

Australasian Association for **Engineering Education**



What's on in AAEE?

2025-Edition 3- June



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President's Message

Dear AAEE Members

Thank you to those members who responded to the call to provide feedback on our strategic plan. The committee will be moving forward to implement the strategy. The AAEE Winter School closed its registrations, and I was positively surprised to see that we had over 30 registrations. The winter school is a critical incubator for engineering education leaders and for growing our research community. Congratulations to those who registered and the leadership teams that supported and encouraged them. As we move into June, there are many activities to consider. This includes submitting a full paper to AAEE25, nominating for an AAEE award, and considering team formation for applying for an upcoming grant. Make the most of your AAEE membership.

I bring your attention to the Sustainable Engineering Resource item below. I trialled the resource myself, and it is indeed a great free resource that provides students with a certificate of completion. Take note that the 2nd Annual AAIEEC showcase has been scheduled for the 18th of July, with further details below.

Sasha Nikolic





Registration has opened and the Call for Full Papers and Workshops is now Open!

Abstract acceptances have been sent out to authors. We would like to notify members of AAEE that the call for Full Papers and Workshops has now opened. We would like to remind you that you do not need to have submitted an abstract to submit a Full Paper.

This is a reminder that:

- Abstract acceptance notifications were sent out on the 30th of May
- The Call for Full Papers and Workshops opens on the 2nd of June.

Sustainable Engineering Resource

The Engineers Australia Sustainable Engineering Society has developed four free, interactive teaching modules that can be easily integrated into your curriculum. Covering topics such as growth, biodiversity, global warming, and probability & risk, these modules offer valuable insights from an engineering perspective. Upon completion, students receive a personalised certificate, making it both an engaging and rewarding learning experience. Access the resource at https://seng.kuropro.com/.

2025 AAEE Engineering Education Grants

The **2025 AAEE Engineering Education Grants** are open for application! There are **3 grants of up to \$10,000** each available to projects which address the outcomes of the ACED Engineering Futures 2035.

The grants encourage excellence in scholarly practice and/or research specific to **Engineering Education** in higher education or equivalent by supporting teams who possess the desired mix of demonstratable expertise and skills and/or are emerging leaders in the field to:

- 1. Identify engineering educational issues across the higher education system and to facilitate approaches to address these issues.
- 2. Devise and undertake a programme of activities that will have positive impact on engineering students, staff, and/or institutions.
- 3. Raise the profile of engineering education in higher education and the prestige associated with the pursuit of scholarly excellence and/or research.
- 4. Show leadership in promoting and enhancing engineering education in higher education and exploring new possibilities.
- 5. Establish and build on national and international partnerships in engineering education in higher education or equivalent.
- 6. Foster national collaboration and collegial networking for sharing research, innovation and good practice in engineering education.
- 7. Contribute to the growing community of engineering education scholars in higher education or equivalent.

The AAEE Engineering Education Grants nomination instructions provide information for nominees and their home institutions. The information covers the selection criteria, and the nomination and selection processes. You can find further information about the 2025 AAEE Engineering Education Grants on our website at: https://aaee.net.au/current-grants

Applications close Monday, 1st September 2025.

Calls for Expressions of Interest in Hosting AAEE in 2028

The AAEE conducts an annual conference throughout Australia and New Zealand to promote engineering education scholarship and facilitate the dissemination of research and best practices throughout the engineering education community. An EOI to host AAEE2028 is due on **17 November 2025**.

Hosting this conference brings substantial visibility to your university and city. It provides a great networking platform and professional development opportunities within engineering education.

The 'Procedures to Host the 2028 conference' is now available on <u>the AAEE website</u>. Please contact <u>enda.crossin@canterbury.ac.nz</u> with any questions or queries.

June CREITE meeting - Wednesday June 18, 12:30-2:00pm

The Centre for Research into Engineering and Information Technology Education (**CREITE**) holds monthly meetings exploring topical issues and the latest research in engineering education. Activities include: guest speakers discussing EER methodologies or research projects; peer feedback sessions on draft abstracts or conference presentations, and interactive sessions on different skills and approaches in EER (e.g. reviewing journal manuscripts). CREITE is hosted by the University of Technology Sydney, with members from the Sydney region and beyond, including the University of New South Wales, University of Newcastle, and Charles Sturt University. We normally meet on the third Wednesday of the month, from 12:30-2pm, Feb-Nov.

Our next CREITE session is planned for Wednesday June 18, 12:30-2:00pm. This session we'll be focusing on responding to reviews, with a particular focus on the abstract reviews for <u>AAEE2025</u> that will have been released by then.

Why are we doing this and what do we hope you'll get out of it?

The quality of all academic research is predicated on peer-review, but nevertheless it can be daunting receiving and responding to such feedback (especially from "Reviewer 2"!). We hope you'll leave the session with some more confidence and strategies to respond to reviews.

What is it?

In this session we ask you to bring along the AAEE abstracts you've submitted, and the feedback you've received, so together in a safe space we can consider this feedback and workshop how best to respond.

If time permits we may be able to do the same for anyone currently in the throes of responding to journal feedback, and/or discuss "what makes a good workshop" in advance of the closing date for workshop submissions.

Join on Zoom (https://zoom.uts.edu.au/j/88012429428).

To join the Teams site or get added to our mailing list, please reach out to the coordinators:

- · Guien Miao Guien.Miao@uts.edu.au
- · Rosalie Goldsmith Rosalie.Goldsmith@uts.edu.au
- · Scott Daniel Scott.Daniel@uts.edu.au

AI SIG Update

The AAEE AI SIG, known as the Australasian Artificial Intelligence in Engineering Education Centre, has been active for just over a year. We have grown to 88 members from over 16 universities. Some recent updates from the SIG:

Implementation Cluster: A new paper has been published that systematically examines empirical case studies that demonstrate the integration of GenAI into teaching and learning in higher education, offering actionable insights and guidance for academic practice. They classified the selected publications based on the pedagogic theory of Laurillard's Conversational Framework (LCF) and the Substitution, Augmentation, Modification, and Redefinition (SAMR) framework. They also synthesised definitions from selected empirical studies and recent research exploring Technological Pedagogical Content Knowledge (TPACK) in the age of GenAI, providing a comprehensive understanding of GenAI-TPACK factors. Available here: https://doi.org/10.1016/j.caeai.2025.100407

GenAI Assessment & Learning Toolkit: This new post by Rezwanul Haque from the University of the Sunshine Coast explains how he used GenAI to help develop extra resources for his students because the textbook did not provide enough examples for students to practice with. Replicate the process using your topic. Access it here: https://www.aaieec.org/genaiassessmenttoolkit

2025 AAIEEC Showcase: Scheduled for 18 July 2025. Back for a second year, this webinar will explore current research projects underway by AAIEEC members. This will be followed by a panel session focused on - Human Skills vs. Artificial Intelligence: Engineering Competencies and Assessment in the GenAI Era. A range of speakers and panel members from UMelb, SCU, UQ, UNSW, UOW and more. For full details and to register: <u>https://www.aaieec.org/event-list</u>

For more information about the SIG, please visit: https://www.aaieec.org/

Introducing your AAEE executive committee: Communications and Engagement portfolio

Each month, we will be featuring some of the AAEE executive committee members and their role(s) / portfolios. There are lots of moving parts behind an association like AAEE and we would like members to not only know what roles are being fulfilled and their responsibilities, but also who the people behind them are. So, for the initial feature, it makes perfect sense to focus on the compliers of this newsletter – the **Communications and Engagement portfolio**!

Gavin Buskes and Maryam Moridnejad handle the Communications and Engagement portfolio for the AAEE.

Gavin is Professor and Deputy Head of Department (Academic) of the Department of Electrical and Electronic Engineering at the University of Melbourne. He has been a member of AAEE for 15+ years and is now serving a second term on the AAEE executive committee (because once is never enough!) In addition to teaching a fair share of subjects across the electrical engineering spectrum, he is also a keen promoter of engineering education and is active in a number of educational research projects. He is keen to raise the profile and importance of AAEE as the tertiary education landscape is changing, with more institutions now placing a higher value on teaching and learning.



Maryam is a Principal Academic Staff Member in Civil Engineering at the Waikato Institute of Technology (Wintec) in New Zealand, specialising in water resources management, and is currently serving her first term on the AAEE executive committee. She holds a PhD in Civil and Environmental Engineering and brings over 15 years of experience across both industry and academia. Her research in engineering education focuses on advancing equity and increasing participation in the profession, particularly among women and Indigenous communities.



The Communication and Engagement Portfolio members are responsible for ensuring effective communication of the Association's activities, events and conferences to its stakeholders, and engaging with relevant

professional bodies, institutions and members in order to fulfil the strategic goals of the Association. We work with the executive committee members to align communication efforts with the Association's overall strategic plan and/or any current campaigns, including this newsletter and the AAEE website.

The newsletter is published on the first day of each month, with the deadline for submitting items for inclusion being the 15th of the prior month. We will soon be incorporating a form on the association's website where members can request an item to be added to the newsletter. In the meantime, please contact Gavin at <u>g.buskes@unimelb.edu.au</u> if you have something you would like to be considered for inclusion in the newsletter.

We are always looking for ideas and happy to hear any feedback our members may have. One thing we will be implementing in the near future is a process for providing direct feedback to the AAEE executive, so keep an eye out for this in a subsequent newsletter!