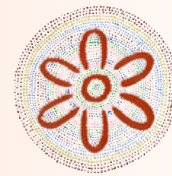


# IAESS SUMMER SCHOOLS

## January 2017 Newsletter

Indigenous Australian Engineering Summer Schools



EngineeringAid Australia  
Building futures

## EAA is set for a record breaking year in 2017

In January 2017, Sydney and Curtin Universities hosted, in Sydney and Perth respectively, week - long Indigenous Australian Engineering Summer Schools on behalf of Engineering Aid Australia (EAA). Other highlights included a Vice - Regal reception at Government House and a Gala Dinner at Parliament House in Sydney. The Gala Dinner, attended by 250 people, was also held to mark the 20th anniversary of our Summer School Program. The Summer Schools were made possible with the generous financial support of our Sponsors. We also thank our Gala Dinner Guests for their financial contribution to the Dinner. At the time of writing, 12 Jeff Dobell Memorial Scholarships have been awarded (turn to page nine for details), so it looks like we are set for a record breaking year.

### Winners of the Hon RJL (Bob) Hawke AC Capacity for Leadership Award

Initiated in 2013 and named in honour of The Hon Bob Hawke, AC - who has given unstinting support as Patron of Engineering Aid Australia and the Indigenous Australian Engineering Summer Schools since 2000 - this award recognises contributions made by the recipients during the Summer School and within their respective communities.



The 2017 Leadership Award at Curtin University was presented to **Keanan Holder**, while **Rhys Mackenzie** received the Award at Sydney University.

### IAESS Class of 2017 – Sydney University



**Front Row** – Linda Hurley, His Excellency General The Honourable David Hurley AC DSC (Ret'd) the Governor of New South Wales, The Hon Robert "Bob" Hawke AC, GCL EAA's Patron and his wife Blanche d'Alpuget.

**Students: Top Row** – Brenton Keats, Nick Walker, Jackson Coles, Thomson Fleming, Jack George, Corey Faulkner and Ben Timbery.

**Middle Row** – Jared Smith, Wonie Yusia, Douglas Anderson, Maggie Dillon, Angus Jacobson, Renae Agius, Tymicka Pierce, Chloe Hooklyn.

**Bottom Row** – Rhys Mackenzie, Harry Wilkins - Byrd, Kaylee – Jane Nelson, Savannah Willis, Simone Ducker, Vanessa Reid, Georgia Lawrence, Jes Nizeti - Panebianco.

### IAESS Class of 2017 – Curtin University



**Back Row** – Baylie Dadleh, Jackson Whooley, Anthony Coyne, Natahlia Amat, Madison Chumside, Jayden Dzubieli, Shantelle Johnson, Marcus Cohen, Caitlyn Mallard, Keanan Holder, Shantay Tidswell, Cody Frick, Sheyann Tidswell, Caitlin Tippet, Jasmine Peucker, Arleye Jongbloed, Mikah Bokelund.

**Middle Row** – Steven Trott, Oscar Logan, Isaac Kathner, Jarrod Cooper, Kobe Cavouras.

**Front Row** – John Morgan and Jack Orr.



EAA's 20th Anniversary Gala Dinner at Parliament House



Savannah Willis, Jes Nizeti-Panebianco and Wonie Yusia with keynote speaker Deng Adut at the Gala Dinner



# IAESS 2017 Diary – Sydney

## MONDAY - JANUARY 09



The morning began with an opening ceremony, followed by an Introduction to Engineering and a Biomedical engineering activity in the form of a one hour hands-on workshop, which gave the students an understanding of some key concepts in biomedical engineering.



After lunch, Honeywell hosted a site visit to the Sydney Opera House where the Company is undertaking a complete replacement and upgrade of the management systems throughout the building. This was followed by a tour of the facilities with an Indigenous guide.

## TUESDAY - JANUARY 10

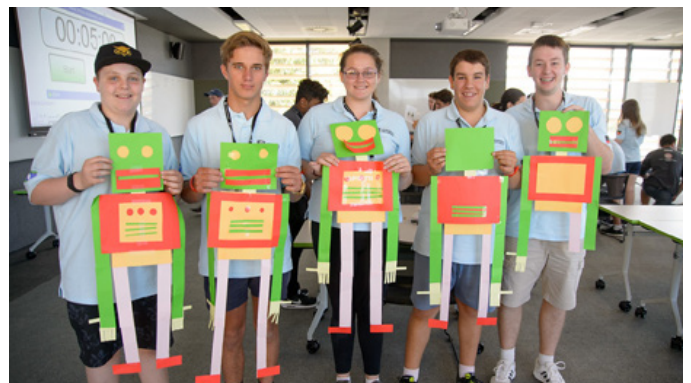
The Transurban site visit was first on the agenda. Students were divided into two groups and were taken by bus to two similar locations where Transurban is working on the Westconnex tunnel. Both groups were given a presentation related to the project followed by a question and answer session and a meeting with some of the young engineers involved in the project.

After lunch, Arcadis organised a 30-minute presentation on the building of the Harbour Bridge. The students were then divided into two groups for the Harbour BridgeClimb, which was followed by the “Amazing Race” - a fun activity focused on the vicinity around the Rocks.

## WEDNESDAY - JANUARY 11



A very full day. The students attended a presentation by the Minerals Council of Australia where they were able to use virtual reality to visit mining sites around Australia to see where the mineral components of mobile phones are sourced.



They then enjoyed two engineering activities; Project Management - an activity that required students to work effectively in groups, building a paper robot in accordance with design specifications and a budget and Eggcellent Car Safety, where teams had to create a safe and cost effective racing car for an egg. During the afternoon, the focus was on careers, communities and networking.



## THURSDAY - JANUARY 12

An early start saw the students dropped off at the new ferry hub at Rozelle where construction for Transport for NSW is underway. They were split into two groups for a tour of the site and then taken to Barangaroo where they were taken to the top floor of one of the towers followed by a tour of the new Wynyard Station.



## FRIDAY - JANUARY 13



Another early start for a full program saw the students arriving at Arup's city offices to participate in a "Think like an engineer" activity. They were split into groups and, having been given a project brief and five key considerations, tasked to come up with a design concept for a second harbour crossing.



After lunch, it was back to the campus for 'Lego Mindstorms', a mechanical engineering activity where students learned the basic principles of coding and worked in groups to program a portable robot.

## Graduation Ceremony

Attended by EAA Directors and industry sponsors, key university staff and other VIP guests, the Graduation Ceremony took place at a Vice Regal reception at Government House



## Anniversary Dinner

Past and present students then joined guests at the EAA 20th Anniversary dinner which was held at Parliament House.



*Former IAESS students, who are now undergraduates and young Engineers, came from all over the country to attend our anniversary celebrations*



*Jes Nizeti-Panebianco and Simone Ducker*



*Stephen Hall of Honeywell with Jackson Coles*



*Ben Lange (IAESS 1999) the MC at the Gala Dinner*





*Graduate Engineers Ross Peek, Grant Maher, Courtney Ryder, Jacob Hyland and Leon Oriti, share their journeys*



*Graduate Engineer Ross Peek*



*Jim Salmon of John Holland with Georgia Lawrence*

## Engineering - "The Noblest Profession"

Speaking at the 20th anniversary dinner, held at Parliament House in Sydney on the final night of the Summer School, EAA Chairman Greg Steele urged students to heed the words of WW2 hero and surgeon 'Weary' Dunlop, who said that "engineering was the noblest profession" and that it was about "improving the quality of life."



*Chairman of EAA and CEO of Arcadis, Greg Steele*

Acknowledging EAA Patron Bob Hawke and other EAA founding board members, Mr Steele thanked them for their strong and selfless contribution in delivering a successful program that has the potential to improve the quality of life of the Indigenous community - when so many similar projects have failed to do so in the past. He pointed out that "their efforts have resulted in over 500 students participating in the EAA program since its inception in 1996 - with 42 IAESS graduates currently studying engineering and over 200 indigenous engineers now in the work force."

Greg added that the dinner was primarily about celebrating success, and that this was best illustrated by the past and current students who were present in the room. "I encourage you to take the time to speak to them and marvel at their hard work and tenacity in overcoming the many barriers they have encountered while gaining their degrees," he said.

He concluded by thanking the parents for their support, pointing out that some had driven for up to two days to join the celebration.

## Feedback From Students

Judging from the written comments we received at the end of IAESS 2017, we believe that the majority of students who attended will return to their communities re-invigorated motivated and inspired to follow their dreams.

*"IAESS has been much more than a camp for me, it has been motivating, insightful, super fun and overall amazing"*

*"My favourite thing about IAESS has been meeting so many amazing people"*

*"IAESS has undoubtedly given me a great deal of motivation to study engineering"*

*"The main thing I will take away is to follow my dreams, big or small"*

*"I really enjoyed the program and it has opened my mind to all the different opportunities that engineering has to offer"*

*"Thank you IAESS for the greatest experience of my life"*

*"I would recommend this program to all of those interested in engineering as this camp can further strengthen the engineering passion of young curious minds"*

*"I liked that I got to meet a range of people with the same mentality as myself, as well as being informed about the types of engineering"*



# IAESS 2017 Diary – Curtin

Twenty Indigenous students from WA, SA and NT attended the week-long program hosted by Curtin University.

## MONDAY - JANUARY 16

A Welcome to Country, given by Shaun Nannup, was followed by an industry Community session, during which representatives from WSP/Parsons Brinckerhoff, Honeywell, ICRAR and the Defence Force focused on engineering in communities. The Industry Community session and Civil and Mining sessions each involved a series of speakers representing Engineering Aid Australia's sponsor companies who shared insights into their experiences and explored aspects they most enjoyed about their careers.



After lunch, students attended an Industry Networking session, hosted by John Holland, Aurecon, Arup and Woodside. Then it was back to campus for a sporting activity. Students later joined engineering mentors to assist in designing and launching bottle rockets.



## TUESDAY - JANUARY 17



Students had an early start ahead of a full day, first travelling to Mandurah with BG&E for a site visit to the new Mandurah Bridge. They then returned to Perth for lunch, which was followed by a trip to Aurecon, where they had a lot of fun learning about virtual reality technology and participated in group interactive challenges.





## At the Careers Expo

Students then returned to Curtin for the Sponsor's Career Expo where twenty-two exhibitors, including the Defence Force, were in attendance.





## WEDNESDAY - JANUARY 18



Students donned hard hats, high vis jackets, boots and glasses for a tour of Perth Stadium with Arup/Multiplex site engineer Ben Kirkwood. After lunch, they were back on the bus for a trip to the offices of WSP/Parsons Brinckerhoff to participate in a spaghetti and marshmallow bridge building competition.



Next on the program was a visit to Green Energy Park and then it was back to the university to meet with Engineers without Borders students, for a water filtration activity.

## THURSDAY - JANUARY 19

After breakfast, the students were taken on a behind-the-scenes tour of the Northlink WA -Southern Section Extension which was hosted by John Holland.

Later in the day, they travelled to the CBD to participate in the Woodside Networking Session where they were briefed on effective networking as well as engineering career opportunities. Valuable contacts were made among the over 50 people who attended.





## IAESS Graduation Dinner

Students then strolled across the road to the Forrest Reception Centre, where over 95 guests gathered for the graduation ceremony and dinner. The proceedings opened with a Welcome to Country and presentation by Shaun Nannup. MC for the evening was former IAESS participant Dale Haynes, who is currently completing his Indigenous traineeship with Woodside Energy. EAA Board member John McKillop and Associate Professor Nicoleta Maynard presented the students with their graduation certificates. Once the serious side of the proceedings were completed, the students and guests were able to relax and get to know each other over dinner.



## FRIDAY - JANUARY 20

The day began with a tour of the Fiona Stanley Hospital which was hosted by Honeywell. Students were intrigued by the technology being used, especially the robots which delivered the food.

After lunch, they were off to ICRAR where they explored tiny radio telescopes, spectroscopes and solar viewing. This was followed by the Pathway Program.

After a fish and chips dinner at City Beach, the students were driven to Reabold Hill to finish the evening with some quiet reflection and stargazing under the guidance of Derek Nannup.



## Dale Haynes Update

*We were delighted to receive this update from Dale, and very pleased when he agreed to be our MC at the Anniversary Dinner. If you haven't been in touch for a while, please contact us and keep us posted with your news.*

I'm not sure if you remember me, but I went to the 2014 Indigenous Australian Engineering Summer School at Curtin Uni. We went to Woodside Energy for our experience day and were introduced to the Woodside Indigenous Cadetship program that they run.

After I had finished year 12, they contacted me at the start of this year, regarding openings for a cadetship and funnily enough, I actually got the position. At the moment, I am at Woodside for the next three months doing my placement. I have just finished my first year at the University of Adelaide doing a bachelor of Engineering Honours (Civil and Architecture). Just like to say thank you for the Summer School program and for your efforts.

**Dale Haynes**



## Jeff Dobell Memorial Scholarships 2016 & 2017

### JDM scholarships awarded in 2017

Name	Degree / Uni	City	State	IAESS
Alexandra Bainbridge	Civil Engineering Sydney	Buderim	QLD	2015
Jaive Barber	Civil Engineering Newcastle	Wamberal	NSW	2015
Sedisha Chatfield	Project Management / Civil Engineering Sydney	Pamona	QLD	2015
Jack Coppins	Engineering/Science Adelaide Uni	Valley View	SA	2015
Levi Dance	Mechatronics Hobart	Miandetta	TAS	2015
Shania Fogg	Environmental Wollongong	Dapto	NSW	2015
Callum Poke	Engineering / Commerce Monash	Smithton	TAS	2015
Corey Quail	Mechatronics UQ	Narangba	QLD	2015
Niamh Moir	Engineering/Commerce Curtin Uni	Thornlie	WA	2015
Khan John	Chemical Engineering/Chemical Science Curtin Uni	Broome	WA	2015
Dale Haynes	Engineering Honours Civil and Architecture Adelaide Uni	Adelaide	WA	2014

### JDM scholarships awarded 2016

Name	Degree / Uni	City	State	IAESS
Lucas Schober	Civil Engineering UQ (2nd YR 2017)	Karama Darwin	NT	2015
Isaiah Turner	Engineering/ Adelaide Uni	Port Noarlunga South	SA	2015
Miranda Mahoney	Civil / Environmental UQ	Wynnum	QLD	2015
Marcus Valastro	Engineering Syd Uni (Deferred)	Parap	NT	2015
Nicholas Young	Chemical / Business Newcastle	Quirindi	NSW	2015

## The Generous Sponsors who make the IAESS Program Possible

The IAESS program is funded with generous donations from the Baxter Charitable Foundation; the James N Kirby Foundation; Arcadis; Arup; Aurecon; BridgeClimb; Broadspectrum; BG&E; Ernst & Young; Honeywell, ICRA (International Centre for Radio Astronomy Research); John Holland; Lyndsay&Dyran; Minerals Council of Australia; Minter Ellison Lawyers; Santos; Transport for NSW; Transurban; WSP Parsons Brinckerhoff; Woodside; Veolia; and private donors; Henry Johnston, Alan and Jenny Smith and Jacqueline Longhurst.