I want to learn how to build hardware and program software to solve problems

STUDY

SOFTWARE ENGINEERING

WITH A DEGREE

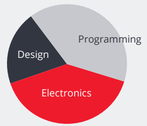
Bachelor of Engineering (Honours) (Professional) with a major in Software

Bachelor of Engineering (Honours) with a major in Software

Pathway to a degree:

Diploma of Engineering (UniLink)

TO LEARN ABOUT



TO BECOME A

- Embedded systems and mobile application engineer
- Quality assurance engineer
- Software architect or engineer
- Software designer or developer
- Systems engineer

THE SWINBURNE ADVANTAGE

At Swinburne, getting you job-ready is at the core of what we do. Our Work Integrated Learning options prepare you for the day-to-day requirements of work, helping you become a more competitive graduate. You'll build invaluable skills, career networks and, most importantly, the confidence of knowing you have what it takes to land a job in your field. This is the Swinburne Advantage.

Visit **swinburne.edu.au/workintegratedlearning**

Professional degrees

Professional degrees are available to students who have completed an Australian Year 12 program. These courses extend the standard degrees to include a professional placement co-major comprising a 12-month work placement. The professional placement co-major is credit-bearing and will strengthen your employability. You'll benefit from Swinburne's unique industry partnerships and be paid during your placement. Look for degrees with (Professional) in the title.

Double degrees

Double degrees are a great way to broaden your study experience and are highly respected by employers. They combine two areas of study and on completion you'll be awarded two degrees.
A double degree is generally only one year longer than a single degree.

Consider combining your Engineering degree with a degree in another study area by studying:

- Bachelor of Engineering (Honours)/Bachelor of Business
- Bachelor of Engineering (Honours)/Bachelor of Computer Science
- Bachelor of Engineering (Honours)/Bachelor of Innovation and Design
- Bachelor of Engineering (Honours)/Bachelor of Science
- Bachelor of Laws/Bachelor of Engineering (Honours)

Pathways to a degree

UNILINK DIPLOMAS

UniLink diplomas are equivalent to eight units of study (typically one year of full-time study) and can provide a pathway to the second year of a related bachelor degree.

These courses are an option for students who miss direct entry to a degree or who would benefit from a more supportive style of learning.

VOCATIONAL EDUCATION

Diplomas and certificates are vocational qualifications that provide practical teaching and skills for work. A vocational qualification could prepare you for your first job, help you retain or take the first step in a career change.

Successful completion of a vocational qualification may also allow you to progress to another qualification with advanced standing.

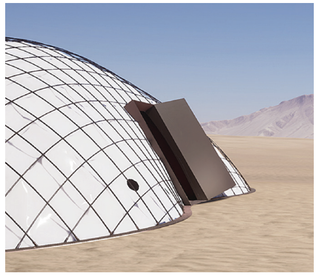
Scholarships

The Vice-Chancellor's Excellence Scholarship is awarded to students in recognition of academic excellence. Recipients will receive $5000 per annum for the normal duration of their chosen degree, plus a one-off payment of $2000 towards an international study experience. They will also have the opportunity to join our High Achievers Program.

To learn more about the program visit **swinburne.edu.au/highachievers**

Swinburne also offers scholarships to students from indigenous backgrounds, students suffering from financial hardship and students who have relocated from regional areas to study.

For a full list of scholarships, including value and eligibility criteria, visit **swinburne.edu.au/scholarships**



Get some structure in your life

Awe-inspiring, soaring, majestic. Sure, they're all apt descriptions for a landmark building. But have you ever thought about the complex structural system that's keeping that landmark in place – and will continue to do so for generations to come?

The perfect balance of imagination and innovation, architectural engineering at Swinburne immerses you in practical projects and foundational theory. And when you graduate, you're set for a career as an innovator of spaces that inform and progress the way we all live.

Formula SAE

Want to go to uni and be in a racing team? Of course you do! Every year, Team Swinburne Formula SAE offers engineering and business students a major project designing, building, marketing and racing a small, fully-electric, open-wheel race car. The amazing thing about being involved in this project is that you get experience collaborating with students who are studying other degrees. It also develops essential skills such as managing timelines and budgets, project management and liaising with industry sponsors and the community.

Engineering students love the balance of design, engineering, maths and science classes the Formula SAE project offers. It's just another one of the incredible ways Swinburne is leading the field and helping create a new generation of industry-ready mechanical engineers.

Why study engineering with us?

Engineering leads to great things. Whether it's biomedical, civil, electrical, mechanical or software engineering, Swinburne delivers all the theoretical and practical skills you'll need to thrive in your career. As for Swinburne itself, see why we're such a great choice:

#133 FOR CIVIL ENGINEERING
Academic Ranking of World Universities, 2018

A$100 MILLION ADVANCED MANUFACTURING & DESIGN CENTRE

#65 IN THE WORLD UNDER 50 YEARS OLD
Times Higher Education Young University Rankings, 2018

7x IN A ROW WE'RE LOCATED IN THE WORLD'S MOST LIVEABLE CITY
The Economist Intelligence Unit's Global Liveability Ranking, 2017

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SWINBURNE UNIVERSITY OF TECHNOLOGY

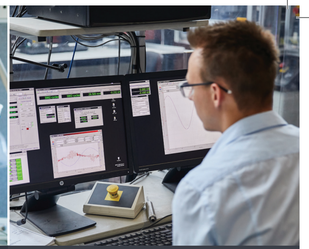
ENGINEERING STUDY GUIDE

Course options and career opportunities

swinburne.edu.au/engineering

INNOVATION FOR A NEW GENERATION

Are you a natural problem solver? Do you love challenging the status quo? Always asking 'how' it can be done better? Say 'hello' to engineering at Swinburne. Civil, mechanical, biomedical, electrical and software engineering are all about finding solutions to life's big problems and improving the way we live.



I want to learn about designing, building and maintaining infrastructure

STUDY
CIVIL ENGINEERING

WITH A DEGREE

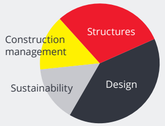
Bachelor of Engineering (Honours) (Professional)
with a major in Civil

Bachelor of Engineering (Honours)
with a major in Civil

Pathway to a degree:

Diploma of Engineering (UniLink)

TO LEARN ABOUT



TO BECOME A

- Civil engineer
- Geotechnical engineer
- Water environmental engineer
- Structural engineer
- Transport planner

OR AN ASSOCIATE DEGREE

Associate Degree of Engineering

TO BECOME

- Engineering associate

OR A DIPLOMA

Advanced Diploma of Engineering Technology specialising in Civil

TO BECOME

- Designer or planner
- Construction supervisor
- Technical officer

I want to learn about designing and managing the construction of buildings

STUDY
CONSTRUCTION ENGINEERING

WITH A DEGREE

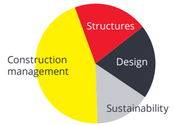
Bachelor of Engineering (Honours) (Professional) with a major in Construction

Bachelor of Engineering (Honours)
with a major in Construction

Pathway to a degree:

Diploma of Engineering (UniLink)

TO LEARN ABOUT



TO BECOME A

- Asset management engineer
- Construction engineer or manager
- Project engineer or manager

OR A DIPLOMA OR CERTIFICATE

Advanced Diploma of Building Design (Architectural)

Diploma of Building and Construction (Building)

Certificate IV in Building and Construction (Building)

TO BECOME

- Builder
- Building designer
- Estimator
- Draftsperson
- Supervisor

I want to learn how to design buildings in which people want to live and work

STUDY
ARCHITECTURAL ENGINEERING

WITH A DEGREE

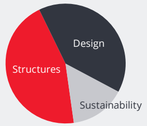
Bachelor of Engineering (Honours) (Professional) with a major in Architectural

Bachelor of Engineering (Honours)
with a major in Architectural

Pathway to a degree:

Diploma of Engineering (UniLink)

TO LEARN ABOUT



TO BECOME A

- Design engineer
- Structural system engineer
- Architectural engineer
- Project engineer

I want to learn how things work and how to make them better

STUDY
MECHANICAL ENGINEERING

WITH A DEGREE

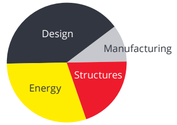
Bachelor of Engineering (Honours) (Professional) with a major in Mechanical

Bachelor of Engineering (Honours)
with a major in Mechanical

Pathway to a degree:

Diploma of Engineering (UniLink)

TO LEARN ABOUT



TO BECOME A

- Design engineer
- Mechanical engineer
- Production engineer
- Project engineer or manager

OR AN ASSOCIATE DEGREE

Associate Degree of Applied Technologies

Associate Degree of Engineering

TO BECOME

- Engineering associate

OR A DIPLOMA

Advanced Diploma of Engineering Technology specialising in Mechanical

TO BECOME

- Drafting technician
- Production supervisor or planner or controller
- Sales technical officer
- Tool designer
- Certified welder
- Welding supervisor
- Technical officer

I want to learn how to improve everyday life through automation

STUDY
ROBOTICS AND MECHATRONICS ENGINEERING

WITH A DEGREE

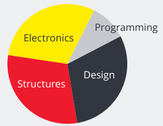
Bachelor of Engineering (Honours) (Professional) with a major in Robotics and Mechatronics

Bachelor of Engineering (Honours)
with a major in Robotics and Mechatronics

Pathway to a degree:

Diploma of Engineering (UniLink)

TO LEARN ABOUT



TO BECOME A

- Design engineer
- Project planner or manager
- Research and development engineer
- Robotics and mechatronics engineer

OR AN ASSOCIATE DEGREE

Associate Degree of Applied Technologies

TO BECOME

- Engineering associate

OR A DIPLOMA

Advanced Diploma of Engineering Technology specialising in Robotics and Mechatronics

TO BECOME

- Production supervisor or planner or controller
- Technical officer

I want to learn how to design innovative products that can be manufactured at scale

STUDY
PRODUCT DESIGN ENGINEERING

WITH A DEGREE

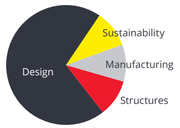
Bachelor of Engineering (Honours) (Professional) with a major in Product Design

Bachelor of Engineering (Honours)
with a major in Product Design

Pathway to a degree:

Diploma of Engineering (UniLink)

TO LEARN ABOUT



TO BECOME A

- Design consultant
- Entrepreneur
- Industrial designer
- Product design engineer

I want to learn how to create devices to improve people's health

STUDY
BIOMEDICAL ENGINEERING

WITH A DEGREE

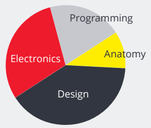
Bachelor of Engineering (Honours) (Professional) with a major in Biomedical

Bachelor of Engineering (Honours)
with a major in Biomedical

Pathway to a degree:

Diploma of Engineering (UniLink)

TO LEARN ABOUT



TO BECOME A

- Biomedical engineer
- Clinical engineer
- Medical device designer
- Medical electronics engineer
- Medical imaging technician

I want to learn about circuits and power generation

STUDY
ELECTRICAL AND ELECTRONIC ENGINEERING

WITH A DEGREE

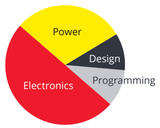
Bachelor of Engineering (Honours) (Professional) with a major in Electrical and Electronic

Bachelor of Engineering (Honours)
with a major in Electrical and Electronic

Pathway to a degree:

Diploma of Engineering (UniLink)

TO LEARN ABOUT



TO BECOME A

- Communications engineer
- Design engineer
- Electrical engineer
- Power engineer
- Product designer
- Project planner or manager
- Research and development engineer

OR AN ASSOCIATE DEGREE

Associate Degree of Engineering

TO BECOME

- Engineering associate

OR A DIPLOMA OR CERTIFICATE

Advanced Diploma of Engineering Technology – Electrical

Advanced Diploma of Electronics and Communications Engineering

Certificate III in Electronics and Communications

TO BECOME

- Planning design supervisor
- Electrical technician
- Systems technician
- Project manager

I want to learn how to make information easier to transfer and use

STUDY
TELECOMMUNICATIONS ENGINEERING

WITH A DEGREE

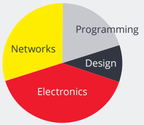
Bachelor of Engineering (Honours) (Professional) with a major in Telecommunications

Bachelor of Engineering (Honours)
with a major in Telecommunications

Pathway to a degree:

Diploma of Engineering (UniLink)

TO LEARN ABOUT



TO BECOME A

- Network design and security analyst
- Project manager
- Telecommunications and network product manager
- Telecommunications design engineer
- Telecommunications systems manager