

Victorian Indigenous Engineering Winter School

5–12 JULY 2025

REPORT

We acknowledge the Traditional Owners of the land in which the Victorian Indigenous Engineering Winter School took place, the land of the Wurundjeri, and pay respect to their Elders and families.



Victorian Indigenous Engineering Winter School (VIEWS)

VIEWS, an initiative arising from the 2015 National Indigenous Engineering Summit, is a collaborative venture between the University of Melbourne, RMIT University, Swinburne University and Monash University. Its aim is to provide Year 10, 11 and 12 Indigenous students with an immersive experience of engineering and the offerings of the four universities.



Professor Misty Jenkins

VIEWS welcomes Professor Misty Jenkins AO as patron for VIEWS. Misty is a woman of Gunditjmara descent who is known for her scientific research into lymphocytes and engineering them as a therapy in the fight against cancer. She is currently a laboratory head at the Walter and Eliza Hall Institute for Medical Research, where she leads a team researching brain cancer and immunotherapy. Misty was the first Indigenous Australian to attend the Universities of Oxford and Cambridge as a postdoctoral research fellow. She is recognised for her advocacy for gender equity, Aboriginal Health and Education. She was proudly born and raised in Ballarat in Victoria.

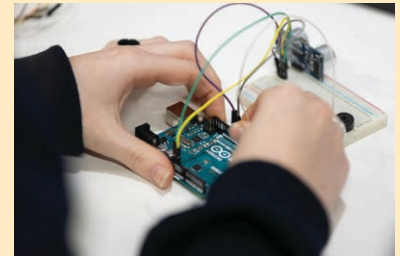
Residing on campus at University College affiliated with the University of Melbourne.



An opportunity to explore different **university campuses**, engineering options and study pathways.



Real-world application of engineering through university workshops.



Hands-on workshops to develop the problem solving and design skills used every day by engineers.



Connection with Indigenous Engagement Units and meeting Indigenous elders.



Speaking with Indigenous university students and Indigenous engineers.



Supporters

The VIEWS Steering Committee would like to express its gratitude to the programs sponsors. Without the continued and generous support of our Industry sponsors, and the sponsorship and collaborative engagement of the four universities, the life-changing VIEWS program would have not been possible.

Sponsors

Principal sponsor:



Philanthropic sponsor:



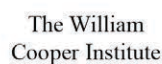
Gold sponsors:



Bronze sponsor:



University Partnerships



VIEWS will keep sponsors updated of the ongoing success of VIEWS participants, who will continue to be supported through the VIEWS alumni network.

Supporters

Patron: Professor Misty Jenkins AO

Steering Committee:

Chair: Ms Michelle Bellino
University of Melbourne: Ms Jessica Sturk
Ms Melanie Schmidt
Associate Dean, Indigenous Joe West
Ms Olivia Metcalfe, Murrup Barak

Monash University: Associate Professor Shannon Kilmartin-Lynch

RMIT University: Mr Dane Lamb
Ms Talia Elliott, Ngarara Willim Centre

Swinburne University: Dr Scott Rayburg
Mr Ryan Chand, Moondani Toombadool Centre

Sponsors:

Principal Sponsor: Worley
Gold Sponsors: Google, Siemens
Bronze Sponsors: SYPAQ
Philanthropic Supporter: Boeing, Motorola Foundation

Indigenous Mentors:

Brittney Andrews, Max Atwell, Katie Bugden, Callahan Elliott, Tilly Doran, Ieisha Lyons, Araminta Kitcher, Guruji Wagner

IEWS has engaged with Indigenous-owned and majority Indigenous-owned businesses and service providers in establishing the cultural safety in the program. This includes the formal Welcome to Country, program content, resources, catering and program materials.



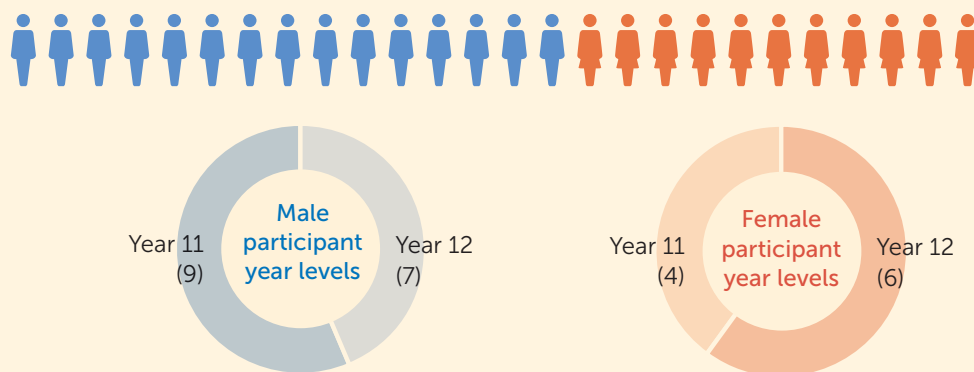
Participants

The 26 participants attended from across Australia, as shown in Figure 1.
Students (15 male and 11 female) attended from Year 11 and 12, as shown in Figure 2.

Figure 1: Australia-wide participation in VIEWS



Figure 2: Participant numbers and year levels



Participants' expectations

Describe in one word how are you feeling about attending VIEWS?



What are you hoping to achieve out of attending the VIEWS program?

Learn new skills, meet new people, figure out what I want to do after school, see if Melbourne is a good university for me

To know more about what pathways I can take for my future in engineering

Explore more unis and different pathways for after school

Learn about engineering courses

Explore engineering pathways and figure out which university best fits my intended pathway

Understanding the different types of engineering that can be done at each uni

Learn more about engineering, meet new people, have fun and explore Melbourne too

Meet like-minded people, explore STEM pathways, and gain a better understanding of university life

Learn more about different engineering careers and what they are like

Understand uni life in Melbourne

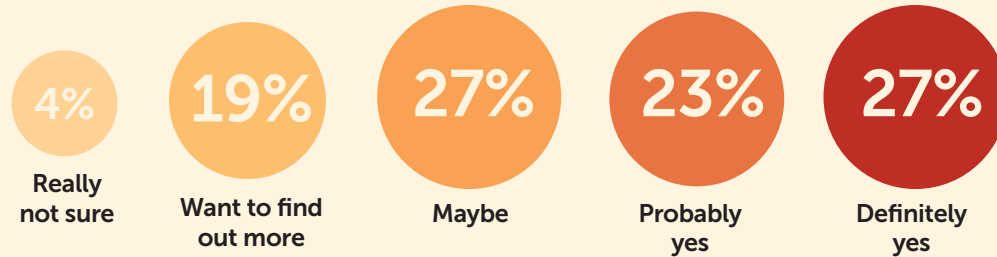
Gain the knowledge of where I can take my current college career and if taking part in an apprenticeship will assist me

I am hoping to meet new people and gain a better understanding of engineering as a whole

See what these universities can offer me in terms of scholarships, sports programs and if I can get additional ATAR points for attending this or being Aboriginal or Torres Strait islander

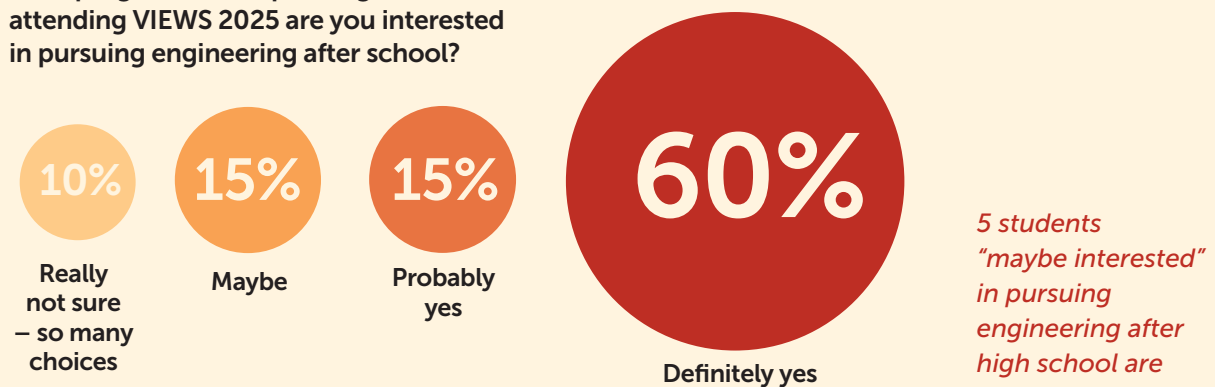
Impact of VIEWS 2025 on Student Interest in Engineering

Before program: Do you want to study engineering when you finish high school?

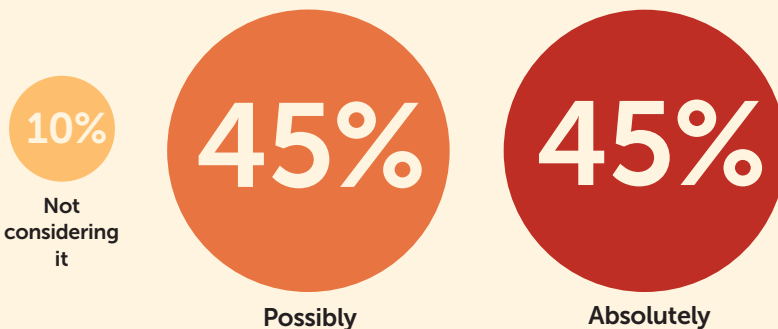


Based on the responses of 20 out of 26 VIEWS 2025 participants:

After program: After spending a week attending VIEWS 2025 are you interested in pursuing engineering after school?



Are you likely to apply to one of the universities you visited?



KEY INSIGHT:

VIEWS 2025 significantly increased certainty and enthusiasm for engineering pathways and further education.

Program

Students travelled to Melbourne from all across Australia, staying at University College and experiencing what it would be like to study on campus. The students were able to experience studying at the University of Melbourne, Swinburne, Monash University and RMIT University, and meet Indigenous engagement units from each university.

The philosophy underpinning the program is to engage students in five key areas:

1. Explore four universities

Each day of the VIEWS program is hosted by one of the four universities and students have an opportunity to experience what it would like to study on campus. The host universities put on a range of engaging workshops and presentations as summarised in the Program Schedule.

Visits to each campus enabled students to explore the various courses on offer and discover their best fit to meet their particular needs and aspirations.

Students were also welcomed at each university's Indigenous engagement unit—Ngarara Willim, the William Cooper Institute,

Murrup Barak, and the Moondani Toombadool Centre—with lunch, guided tours and discussions on the services and support they offer.

Students stayed at University College, giving them firsthand insight into residential college life and the accommodation options available when studying at university.



2. Meet Indigenous engineers and students

IEWS was designed to offer students the opportunity to meet Indigenous people who had successfully undertaken university study and become engineers. The week was supported by former participants who return as Student Mentors to guide and inspire new cohorts, including three past students who rejoined the program this year.

Callahan Elliott was a 2023 IEVS participant and has now gone to become an undergraduate student at Swinburne University studying Computing as his major. Brittney Andrews joined IEVS in its inaugural program in 2016 and since then has commenced the Doctor of Medicine program at the University of Melbourne.

Guruji Wagner completed IEVS in 2019 and completed his second year as a Student Mentor. Guruji is currently enrolled in the Bachelor of Design at the University of Melbourne and is on the pathway to become a Mechanical Engineer. You can read more about his experience in the Student Mentor Highlight.

Alongside our incredible Student Mentors, students had the opportunity to meet Associate Professor Shannon Kilmartin-Lynch, a Taungurung engineer working across sustainable materials, carbon-neutral concrete, and Indigenous STEM knowledges. Shannon is a former IEVS Student Mentor, now serving as a member on the IEVS Steering Committee and leading the Monash University experience for participants.

3. Discover pathways into engineering

In addition to exploring real-world applications of Engineering, participants were able to explore the various pathways offered by the four universities.

They had the opportunity to meet with University staff members, industry professionals, and other experts to hear about their unique journeys into higher education and careers in engineering.

Students also learned about undergraduate and postgraduate degrees, different majors, and the entry requirements for each program.

One of the key benefits of IEVS is that participants always have a staff member to connect with, both during and after the program, to discuss education and employment opportunities regardless of University or discipline.



4. Experience the work of engineers

An important element of the program was meeting engineers and industry professionals, which exposed students to the variety and diversity of an engineer's daily work.

Students met experts, asked questions, gained insights into the engineering world, explored its diverse fields, build networks, and understand the role of industry in engineering.

Furthermore, students engaged with academics and learned about their research, including learning about the engineering behind the Gunditjmara eel traps at Budj Bim and related projects undertaken at both RMIT University and the University of Melbourne. Swinburne and Monash also provided opportunities for students to meet their engineers and learn about pathways and projects at their institutions.

Worley

Students visited the office of Worley, an engineering partner in energy, chemicals, and resources to become a solutions provider leading partners and societies to a more sustainable future. Students took part in a 'Shark Tank' style workshop, where they created and presented proposals for sustainable technologies. This allowed the VIEWS participants to have an insight into presenting to industry and receiving valuable feedback.

5. Cultural activities

An important element of the program was to provide meaningful connections to Indigenous knowledges and support. Cultural activities were intentionally woven



throughout the weekly program to provide students with opportunities for learning and connection.

Highlights included the Ngarara Willim Cultural Tour at RMIT University, where participants were introduced to local histories, and a painting workshop at Swinburne University, which offered a hands-on experience of creative expression through art.

In the evening, yarning circles were facilitated by our Student Mentors to provide cultural peer support with additional access to Indigenous

counsellors through Connected Minds.

Students visited the Bunjilaka Aboriginal Cultural Centre at the Melbourne Museum and accessed a range of activities and workshops on their NAIDOC Family Day. Students also had the option to attend the NAIDOC March.

They participated in the Wayapa Wuurk Indigenous wellness session and enjoyed a Welcome and performance by the Djirri Djirri women's dance group at the VIEWS Celebration Dinner.



Guruji Wagner, Student Mentor

Student Mentor Highlight – Guruji Wagner

As a VIEWS alumni, mentor, and current Mechanical Engineering student, I can confidently say that the program has been one of the most meaningful experiences of my university journey. VIEWS provided First Nations students with a purpose and a space to see what engineering truly is—the creativity, the problem-solving, and the endless possibilities that come with it. For many, it was their first chance to explore how engineering could connect to their passions, communities, and futures, and to watch that spark of curiosity ignite was incredibly powerful.

It was my absolute pleasure to serve as a mentor in the program. Supporting students as they asked questions, tested ideas, and discovered their potential was deeply rewarding. Seeing their confidence grow day by day reminded me why programs like VIEWS are so important—they not

only open doors to opportunities, but they also show our young people that they belong in spaces of innovation and leadership. I carry a great sense of pride in having been part of their journey, and I know they will continue to inspire others as they stay curious and chase their goals.

“VIEWS provides First Nations students with a clear sense of purpose and an opportunity to explore the breadth of possibilities within engineering. Serving as a mentor was profoundly rewarding, and it was inspiring to witness students develop their confidence, maintain their curiosity, and realise their potential.”

Program timetable

SUNDAY 6 JULY

7:30am – 10:00am	Breakfast, University College Dining Hall
10:00am – 11:00am	Welcome to Country and Smoking Ceremony
11:00am – 12:00pm	Program Briefing and Morning Tea
12:15pm	Travel to the Bunjilaka museum
1:00pm – 3:00pm	Bunjilaka museum
3:00pm – 3:30pm	Travel back to University College
4:00pm – 5:30pm	Free Time, University College
5:30pm – 7:00pm	Dinner at University College
9:00pm	Bedtime

MONDAY 7 JULY – RMIT

7:30am – 8:45am	Breakfast, University College Dining Hall
8:45am – 9:30am	Travel to RMIT University
9:30am – 10:30am	Ngarara Willim Cultural Tour, RMIT University
10:30am – 12:30pm	Introduction to Fish Traps
12:30pm – 1:45pm	Lunch
2:00pm – 4:45pm	Designing Fish Traps Additive Manufacturing Precinct & Construction
4:45pm – 5:30pm	Travel back to University College
4:50pm – 6:00pm	Free time
6:00pm – 7:00pm	Dinner at University College
7:00pm – 8:00pm	Yarning Circles Student Mentors

PROGRAM TIMETABLE

TUESDAY 8 JULY – MONASH UNIVERSITY

7:00am – 8:45am	Breakfast, University College Dining Hall
8:45am – 9:30am	Travel to Monash University
9:30am – 10:00am	Welcome and Introductions
10:00am – 10:30am	Morning Tea
10:30am – 12:15pm	Digital Makerspace
12:15pm – 1:30pm	Lunch and Presentation, William Cooper Institute
1:45pm – 3:15pm	Advanced Robotics
3:15pm – 3:45pm	Afternoon tea/light snacks
3:45pm – 5:00pm	Monash Human Power Team
5:00pm – 5:45pm	Travel to University College
6:00pm – 7:00pm	Dinner
7:00pm – 8:00pm	Yarning Circles

WEDNESDAY 9 JULY – UNIVERSITY OF MELBOURNE

7:00am – 8:30am	Breakfast, University College Dining Hall
8:30am – 9:00am	Travel to Melbourne Connect
9:00am – 9:30am	Welcomes and Introductions
9:30am – 11:00am	Building Racecars The Creator Space
11:00am – 11:30am	Morning Tea Break
11:30am – 1:00pm	Building Racecars The Creator Space cont.
1:00pm – 2:15pm	Lunch and tour with Murrup Barak
2:30pm – 3:15pm	Workshop Rotation – Robogals/D-Lab
3:15pm – 4:00pm	Workshop Rotation – Robogals/D-Lab
4:15pm – 5:15pm	Wayapa
5:15pm – 5:45pm	Travel back to University College
6:00pm – 7:00pm	Dinner at University College
7:00pm – 8:00pm	Yarning Circles



PROGRAM TIMETABLE

THURSDAY 10 JULY – SWINBURNE UNIVERSITY

7:30am – 8:15am	Breakfast, University College Dining Hall
8:15am – 9:00am	Travel to Swinburne University
9:00am – 9:30am	Acknowledgement of Country, Welcome to Swinburne
9:30am – 10:30am	Cultural activity
10:30am – 11:00am	Morning tea (Chat with Moondani Toombadool staff)
11:00am – 12:00pm	Cultural activity (continued)
12:00pm – 1:00pm	Lunch (learn about engineering disciplines, chat with former VIEWS student)
1:00pm – 4:30pm	Rotating activities (Program a sensor, flight simulator, TeamSwinburne Racing, digital cadavers)
5:00pm – 6:30pm	Dinner at Laung Laachi
6:30pm – 9:00pm	Lido Cinema – Flow
9:00pm – 10:00pm	Travel back to University College



PROGRAM TIMETABLE

FRIDAY 11 JULY – INDUSTRY DAY & TH CELEBRATION DINNER

7:30am – 8:15am	Breakfast, University College Dining Hall
8:30am – 9:30am	Travel to Worley
10:00am – 1:00pm	Worley Workshop and Networking Lunch
1:00pm – 2:00pm	NAIDOC March
2:00pm – 3:00pm	Travel to University College
3:00pm – 5:15pm	Free time + prepare for Celebration Dinner and VIEWS departure
5:15pm – 6:00pm	Travel to Victoria State Library
6:30pm – 10:00pm	Celebration Dinner
10:00pm – 10:30pm	Travel to University College

SATURDAY 12 JULY – DEPARTURES

6:00am – 10:00am	VIEWS participants' departures
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Student Highlights: Reflections on VIEWS 2025



"It's really changed my perspective on my place as an Indigenous person and as an academic – and the responsibility that comes alongside such. VIEWS is a brilliant program, incredibly informative, and I highly recommend any Indigenous student interested in attending University or Engineering in any capacity, to attend."

"Feel the fear, and do it anyway."

"VIEWS was a great experience and opened my eyes to how university works, as well as life within uni."

"I found the VIEWS experience enlightening about not only STEM pathways in University but also a taste of living in Melbourne."

"VIEWS let me experience Melbourne university life and Melbourne in general."

Worley's Impact Statement Victorian Indigenous Engineering Winter School



Worley has been the inaugural multi-year principal sponsor of the Victorian Indigenous Engineering Winter School (VIEWS) since 2024, championing First Nations students as they step into the world of STEM.

In 2025, Worley brought the energy to Melbourne with an Industry Day that put innovation front and centre. Students pitched bold sustainability ideas in a 'Shark Tank' – style challenge, blending cutting-edge engineering with centuries-old First Nations knowledges – proving that the first engineers are still shaping the future.

The result? A powerful showcase of how Indigenous wisdom and modern technology can work together to regenerate Country and drive climate action.

And they're just getting started. Worley is strengthening mentorships, internships, and co-designed programs to ensure First Nations voices lead the way in building a diverse, sustainable engineering workforce.



"Engineering's greatest advances come when we bring together diverse perspectives and work in partnership. Worley is committed to creating opportunities for First Nations students to lead and innovate, ensuring the future of STEM reflects the richness of our communities and the challenges of our world." **Chris Ashton, CEO.**



"Progress starts with listening, learning, and walking together." **Kyra Galante, First Nation Participation Director.**

Together with VIEWS, they're not only imagining a better world – they're building it.



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