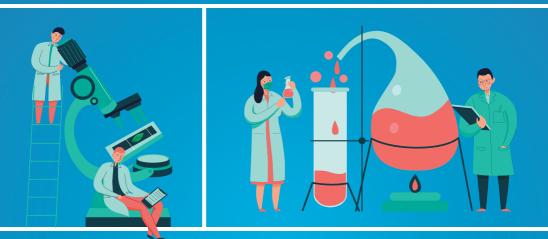
# THE SCIENCE EXPERIENCE





A nationwide STEM outreach program for year 9 and 10 students in 2023

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### **New South Wales**

#### Macquarie University

Meet passionate scientists at our career speed dating, get hands-on with science, technology, engineering and mathematics at our expo, participate in a chemistry magic show, learn more about our solar system and the world beyond earth, explore the world of Indigenous science and sustainable use of natural resources, and much much more!

#### University of Sydney, Sydney

Calling all detectives! We need YOU to use forensic science and techniques to solve an unusual problem that starts out seemingly simple but will become a whole lot more ...complicated. You and your fellow detectives will need to use our university wet and dry labs, meet our STEM experts and learn new forensic skills in microscopy, cyber security, chemical sample identification and electrical circuitry for starters. Together, we will get to the bottom of a weird situation and determine who is the guilty party and how they were committing their crimes.

#### University of Technology Sydney, Sydney

#### 26–28 September 2023

Various hands-on and fun science, maths, and technology activities. Explore some of the hottest topics in forensic science, physics, microbiology, and mathematical modelling.

#### University of New England

The University of New England (UNE) welcomes students going into Years 10 & 11 in 2024 with a passion and interest in science to join us

for three fun-filled days of hands-on science activities on our Armidale campus, in the heart of the NSW New England. You immerse yourself in a world of science, see our scientific facilities, learn from leading scientists and participate in workshops in diverse areas such as

#### 16-18 January 2024

#### 4-6 October 2023

18–20 January 2023



chemistry, neuroscience, biomedical science, coding, meat & animal science, soil science, agriculture and more. We will also host a career panel and discussion to help you clarify your thoughts on pursuing science at a University level and into the future. Students will be able to stay in one of UNE's colleges on campus and take in the full university experience. Accommodation and meals will be an additional cost.

### **Northern Territory**

#### Charles Darwin University, Casuarina Campus

#### 6–8 June 2023

Activities in Exercises Sports Science, IT, NT Medical Program, Environment Science, Virtual 360 Bush Tour, Engineering, Primary Industries, Career Investigations, CPA LNG Plant Seminar and Excursion.

### Queensland

#### Griffith University, Gold Coast

#### 4–6 July 2023

Designed to provide students who have an interest in science with an opportunity to participate in a wide range of fascinating science and technology activities under the guidance of scientists, engineers and health professionals who love their work.

#### Combined Brisbane program UQ, QUT and Griffith Nathan 16–18 January 2024

Treble your science experience by attending three of the largest universities in Queensland during the three days.Visit QUT, UQ and Griffith-Nathan.You will tour scientific facilities, hear from some of Queensland's leading scientists, participate in hands –on workshops, explore science based careers. Areas covered include forensic and biological science, chemistry, physics, mathematics, astronomy, environmental sciences and engineering.

#### CQUniversity, Townsville

CQUniversity invites you to come and experience STEM in the real world and start thinking about your career in science, technology, engineering and maths. Students will spend an exciting 3 days working in teams to solve a real-world problem learning from experts in the field and ways to approach solving problems. The program will include hands on activities and talks with CQUniversity students and staff.

#### **CQUniversity**, Cairns

CQUniversity invites you to come and experience STEM in the real world and start thinking about your career in science, technology, engineering and maths. Students will spend an exciting 3 days working in teams to solve a real-world problem learning from experts in the field and ways to approach solving problems. The program will include hands on activities and talks with CQUniversity students and staff.

#### South Australia

#### University of South Australia, Mawson Lakes 13 July 2023 (one day program)

At the University of South Australia, Mawson Lakes Campus, students in year 9 and/or 10 will spend the day learning about real world applications of STEM. They will be creating their own electronics kit, solving mysteries using gel electrophoresis and investigate material properties while designing prototypes within set parameters. The underlying emphasis is to encourage STEM skills and careers, and to build peer networks with like-minded STEM students.

## University of South Australia, Mawson Lakes (three day program) 21–23 November 2023

The University of South Australia will provide an immersive STEM inquiry based learning program to find a possible solution to some real

#### 6–8 June 2023

#### **19–21 September 2023**

world issues. Students in year 9 and/or 10 will work as scientists developing their own investigation into passive solar housing and design and construct water filtrations systems through immersive inquiry based learning activities. They will also learn how technology such as electronics and GPS systems can be applied to improve living conditions

> in developing countries. At the conclusion of the program, students will communicate their learning in formal presentations. The underlying emphasis is to encourage STEM skills and careers, and to build peer networks with like-minded STEM students.

#### University of South Australia, Mount Gambier I day program 8 August 2023 or 9 August 2023 or 10 August 2023

At the University of South Australia, Mt Gambier Campus, students in year 9 and/or 10 will spend the day learning about real world applications of STEM. They will be creating their own electronics kit, solving mysteries using gel electrophoresis and investigate material properties while designing prototypes within set parameters. The underlying emphasis is to encourage STEM skills and careers, and to build peer networks with like-minded STEM students.

### Tasmania

#### Hobart Burnie Launceston

#### Thursday 23–Friday 24 November Monday 27–Tuesday 28 November Thursday 30 November–Friday I December

The University of Tasmania welcomes you to two days of engaging, hands-on science activities. Be challenged to extend yourself and expand your ideas of how science and technology can make a difference in every-day life! Carry out hands-on experiments in university laboratories, work with experts from different areas, take part in problem-solving challenges, and experience university life on campus as part of this year's Science Experience program.

### Victoria

## Marine and Freshwater Discovery Centre,18 April 2023Queenscliff – One day only!!or 26 September 2023

Immerse yourself in marine and freshwater science in one day.

- Sharks, plankton, crabs, sea horses and seaweed.
- Freshwater beasts both big (Murray Cod) and small (mini beasts).
- Law enforcement in the aquatic world.

A combination of presentations by scientists, hands on practicals and watery activities will lead to a fulfilling program that will allow you to explore the many possibilities for future studies and careers in aquatic science and beyond.

#### **RMIT University, Melbourne**

#### Budding scientists entering Year 9 or 10 in 2023 will work together to problem solve real world challenges in laboratories and state-of-the-art facilities in disciplines such as space science, nanotechnology, biomedical science, food science, allied health sciences and engineering. Interactive activities, excursions and guest lectures will provide attending students with an invaluable opportunity to learn from academic experts, and friendly RMIT student mentors will be their guides throughout the program as they understand and experience the STEM landscape of 2023 and

#### 4–6 July 2023

Students will get to experience university life with lectures, laboratory experiments and hands-on experiences run by our top researchers and scientists, all whilst exploring our world-class facilities.

studying science in VCE.

#### University of Melbourne, Parkville 22–24 January 2024

physical evidence from the crime scene, such as fingerprints and crime scene virtual reality (VR) photos. Biometrics-This entails electrophoresis, blood typing, polygraph, fingerprinting and more. Students will use lab techniques such as UV Spectrophotometry, chromatography, weapons analysis and more to help solve the crime. They will also take part in two KIOSC VCE Master-class in preparation for

Forensic Science: In order to solve a homicide case, students investigate

With a focus on real-world applications, you'll get to:

Swinburne University of Technology, Hawthorn

- meet leaders from the scientific community
- work with innovative technologies in our specialised labs and facilities
- watch out-of-this-world science demonstrations
- participate in hands-on workshops that will challenge and excite

the evidence that could lead to a conclusion. Students will examine

### KIOSC, Wantirna (2 days)

exciting environment.

10–11 August 2023

### 28–30 June 2023

Come to the Swinburne University Hawthorn campus to learn and experience STEM through interactive, hands-on workshops and demonstrations. Explore the universe in virtual reality, conduct experiments in our chemistry labs and explore the applications of the world-class Australian Synchrotron! Our three-day program encourages curiosity and explores the never-ending possibilities of science.

beyond. The RMIT University Science Experience gives students the opportunity to explore career paths in STEM, make like-minded new friends, and see what University is all about in a supportive, safe and

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- Exploring the secrets of the universe with the physics show
- Extracting DNA from strawberries and examining the science of inheritance
- Studying ancient fossils and minerals in an introduction to Earth Sciences
- Discovering how and why our weather systems form
- Testing what chemicals go bang... and why?
- Taste testing indigenous foods & exploring ways they can solve the world's food crisis
- Exploring how mathematics plays key roles in our lives but hides right under our noses.
- Touring the Harry Brooks Allen Museum of Anatomy and Pathology
- Discovering the intersection of art and science at the Science Gallery

#### University of Melbourne, Dookie

#### 29 November-I December 2023

Dookie campus is a working farm- a centre of agricultural research and teaching. You will join scientists and agricultural student mentors in hands on activities in the laboratory and paddock investigating real world issues. Activities include biodiversity, sheep science, plant science, protein content of milk, cheese making and robotic dairy.

### Western Australia

#### **Murdoch University**

Engage in a wide range of fascinating science activities under the guidance of

scientists who love their work. Students will be able to broaden their experience across fields such as agricultural science, marine biology, ecology, engineering, information technology, forensics and biomedical science.

## 12–14 December 2023



## Student Application Form

Name:		
Student's e	mail:	
Postal Add	ress:	
		Suburb/Postcode:
Parent's mo	obile:	
Student's n	nobile:	
Date of Bir	-th: //	Sex M / F
School:		Phone:
Suburb/Pos	stcode:	
Year Level	in 2023: Name of Sci	ence Teacher:
Choice of	program:	
First:		Second:
program) i	ncluded with this application e/Money order made payable	50 inc GST (2 day program) / \$210 inc GST (3 day to The Science Experience
Card No:		Mastercard
	e / Amount: \$_	
Cardholde	r's Signature:	
(to be com	<b>Sponsorship if applic</b> npleted by Rotary representa	tive)
	····	
		to the amount of: \$
	ntribution (if applicable): \$	
Contact ac	Idress:	
		Suburb
Post to:	PO Box 158, Monbulk, V	
Email to:	<u> </u>	
Fo		enceexperience.com.au or (03) 9756 7534
0		ilable (minus \$35 administration fee) up until ne particular program commences.

#### **Registration Fees**

- I day program \$72 (includes GST)
- 2 day program \$150 (includes GST)
- 3 day program \$210 (includes GST)
- Please note these fees do not cover any transport, meals or accommodation costs
- Refunds are available (minus \$35 administration fee) until 4 weeks before a particular program commences

#### How do I enrol?

Send your completed application form to: The Science Experience PO Box 158, Monbulk, Vic 3793 or Email your completed application form to admin@scienceexperience.com.au

#### or enrol online at www.scienceexperience.com.au

Applications are accepted immediately online at any time if a place is available or send your application form to a local Rotary Club if you're seeking Rotary financial support. Your local club may consider full or part sponsorship of the \$72/\$150/\$210 fee. Please follow through with the club to check they have submitted your application.

#### Accommodation

Most programs are non-residential, accommodation at an extra cost is available at the following programs:

- University of New England, Armidale
- Melbourne University, Dookie campus



#### Who We Represent



#### science schools foundation

The Science Experience is a Nationwide STEM outreach program established, managed and conducted by the The Science Schools Foundation Incorporated an independent non-profit association of educationalists, Rotarians and industrialists.

#### Our supporters

Rotary Rotary Districts of Australia

#### **Rotary Clubs**

- sponsor many students to attend,
- promotes the program to schools,
- participates actively in organising programs and provides social activities.



#### Young Scientist of Australia (YSA)

several hundred YSA members voluntarily assist the universities and tertiary institutions in conducting the program



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Australian Science Teacher Association (ASTA) promotes the program to schools and teacher members

#### Universities and Tertiary Institutions

- organize and conduct the programs on their campuses
- provide a director and presenters
- provide laboratories and other resources