



Australasian Association for
Engineering Education



What's on in AAEE?

2025-Edition 9- December

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President's Message

Dear Members,

The year has travelled fast. It's hard to believe we've already reached the final newsletter of 2025 and are just a stone's throw away from the AAEE Conference and **AGM** (Monday 8/12, details will be shared in a separate email, and I hope to see many of you there).

This year has been one of significant progress and collective achievement. To help highlight the often unseen but deeply meaningful work of the committee, I've included a special section in this newsletter that showcases these contributions. At a high level, some key initiatives delivered this year include:

- Establishment of a new strategic plan
- A full review of the committee structure, including updated position descriptions and documentation to support continuity
- Refinement and enhancement of policies across all portfolios
- More regular, detailed communication through our newsletters
- Introduction of the new Whakatere Grant
- Promotion of more community-related events, such as CREITE (running similar events? Get in touch)
- Establishment of a History Committee
- Further enhancement of relationships with sister organisations
- And much more behind-the-scenes work that keeps AAEE moving forward

Last month, I put out a call for new special interest groups. To date, we have received one proposal - Australasian Centre for Engineering Professional Practice Research (ACEPPR), which will be discussed for approval at our next executive meeting on the 7th of December. I encourage other members to seek out other SIG ideas; morning tea conversations at the conference are a great starting point.

The results of the AAEE Executive Committee elections have now been released. I warmly congratulate **Zachery Quince** (SCU) and **Jayashri Ravishankar** (UNSW) on earning the confidence of our community. I look forward to the fresh ideas and contributions they will bring. I would also like to sincerely thank our outgoing

members, **Nick Brown** and **Sara Moridpour**, for their substantial and long-standing contributions. More details about committee efforts are included in the **recognition section** below.

Congratulations to our grant recipients (announced in this newsletter) and to our award winners, who will be formally acknowledged at the conference dinner. My thanks go to the judging panels, as your work is essential, though often invisible, and greatly appreciated.

Success in grants and awards is more than recognition; it helps members establish a strong foothold in engineering education and often provides important evidence for national teaching award schemes such as the AAUT. One trend remains clear: applicants who have engaged with the AAEE Research School or ECR Academy consistently produce stronger submissions. This is no surprise as education strengthens capability. I encourage members who have not yet participated in such initiatives to explore them.

On that note, I am pleased to announce that **Queensland University of Technology** has been selected to host next year's **Research School** in July. Please mark this on your calendars.

A heartfelt thank you to Greg, Melanie, and the entire UQ team for their exceptional efforts in preparing what promises to be an outstanding AAEE2025 Conference. I am excited to see as many of you as possible there. Please feel free to grab hold of me to discuss any feedback about your membership experience; your insights shape our direction.

As this is our final newsletter of the year, I wish you all a safe and restful holiday season. Stay connected with the AAEE community through our **Facebook** and **LinkedIn** pages and continue to support each other in advancing engineering education.

Warm regards,

Sasha Nikolic

2025 AAEE Annual Conference



AAEE2025 is almost upon us! The program has been finalised and is available for download from the [conference website](#). Please ensure you have the latest version of the program.

Details have been sent to presenters on the logistics of organising your presentation, so make sure you carefully read through the guidelines in the email.

AAEE Higher Degree by Research (HDR) Symposium

The AAEE Higher Degree by Research (HDR) Symposium in Engineering Education Research (EER) offers an opportunity for Masters by Research and PhD candidates to explore and develop their research projects under the guidance of scholars from the wider engineering education community. The aims of the symposium are for HDR students to:

- Network with other students to extend their network in EER,
- Present and constructively discuss their own work and the work of others,
- Receive constructive feedback and input from scholars outside their own institution, and,
- Contribute to the AAEE community.

The 2025 AAEE HDR Symposium is planned for in-person participation at the University of Queensland campus on the afternoon of **7 December** in the lead up the AAEE conference welcome event. Further details will be announced in due course.

Any questions about the HDR Symposium can be directed to Amy Young (a48.young@qut.edu.au) or Sarah Dart (sarah.dart@qut.edu.au)

2025 AAEE Engineering Education Grant Outcomes

The 2025 round of the AAEE Engineering Education Grants was highly competitive. The 2025 grant panel has recommended two proposals to be awarded to the amount of \$20,000 in total and identified a potential third collaboration.

Congratulations to the successful applicants for the 2025 AAEE Engineering Education Grants (ACED aligned) outlined below. Looking forward to great outcomes and impact from their work in the near future!

2025 ACED Aligned Grant \$10,000

Project title: Achieving assessment security without sacrificing assessment validity

Team: Dr Joshua Burrige, The University of Melbourne; Dr May Lim, UNSW; Dr Ghislain Bournival, UNSW; Dr Winn Chow, The University of Melbourne; Dr Shannon Rios, The University of Melbourne; Dr Andrew Valentine, The University of Melbourne

Abstract: Engineering education has made enormous strides in innovative learning, teaching, and assessment in recent years – project-based learning, authentic assessment, work-integrated learning, and more. These practices have improved outcomes, inclusion, and the discipline as a whole. The impact of generative AI on our ability to assure students’ demonstration of learning, however, presents a risk that the ‘easy solution’ of invigilated in-person examinations will destroy decades of hard-won progress.

Our project seeks to research ways in which these innovative practices may incorporate assessment – without sacrificing validity. This will be achieved through three phases:

- An investigation to identify where these innovations are in active use and their associated assessment methods, following up with coordinating academics to investigate their assessment security.
- Having identified gaps, including where current methods for securing assessment impact validity, developing and evaluating improved methods in partnership with identified coordinators.
- Developing guides for practitioners in securing their own innovative assessment practices.

2025 ACED Aligned Grant \$10,000

Project title: The Equitable GenAI Co-Pilot: Enhancing Learning for Future Engineers

Team: Dr Liuxin Chen, James Cook University; Dr Amir Tophel, Monash University; Dr Sarah Grundy, UNSW; Dr Zachery Quince, Southern Cross University

Abstract: Engineering education faces persistent challenges in developing the professional capabilities of underrepresented students in Engineering,

including students from rural and regional areas, women, neurodiverse, non-English-speaking backgrounds, and first-in-family university students. To address this equity gap, this project introduces a co-designed Generative AI (GenAI) Co-Pilot. The Co-Pilot is a GenAI tool codeveloped with underrepresented students, designed for engineering education and embedded with best practices in communication, teamwork, and ethical reasoning, with learning outcomes explicitly mapped to Engineers Australia Stage 1 Competency Standards.

Developed in collaboration across four universities, the project will deliver:

- (1) a validated, open-access GenAI Co-Pilot with Learning Management System (LMS) integration;
- (2) a comprehensive Educator Toolkit for teaching with the developed GenAI tool; and

(3) evidence-based guidelines for the inclusive use of GenAI in engineering education.

By offering a scalable and practice-aligned solution, this work provides a concrete model for fostering equitable professional capabilities and advancing the human-centred, inclusive vision of Engineering Futures 2035.

Become an Accreditation Discipline Expert for Engineers Australia

Help shape the future of engineering education by becoming an accreditation expert for Engineers Australia.

What is Accreditation?

Accreditation evaluates engineering programs—not individuals or universities—to ensure graduates are ready for professional practice as Engineering Associates, Engineering Technologists & Professional Engineers.

Why You Should Get Involved

Engineers working as academics and in industry bring their unique insights to accreditation panels, helping universities improve programs and better prepare students. Volunteers report a strong sense of professional satisfaction and impact.

What's Involved?

- 1–3 day visit with a panel of 3 (academics + industry engineers)
- EA covers travel, accommodation & meals
- You contribute your time as an in-kind gift to the profession
- Includes pre-visit reading and a short training session

More Information

- [Info Guide](#)
- [Become a Discipline Expert Webinar](#)
- [Submit an Expression of Interest](#)

Once we find a match for your discipline, we'll reach out 3–12 months before the visit.

Further Information: Helen Fairweather hfairweather@engineersaustralia.org.au

AI SIG Update

This has been a very successful year for the SIG. Not only do we have several papers being presented at AAEE25 and other conferences, we also have had 6 journal papers published throughout the year. Our latest from the ethics cluster, [Exploring GenAI image generation in engineering: A thematic analysis of ethical and representational biases](#), explores how GenAI tools like Copilot and Canva often produce low-quality engineering images that reinforce racial, gender, and age stereotypes. The study highlights their limited diversity and provides a baseline for improving inclusive image generation.

We also held our second annual showcase, which highlighted innovative research being conducted through our membership. Members have also been active in outreach activities across our region. Our efforts have resulted in our membership increasing throughout the year. Many of our clusters are in the process of renewal as projects close and new ones open.

Engineering Registration & Chartered Information

There have been requests from the community for information to help academics better understand registration and becoming chartered. Engineers Australia, via its OnDemand platform, provides resources that can build this understanding. There are paid and free options. You will need to log in with your EA ID, which you have to become an AAEE member.

For videos on registration: <https://eaondemand.engineersaustralia.org.au/Search?searchtext=registration>

For videos on becoming chartered: <https://eaondemand.engineersaustralia.org.au/Search?searchtext=chartered>

Special Interest Groups (SIG)

Currently, AAEE has one active Special Interest Group — AI in Engineering Education. This SIG has already sparked several multi-institution collaborations, publications, and dissemination events.

Special Interest Groups are a powerful way to connect members who share common interests, foster collaboration, and advance emerging areas within engineering education.

We invite members of the community, especially those who have recently completed or are leading multi-institution projects, to consider forming new SIGs. Opening up your research ideas or thematic interests to the wider AAEE community can lead to fresh perspectives, stronger networks, and sustained impact.

Ideally, a SIG would commence with a committee of at least 5 people, from at least 3 different institutions. This provides a strong foundation for growth and sustainability. The SIG President should be prepared to dedicate time and effort to lead, motivate, and coordinate activities that drive collaboration and impact across the group. This workload availability is essential to give any SIG a positive chance at success.

If you have an idea for a new SIG, please contact me (sasha@uow.edu.au). Let's work together to expand the conversation and strengthen collaboration across our community.

Committee Contributions – Recognition of Efforts

The work of the AAEE Committee is often quiet, behind-the-scenes, and not always visible to our full community. I would like to take this opportunity to highlight and celebrate the contributions of each member, both to acknowledge their efforts and to inspire others to consider joining and contributing in the future.

I would like to commence with our two departing members:

Nick Brown: Nick has played a pivotal role in reforming the Education Portfolio. His leadership has included developing a strategy to strengthen the Research School, establishing policies and procedures for bidding and hosting the event, and successfully delivering this year's Research School at RMIT, one of the largest on record. Under his leadership, new roles such as the HDR Symposium Convenor and the Research School Convenor were introduced, complementing the existing ECR Academy Convenor. Nick's work has laid strong foundations that the incoming portfolio lead can continue to refine. He has also provided many valuable ideas across portfolios. A huge thank you to Nick for his tremendous efforts and legacy of improvement.

Sara Moridpour: Sara has been instrumental in transitioning our disparate collection of committee resources onto our Teams platform, creating a unified and reliable single source of truth. She also helped bring committee elections forward, enabling new members to attend the December meeting as observers and facilitating effective knowledge transfer. This work sets the stage for an important focus next year, reviewing and modernising our constitution under the incoming Secretary. Heartfelt thanks to Sara for her long-standing and dedicated service over many years.

For our continuing members:

Gavin Buskes and Maryam Moridnejad: Many of you will have noticed the more frequent and comprehensive newsletters and communications this year. This improved engagement is thanks to Gavin and Maryam's hard work and commitment to strengthening member communication. Communication is central to the success of any organisation and the connection to the community, so I thank them for driving this change. In the year ahead, they will turn their attention to enhancing our website - its content, design, and functionality, and exploring new ways to support community collaboration and knowledge sharing.

Tony Vo: Tony has provided outstanding leadership in reviewing and enhancing the processes and communications associated with the AAEE Awards. With a large number of high-calibre applications to evaluate, his work was substantial. He also identified confusion within our community around the dual steps of joining Engineers Australia and registering as an AAEE member. In response, he created an excellent step-by-step video guide, now available on our website. I encourage all members to share this resource and encourage others to join. One of next year's major activities will be strengthening the dissemination of award-winning practices across the community. Thank you, Tony, for your initiative and dedication.

Tania Machet: Tania has been deeply involved in improving the grants process, ensuring it was robust, clear, and successful. We received many strong applications this year, and Tania has developed several ideas to further strengthen applicant guidance and the assessment process for next year. She also integrated the new Whakatere

Grant into the program. Looking ahead, we are excited about the initiatives she will lead to better share grant outcomes with the wider AAEE community. Thank you, Tania, for your thoughtful leadership.

Sam Cunningham: Taking on the Treasurer role in a year when our surplus had significantly declined, and when 2025 required transitioning to a more sustainable financial position, was no small task. Thanks to Sam's diligence, our finances have stabilised, and we are now positioned to pursue new initiatives and opportunities next year. Thank you, Sam, for your steady hand and strategic guidance.

Steven Goh: As Past President, Steven has been an invaluable source of historical insight and governance advice. His portfolio expanded this year to support both the Awards and Grants portfolios, as well as oversight of the AJEE Editor. His contributions have ensured continuity, stability, and effective operation across key areas. Thank you, Steven, for your unwavering support.

Enda Crossin: Serving as Vice President and Conference Portfolio Lead, Enda has made enormous contributions, ensuring alignment with best practices and advancing several important initiatives. Chief among these is the establishment of the new Whakatere Grant scheme. He has provided excellent support to this year's Conference Committee and has also been exploring the feasibility of having our conference proceedings indexed in Scopus, an important step for the future of AAEE. He helped shape our strategic plan, ensuring continuity when the leadership transition takes place. We deeply appreciate Enda's forward-thinking leadership.

Non-Voting members:

Greg Birkett and Melanie Fleming: Only those who have run a conference truly understand the time, commitment, and complexity involved. Greg and Melanie have risen to every challenge, going above and beyond to support initiatives and ensure AAEE25 is a resounding success. My sincere thanks for all you have done, and all you will do in the coming weeks.

Iain Skinner: Despite being officially retired, Iain has continued to provide extraordinary service to our community. As the ECR Academy Convenor, he has played a vital role in supporting and nurturing emerging leaders in engineering education. His guidance, encouragement, and steady hand have had a long-lasting positive impact on all who have engaged with the Academy. Our sincere thanks to Iain for his dedication and invaluable contributions.

Scott Daniel: As Research School Convenor, Scott stepped up to help transition the school to a new generation of facilitators, building on the enormous contributions Anne Gardner had led in the years prior. He helped deliver a RS that has received substantial praise from all participants. Much appreciation, Scott, for fitting this in within your busy workload.

Sally Male: As the long-standing Editor of AJEE, Sally has overseen a remarkable rise in the journal's reputation and quality. AJEE is now consistently ranked as a Q1 journal, and community contributions have increased significantly. I encourage all members to aspire for at least one AJEE publication. Her leadership is supported by a dedicated team of deputy and associate editors, an engaged editorial board, and a committed reviewer community. Thank you, Sally, and thank you to the entire editorial team for your exceptional work.

Prasad Yarlagadda: As the representative of the Australian Council of Engineering Deans (ACED), Prasad plays an important role in connecting our work with national leadership. His insights, advice, and support have been invaluable. Thank you, Prasad, for your continued partnership.

Helen Fairweather and Brett Williams: Representing Engineers Australia and Engineers New Zealand, respectively, Helen and Brett provide critical linkage between AAEE and the professional bodies that uphold the quality of engineering education and the profession more broadly. Their support, alongside the broader EA team, who assist with accounts, documentation, elections, logistics, and more, ensures our organisation functions smoothly. This contribution is often unseen, but deeply appreciated. Thank you both, and to the rest of the EA team.

Have a great December

Sasha Nikolic