diverse areas such as software, engineering, health and many other fields
- 
- **Digital Media Technology**
  - **Biomedical and Health Informatics**
  - **Data Management and Analytics**
- 
- **Software Engineering**
  - **Networks and Distributed Systems**
  - **Telecommunications Engineering**



# Master of Information Technology Management (MITM)

- 1.5 year full time program
- For IT professionals who would like to make the transition to management
- Equips students with an in-depth understanding of key areas such as business analytics and intelligence, IT strategy and IT project management



Whilst there are no formal specialisations within this degree, candidates choose from among a wide range of specialist units of study to enhance their learning in the areas of their choice.

- **Professional Pathway**
- **Research Pathway**

# **Master of Information Technology / Master of Information Technology Management (MIT/MITM)**

- 2 year full time program
- For IT professionals who would wanting to develop both technical and management skills specifically related to technology
- Deepen your technical knowledge of complex IT environments while developing your ability to manage the design, delivery and operation of business technologies.



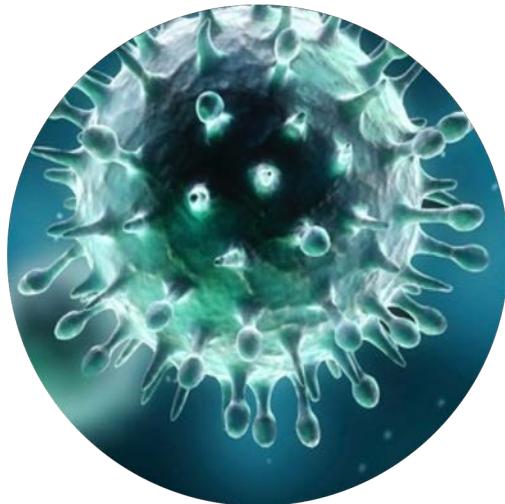
- Digital Media Technology
- Software Engineering
- Data Management and Analytics
- Biomedical and Health Informatics
- Networks and Distributed Systems
- Telecommunications Engineering



THE UNIVERSITY OF  
**SYDNEY**

# **Master of Health Technology Innovation (MHTI)**

- 2 year full time program
- Developed with support from industry and taught by leaders in medicine and technology
- Designed to equip those from science, technology, engineering or medical backgrounds with the skills to apply advanced technologies to deliver innovative healthcare solutions



Whilst there are no formal specialisations within this degree, candidates choose from among a wide range of specialist units of study to enhance their learning in the areas of their choice.

- **Dissertation Project Pathway**
- **Capstone Project Pathway**



THE UNIVERSITY OF  
**SYDNEY**

# CUSP - Course and Unit of Study Portal

## cusp.sydney.edu.au

Programs > IT/CS > IT(Postgrad) > Master of Information Technology (2017)

Show information for 2017 commencing students (ie. started First Year then). 

[Print View](#) | [Download as PDF](#)

[Administrative Information \(Fees, ATAR etc.\)](#)

Semesters	Pathways/Majors	Unit Blocks	Requirements	Reports															
Select plan for Major/Pathway <input type="text" value="Master of Information Technology"/> 																			
<b>Year 1 - Semester 1</b>																			
<table border="1"><thead><tr><th>SITS Diet Block/Type</th><th>CP</th><th>Unit of Study/Unit Block</th></tr></thead><tbody><tr><td>Core</td><td>6</td><td>INFO5990: Professional Practice in IT</td></tr><tr><td>Core</td><td>6</td><td>INFO5992: Understanding IT Innovations</td></tr><tr><td>Core</td><td>6</td><td>INFO6007: Project Management in IT</td></tr><tr><td>List</td><td>6</td><td>Select from Specialist Units Foundation Units  <b>Note:</b> The Specialist units chosen may contribute towards a designated Major. See the Streams/Majors section of these tables for details of each Major.</td></tr></tbody></table>					SITS Diet Block/Type	CP	Unit of Study/Unit Block	Core	6	INFO5990: Professional Practice in IT	Core	6	INFO5992: Understanding IT Innovations	Core	6	INFO6007: Project Management in IT	List	6	Select from Specialist Units Foundation Units  <b>Note:</b> The Specialist units chosen may contribute towards a designated Major. See the Streams/Majors section of these tables for details of each Major.
SITS Diet Block/Type	CP	Unit of Study/Unit Block																	
Core	6	INFO5990: Professional Practice in IT																	
Core	6	INFO5992: Understanding IT Innovations																	
Core	6	INFO6007: Project Management in IT																	
List	6	Select from Specialist Units Foundation Units  <b>Note:</b> The Specialist units chosen may contribute towards a designated Major. See the Streams/Majors section of these tables for details of each Major.																	
<p><b>Note:</b> Core units INFO5990, INFO5992 and INFO6007 can be taken in either Semester 1 or Semester 2.</p> <hr/>																			
<b>Year 1 - Semester 2</b>																			
<table border="1"><thead><tr><th>SITS Diet Block/Type</th><th>CP</th><th>Unit of Study/Unit Block</th></tr></thead><tbody><tr><td></td><td></td><td>Select from</td></tr></tbody></table>					SITS Diet Block/Type	CP	Unit of Study/Unit Block			Select from									
SITS Diet Block/Type	CP	Unit of Study/Unit Block																	
		Select from																	

# **Postgraduate Research Degrees**



THE UNIVERSITY OF  
**SYDNEY**



## **Master of Philosophy (MPhil)**

- 1-2 years full time
- Research that makes original contribution to the field
- Submission of a thesis
- Good entry point for PhD

## **Doctor of Philosophy (PhD)**

- 3-4 years full time
- Research that makes substantial and original contribution to the field
- Publish papers and attend conferences
- Complete extensive thesis

# Faculty of Engineering & IT Research Strengths

At the University of Sydney, we are **tripling** our investment in research by **2020** to change the way we think about the world and how we live and work in it.

We are one of the world's top research universities and a member of Australia's prestigious **Group of Eight** network and the **Association of Pacific Rim Universities**. The latter partners us with others that excel in research, including Stanford, UCLA, Shanghai Jiao Tong University and the University of Hong Kong.

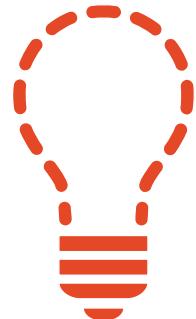
## World standard research

The Australian Government ranked all of our research at world standard or above in its latest Excellence in Research for Australia ratings.

## Our strategic research themes:

- Biomedical engineering and technologies
- Data science and artificial intelligence
- Food enginomics
- Internet of Things and telecommunications
- Robotics and intelligent systems





**#31 in the world**

Thomson Reuters Asia  
Pacific's Most Innovative  
Universities 2017



**TRIPLING  
our investment  
in research by  
2020**

**More than  
\$513million  
in research funding**



THE UNIVERSITY OF  
**SYDNEY**

# **Entry Requirements**



THE UNIVERSITY OF  
**SYDNEY**

# 2019 Entry Requirements – Undergraduate International

## Full table of international entry requirements

Engineering and Information Technologies	
● B Advanced Computing	90/33
▲ B Advanced Computing/B Commerce	95/36
▲ B Advanced Computing/B Science	90/33
▲ B Advanced Computing/B Science (Health)	90/33
▲ B Advanced Computing/B Science (Medical Science)	90/33
● B Engineering Honours (Dalyell Scholars)‡	98/40
● B Engineering Honours (Aeronautical)	85/31
● B Engineering Honours (Biomedical)	85/31
● B Engineering Honours (Chemical and Biomolecular)	85/31
● B Engineering Honours (Civil)	85/31
● B Engineering Honours (Electrical)	85/31
● B Engineering Honours (Flexible First Year)	85/31
● B Engineering Honours (Mechanical)	85/31

Course	ATAR/IB
● B Engineering Honours (Mechatronic)	85/31
● B Engineering Honours (Software)	85/31
● B Engineering Honours with space engineering major	97/39
▲ B Engineering Honours/B Arts	85/31
▲ B Engineering Honours/B Commerce	95/36
▲ B Engineering Honours (Civil)/B Design in Architecture	95/37
▲ B Engineering Honours/B Project Management	85/31
▲ B Engineering Honours/B Science	85/31
▲ B Engineering Honours/B Science (Health)	85/31
▲ B Engineering Honours/B Science (Medical Science)	85/31
● B Project Management	80/28

# 2019 Entry Requirements – Postgraduate International

University name- The University of Sydney				
Entry requirements for PG courses. This must be used as guideline only not confirmation of entry to the program				
NOOSR	Business / Arts / Architecture	Master of Professional Engineering	Engineering	Information Technology
Sec-I	65% or First Class equivalent	68.5%+	65% or First Class equivalent	65% or First Class equivalent
Sec-II	65% or First Class equivalent	68.5%+	65% or First Class equivalent	65% or First Class equivalent
<i>English Requirement(please also mention individual module requirement if any)</i>				
IELTS	Overall 7 Section min 6	Overall 7 Section min 6	Overall 6.5 Section min 6	Overall 6.5 Section min 6
TOEFL	96 Overall	96 Overall	85 Overall	85 Overall
PTE	Overall 68 Section min 54	Overall 68 Section min 54	Overall 61 Section min 54	Overall 61 Section min 54

# Scholarships



THE UNIVERSITY OF  
SYDNEY

# **Undergraduate Scholarships (international)**

## **Dr Abdul Kalam International Undergraduate Scholarship (Semester 1 or 2 start)**

- 50% tuition fees for maximum 1 year

## **Vice-Chancellor International Scholarships Scheme**

- range from \$5-\$40k in value off 1 year of fees
- awarded on academic merit



THE UNIVERSITY OF  
**SYDNEY**

# **Postgraduate Coursework Scholarships (international)**

## **Dr Abdul Kalam International Postgraduate Scholarship (Semester 1 or 2 start)**

- 50% tuition fees for maximum 1 year
- 75% distinction average minimum in undergraduate studies

## **School of Information Technologies Postgraduate Coursework Entry Scholarship**

- Master of IT, Master of IT Management, and MIT/MITM combined degree
- \$6,000 for 1 year

## **School of Information Technologies Master of Health Technology Innovation Entry Scholarship**

- \$6,000 for 1 year

# **Postgraduate Coursework Scholarships (international)**

## **School of Information Technologies Master of Data Science Entry Scholarship**

- Applicants must be a graduate of a quantitative degree program
- \$6,000 for 1 year

## **School of Information Technologies Postgraduate Coursework Diversity Scholarship**

- Applicants from Latin America, the Middle East, or Asia Pacific
- Master of IT, Master of IT Management, MIT/MITM combined degree, and Master of Data Science
- \$6,000 for 1 year

# **Postgraduate Research Scholarships (international)**

## **Australian Government Research Training Program (RTP) Scholarship (International)**

- Available to those applying for Masters or PhD degrees
- Open to all research disciplines
- Covers tuition fees and living allowance stipend for up to 3 years with a possibility of one semester's extension for PhD students
- Awarded based on academic merit and research potential

Note: it may take up to 4 months from submission of application to receiving advice on whether you have been successful. There is no separate scholarship application form, to be considered you must submit an application for admission to your research degree

### **25+ Faculty Scholarships across a range of disciplines:**

<http://sydney.edu.au/scholarships/research/faculty/engineering-it.shtml>

# **Messaging, Resources, and 2019 Updates**

# Our Messaging

- Taught by academics on cutting-edge of new technologies and research...  
***we teach what we discover***
- Highlight our graduate employability and median salary (2017 Gradstats)
  - 79.4% employed (better than national average 71.8%)
  - \$64,000 median salary (better than national average \$60k)
- More than double the national average of female enrolments (34%)
- Flexible First Year - still graduate in four years
- Unique offerings: humanitarian, space, internet of things, biomedical
- New B. Advanced Computing
  - Designed with industry to cope with rapidly changing sector
  - 4 years, 2 majors, choose 2<sup>nd</sup> from shared pool
- Investment in new buildings within Engineering Precinct

## **Resources and contacts**

**CUSP - Course & Unit Study Portal (for degree structures and electives)**

<https://cusp.sydney.edu.au/>

**YouTube Playlist of all Engineering, IT & Project Management videos:**

[https://www.youtube.com/watch?v=8e53\\_rNKvHg&list=PLXSDVg9HvDBjoG3DOKt0jH6H04e1GLoWW](https://www.youtube.com/watch?v=8e53_rNKvHg&list=PLXSDVg9HvDBjoG3DOKt0jH6H04e1GLoWW)

**Facebook page**

<https://www.facebook.com/Engineering.IT.Sydney.University/>

**Instagram page**

@ENG\_IT\_Sydney

**Twitter:**

@ENG\_IT\_Sydney

# **Student Accommodation**



THE UNIVERSITY OF  
**SYDNEY**

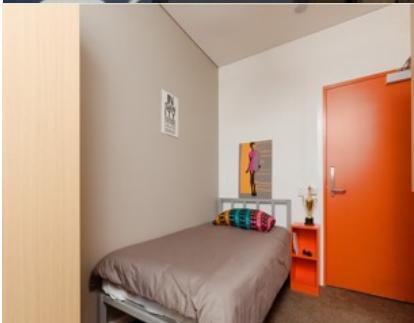
# Queen Mary Building

## Features & Facilities:

- Fully furnished bedrooms \$264.00 – 431.00pw
- Utilities included (Gas, Electricity, Water)
- 10GB internet data included per month
- 24/7 Campus Security access
- Gym and bike storage
- Sky lounge, roof-top garden, entertainment lounge
- Music room, study & meeting rooms

## Apply now:

[sydney.edu.au/accommodation](http://sydney.edu.au/accommodation)



# Abercrombie Student Housing

## Features & Facilities:

- Fully furnished studio apartments  
\$406 – 431.00pw
- Utilities included (Gas, Electricity, Water)
- 10GB internet data included per month
- 24/7 Campus Security access
- Bike storage
- Entertainment areas
- Study & meeting rooms

## Apply now:

[sydney.edu.au/accommodation](http://sydney.edu.au/accommodation)



Image: booking.com

# Off-Campus Living

Type	Room	Bill	Furniture	Other cost
Shared accommodations	Private or shared	Included	Furnished or unfurnished	Travel Food
Rental properties (suitable for family)	Private	Separate	Unfurnished	Travel Food
Full board (Homestay)	Private or shared	Included	Furnished	Travel Food is included Shared duties

# Accommodation Database

My Profile   Accommodation Listings

You are here: Accommodation Information Service / Online accommodation search

## ACCOMMODATION SEARCH

### Find an accommodation

Hint: To search effectively only enter values into fields that are important to you. Leave all

Type of Accommodation: Any

Campus/Region: Any

Suburb:

On-campus or Off-campus?: Any

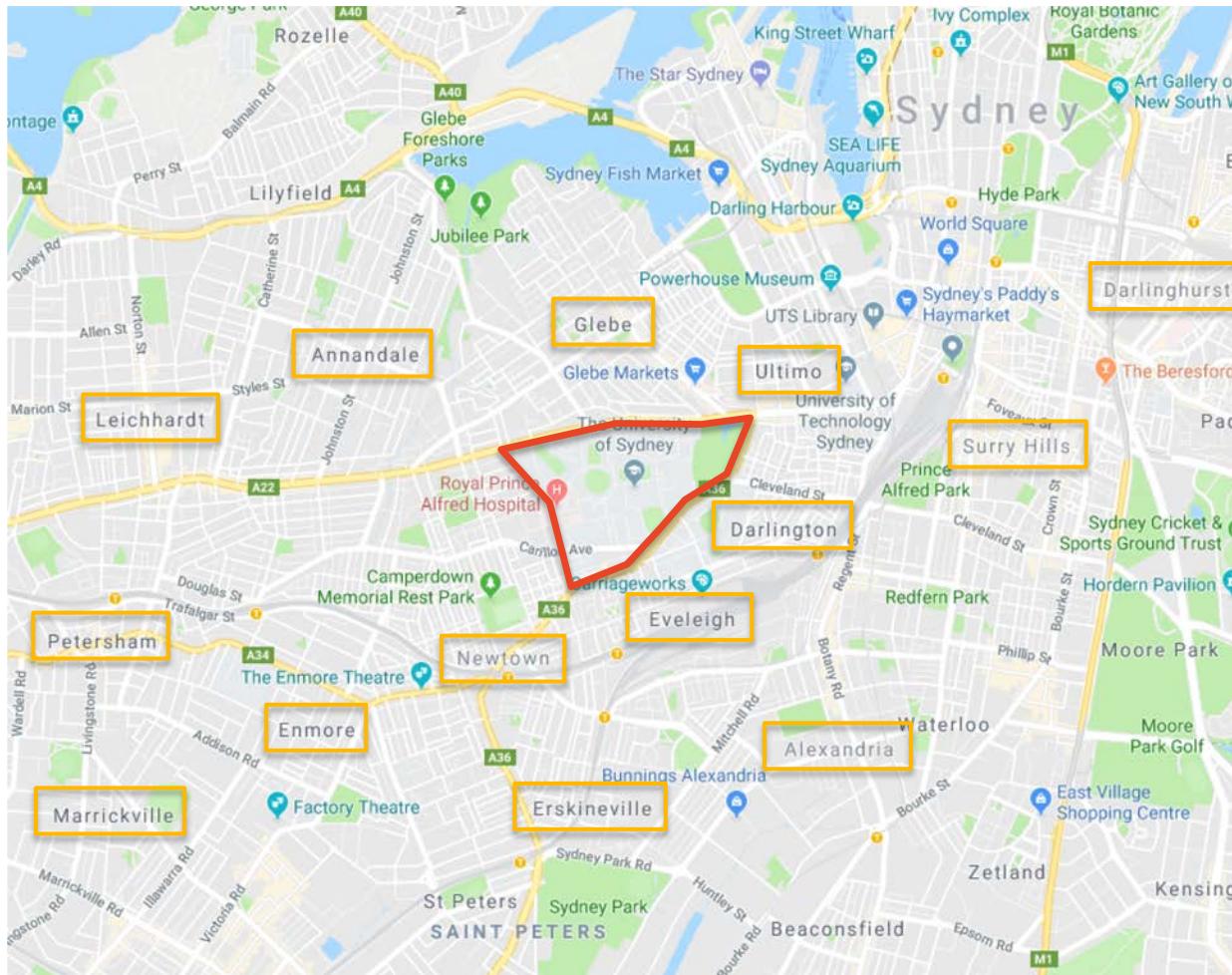
Maximum Rent Per Week:

Advanced Search

- Log in with your UniKey and password
- Lists hundreds of offers of currently available share accommodation opportunities.
- You must be an enrolled University of Sydney Student
- Also lists rental properties
- Updated daily by Student Accommodation Services
- <http://sydney.edu.au/campus-life/accommodation.html>

You can also look online and join a sharehouse using sites like [Flatmates.com.au](http://flatmates.com.au).

# Suburbs near Main Campus to Consider



- **Newtown**
- **Glebe**
- **Redfern**
- **Darlington**
- **Ultimo**
- **Surry Hills**
- **Darlinghurst**
- **Eveleigh**
- **Alexandria**
- **Erskineville**
- **Enmore**
- **Marrickville**
- **Petersham**
- **Leichardt**

**[sydney.edu.au/engineering](http://sydney.edu.au/engineering)**

**Follow-up Questions? Please contact:**

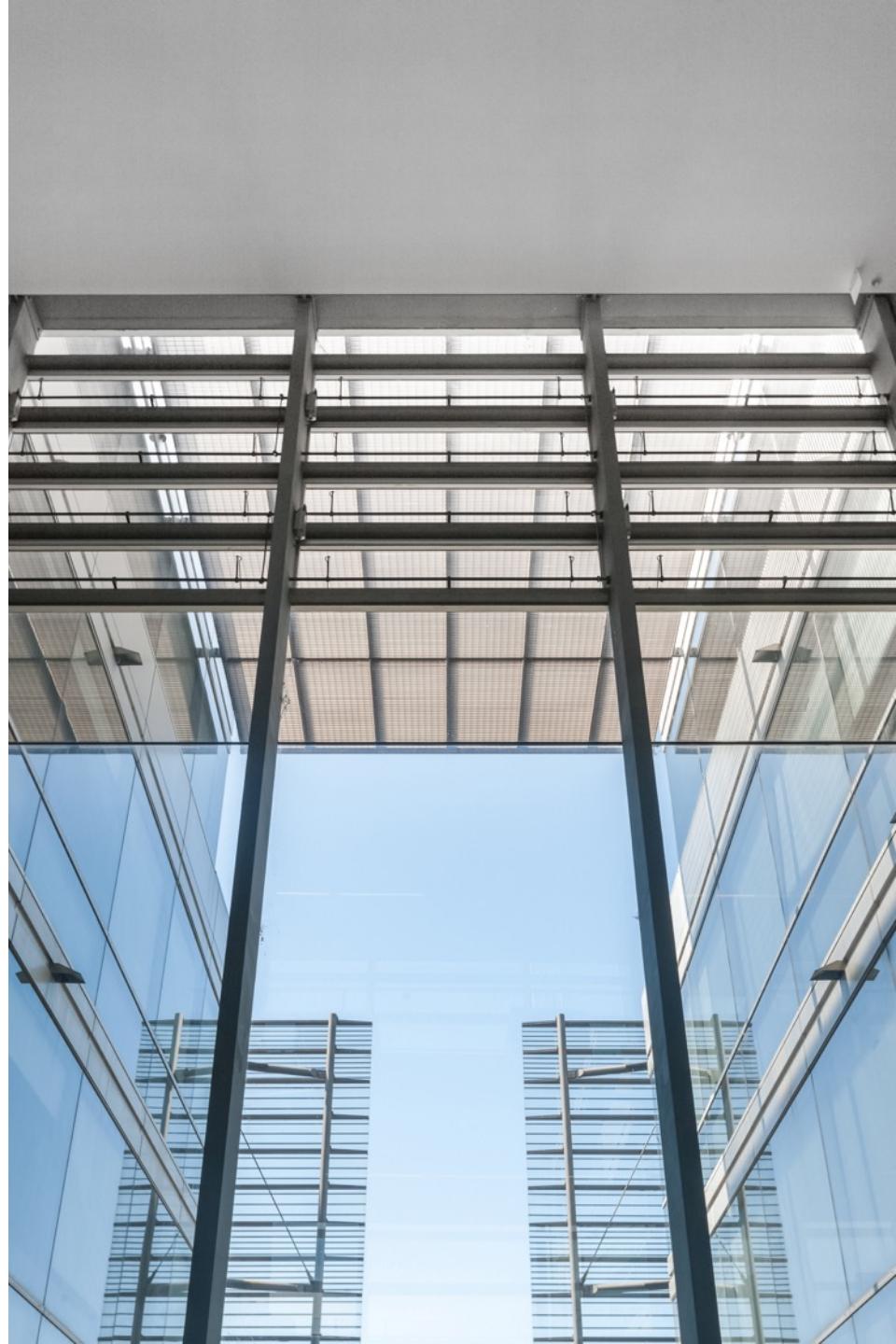
**Millie Norton-Night**

Student Recruitment Manager  
Faculty of Engineering & IT

**[millie.norton-knight@sydney.edu.au](mailto:millie.norton-knight@sydney.edu.au)**



THE UNIVERSITY OF  
**SYDNEY**



# **Tips to make a great UG Scholarship Application**



THE UNIVERSITY OF  
**SYDNEY**

# 10 Tips to Make a Great Scholarship Application

1. Focus on specific concrete examples, particularly where you have shown initiative.
2. Be concise. Remember you only have 150 words for each section where you need to provide a leadership statement.
3. Emphasise sustained contributions that go beyond things you had to do to satisfy school requirements.
4. Give a sense of what you are passionate about.
5. Be truthful, factual, accurate, and focused.

## **10 Tips to Make a Great Scholarship Application**

6. Provide relevant evidence! What supports what you have said in your statement.
7. Quotes from others generally do not assist your application.
8. Leadership does not only equal having been a school captain or prefect.
9. Don't forget to upload your CV and school reports.
10. Make sure you apply! You may think you may not get an ATAR of 98 now, but you may be surprised and be disappointed if you didn't end up applying for a scholarship.