

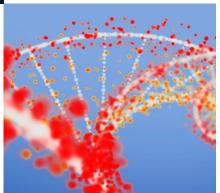




# Science study guide

career opportunities

Course options and



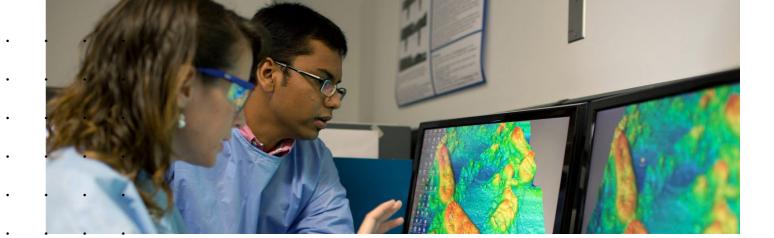
swinburne.edu.au/science

# Where will science take you?

When you study science at Swinburne, you embark on a journey of discovery.

You'll experience practical learning and conduct research in world-class labs. You'll study in a university setting that has strong connections with industry and regularly collaborates with esteemed researchers.

Science equips you with excellent problem-solving skills so you can help make better sense of the world. And it takes you in many exciting career directions.



### I want to learn

How to use mathematics to model our world

# Study

**Physics** 

To learn about

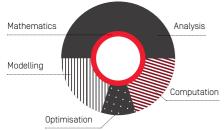
Mathematics

Physics

#### Mathematics

Study

# To learn about



### I want to learn

About matter and how the universe works

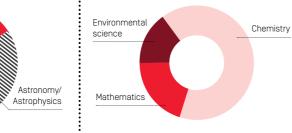
### I want to learn

About how molecules react and can be manipulated

### Study

Chemistry

#### To learn about



# With a degree

Bachelor of Science (Professional) with a major in applied mathematics

# **Bachelor of Science**

with a major in applied mathematics

Pathway to a degree:

To become

Actuary

Diploma of Science (UniLink)

· Mathematical researcher

· Biological and climate modeller

· Quantitative analyst

Financial analyst

### With a degree

## **Bachelor of Science (Professional)**

with a major in physics

## **Bachelor of Science**

with a major in physics

Pathway to a degree:

Medical physicist

Astrophysicist

Data analyst

Diploma of Science (UniLink)

Research and development physicist

Financial modeller and forecaster

· Meteorologist and climate modeller

# With a degree

# **Bachelor of Science (Professional)** with a major in chemistry

# **Bachelor of Science**

with a major in chemistry

Pathway to a degree:

# Diploma of Science (UniLink)

# To become

- · Chemical researcher
- Analytical forensic scientist
- Agricultural or environmental scientist
- Diagnostic laboratory scientist
- Food or beverage production technician
- · Pharmaceutical scientist

#### Or a diploma or certificate

**Diploma of Laboratory Technology** Certificate IV in Laboratory Technology Certificate IV in Science

## To become

- · Laboratory technician
- · Technical officer

### I want to learn

About how molecules make your body work

### I want to learn

About cells and how to change them

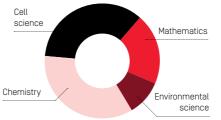
### I want to learn

About water and agriculture, and how to manage them

## Study

# Biochemistry

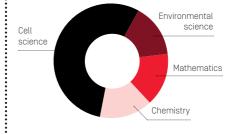
#### To learn about



### Study

# Biotechnology

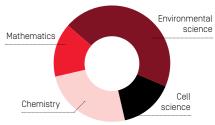
#### To learn about



#### Study

# Environmental science

#### To learn about



# With a degree

# Bachelor of Science (Professional)

# **Bachelor of Science**

# with a major in biochemistry

with a major in biochemistry

Pathway to a degree:

Diploma of Science (UniLink)

# **Bachelor of Science (Professional)**

with a major in biotechnology

# **Bachelor of Science**

With a degree

With a major in biotechnology

Pathway to a degree:

Diploma of Science (UniLink)

# With a degree

# Bachelor of Science (Professional)

with a major in environmental science

# Bachelor of Science

with a major in environmental science

Pathway to a degree:

Diploma of Science (UniLink)

· Biochemical researcher

Or a diploma or certificate

Certificate IV in Science

Diploma of Laboratory Technology

Certificate IV in Laboratory Technology

- Clinical biochemist
- · Agricultural or environmental scientist
- Forensic scientist

To become

- Food or beverage production technician
- · Pathologist

To become

· Technical officer

- Biotechnology researcher
- Clinical biochemist
- Agricultural or environmental scientist Diagnostic laboratory scientist
- Food or beverage production technician
- Pharmaceutical scientist

# Or a diploma or certificate

Diploma of Laboratory Technology Certificate IV in Laboratory Technology Certificate IV in Science

## To become

- Technical officer

# To become

- Environmental scientist or consultant
- Sustainability analyst
- Water quality expert
- · Plant and animal breeder

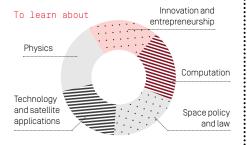
- · Laboratory technician · Laboratory technician

#### I want to learn

About space science and technology and how space operations are managed

#### Study

# Space technology



## With a degree

#### **Bachelor of Science (Professional)**

with a co-major in space technology

# **Bachelor of Science**

with a co-major in space technology

#### To become

- · Mission designer
- · Space engineer
- · Space research scientist
- Satellite technician
- Space administrator

The information provided here was correct at the time of printing (July 2021). For the most up-to-date information, please visit swinburne.edu.au

# Your next gen\_now upgrades

# Guaranteed real industry experience

At Swinburne, your education is more than reading; with our Work Integrated Learning program, it's doing. Start building your résumé with placements, internships and industry-linked projects while you study. Real industry experience is guaranteed in all our bachelor degrees that commence in 2021 and beyond.

Visit swinburne.edu.au/workintegratedlearning

# **Professional Degrees**

More than a standard bachelor degree, a Professional Degree is a premium university experience you'll graduate from having completed a 12-month full-time work placement. Not only will you apply your knowledge in the workplace, you'll be paid award rates and receive academic credit.

# 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 IT degree with a degree in another study area by studying:

- · Bachelor of Arts/Bachelor of Science
- · Bachelor of Engineering (Honours)/Bachelor of Science
- Bachelor of Health Science/Bachelor of Science
- Bachelor of Laws/Bachelor of Science

# 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.

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**