



**13TH
INDIGENOUS
AUSTRALIAN
ENGINEERING SUMMER
SCHOOL (IAESS)**


17 – 24 JANUARY 2010

HOSTED BY



UNSW
THE UNIVERSITY OF NEW SOUTH WALES

ENGINEERING



INDIGENOUS REPRESENTATION IN ENGINEERING

Aboriginal Australians are under-represented in the engineering profession. This is unfortunate, because engineering is the only original wealth-creating profession. The number of trained engineers required to make up the shortfall is numbered in the thousands. Remote communities and outback Australia are areas most in need of infrastructure development, a process that can only be undertaken ultimately with the contribution of engineering professionals, educated in our universities.

Engineers design and advise on drinking water, roads, hospitals, schools, radio, television, communication networks and all the fabric of modern society. Wealth creation through irrigation schemes, electricity generation, mining and agriculture will be undertaken in country areas, preferably with the guidance and participation of those living there.

Engineers may be the most valuable resource communities can have.

WHAT IS ENGINEERING?

Throughout the day – at home, at work and at play – we rely on the work of engineers. They are responsible for our infrastructure, our mobile phones and the special effects in our favourite films. In the future, engineers will find solutions to issues like water and energy supply, as well as invent technology that we can't yet imagine.

Engineers translate ideas and technology into products and services that improve our quality of life.

IS ENGINEERING FOR ME?

If you...

- Want to make a difference to the lives of individuals and society as a whole,
- Are good at maths and science,
- Like to tackle a challenging problem,
- Enjoy working as a part of a team...

then engineering may just be what you're looking for.

WHAT KIND OF CAREER CAN YOU EXPECT AS AN ENGINEER?

More than any other degree, engineering is the one that leads to the most diverse range of career paths. Why? Because engineering teaches problem-solving, management skills, lateral thinking, teamwork, communication and negotiation - skills that can be applied to many different fields.

Engineering is a profession that is never routine or boring because its essence is confronting problems and finding solutions to them.

Since engineers must also have sound project management, people and financial skills, they are in great demand in the corporate world. Indeed many top CEOs are engineers.

INTERESTED?

Get first-hand experience: meet engineers and discover the benefits of the profession through the 13th Indigenous Australian Engineering Summer School (IAESS).

IAESS is open to students entering years 11 and 12 in January 2010, and will be held at The University of New South Wales (UNSW), in Sydney.



Mr Leon Oriti (IAESS 2007) with the Hon Bob Hawke AC

"I'd like to invite you to attend the Summer School. Past students have told me how it was a life changing experience for them. It will show you the exciting and varied career opportunities that are available to young men and women in the engineering profession.

Engineering has an exciting future as Australia increasingly develops and applies its technological skills to improving the quality of life for all its people.

You will learn about the various fields of engineering, visit engineering projects and meet with Indigenous role models and young people presently studying engineering.

I'm sure you will enjoy the experience and return home with a new and expanded vision of your future."

– THE HON BOB HAWKE AC, PATRON

WHAT IS IAESS?

The Indigenous Australian Engineering Summer School (IAESS) is an annual event, established 13 years ago by Engineering Aid (a non-profit organisation). It will be held again in January 2010 for 20 Aboriginal and Torres Strait Islander students, male and female, entering Years 11 and 12 in 2010. It is a five-day live-in Summer School, featuring a combination of activities that will give you a taste of engineering as a university course and career.

WHAT WILL IT BE LIKE?

The objective of IAESS is to provide a challenging environment for Indigenous students to discover the benefits of the Engineering profession, to provide a forum for students to meet engineering role models, and to gain insights into the excitement and opportunities engineering can provide to our communities.

During IAESS you will meet engineers, participate in design work and other hands-on activities that will test your newly acquired engineering skills, visit engineering projects and gain an understanding

of the job opportunities that are available within the profession.

For the whole of your stay at The University of New South Wales (UNSW), as IAESS participants you will receive support from the Nura Gili Indigenous Programs, The Faculty of Engineering and engineering role models.

COST?

The Summer School is fully sponsored by a range of Sponsors and Donors including engineering companies, Government Departments and private donors.

Travel costs to and from Sydney, as well as accommodation and Summer School fees are provided without charge to the participants. Your only financial need will be for pocket money when travelling and during your stay in Sydney.

WHAT WILL PARTICIPANTS DO?

The Summer School program normally involves hands-on and challenging group work with the Faculty of Engineering at UNSW in the morning, with the afternoon

spent on site visits to engineering companies and major projects. The Summer School promotes teamwork and communication skills, with several competitions to motivate and inspire both individual and group involvement.

At the Graduation dinner, you will have the opportunity to mix with numerous engineers, university staff and former Prime Minister, the Hon. Bob Hawke, Patron of the Summer School. You will also attend an official function with sponsors and the Governor General at her Sydney residence.

You will stay in campus accommodation within the UNSW grounds in Kensington and get a taste of University life and a better understanding of engineering as a University course and career.

All participants in the IAESS are covered under the UNSW insurance program during the Summer School. Insurance is managed by the Risk Management Unit and includes public liability, travel and personal accident.



Mr Ben Lange (IAESS 1999) presents Major General Michael Jeffery, AC with an Award to thank him for his support, July 2008

“One of the greatest pleasures I had as Governor-General was in meeting the students attending The Indigenous Australian Engineering Summer School each year at Admiralty House. Without exception, they were young men and women of intelligence, capacity and determination and I always felt certain that even if some did not take up a career in the Engineering profession, that the wisdom they gained from attending the Summer School, would stand them in very good stead, no matter what vocation they chose to follow.

Not only do I recommend that Indigenous communities across the country support the Summer School with

nominations of deserving candidates, but I ask the business and university sectors provide the essential financial, accommodation and mentoring support.

I look forward to seeing the Summer School progress from strength to strength at it surely deserves to do.”

MAJOR GENERAL MICHAEL JEFFERY, AC, (RETD) VICE PATRON

APPLICATIONS



Applicants will be selected for IAESS on the basis of their interest in engineering related subjects (such as mathematics and science) and personal initiative and outlook, as expressed in the application form, and supported by those who know them.

If you wish to apply for the 13th Indigenous Australian Engineering Summer School please complete the application form provided and submit supporting documents as indicated on the application form.

APPLICATIONS CLOSE ON MONDAY 9 NOVEMBER 2009

The Faculty of Engineering at the University of New South Wales (UNSW) is the largest in Australia, is ranked the nation's best and in 2009 is celebrating 60 years of sustained excellence in teaching and research. It offers the widest choice of engineering disciplines including combined and concurrent degrees. All programs provide practical and theoretical training supported by small group tutorials, laboratory classes and modern computing facilities. Numerous hands-on, student-led projects – such as the solar car racing team, formula SAE car and Robocup – instill practical and collaborative principles, and our excellent industry links provide valuable workplace experience. The Faculty has important links with overseas universities for both

teaching and research and sees great value in international student exchanges. Our major scholarship program rewards academic excellence in students from all backgrounds.

Nura Gili Indigenous Programs is the support network for Indigenous students at UNSW. Nura Gili is the first contact point at UNSW for Aboriginal and Torres Strait Islander students enrolled in the various undergraduate or postgraduate degrees. Nura Gili's members are there to assist you in any enquiries you may have and to support you at UNSW. Nura Gili Indigenous Programs strives for excellence in education services, standards of professional education and quality of environment at UNSW.

Engineering Aid Australia is a philanthropic organisation that provides engineers and related services to assist disadvantaged Indigenous Australians and communities. The Indigenous Australian Engineering Summer School is their principal program on behalf of Indigenous young Australians.

FOR FURTHER INFORMATION ABOUT IAESS PLEASE CONTACT:

Faculty of Engineering

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Visit: www.eng.unsw.edu.au/iaess

Engineering Aid Australia

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