







# What's on in AAEE?

2025-Edition 7- October



- President's Message
- 2025 AAEE Annual Conference
- AAEE Higher Degree by Research (HDR) Symposium
- History Committee
- Call for Early Career Academy Applications
- REMINDER: Whakatere | Navigation Grants 2026 due 31 October
- Seeking a Host for the 2026 AAEE Engineering Education Research School
- AAEE members receive EJEE and SEFI awards
- AAEE at WEEF 2025 in Daegu, South Korea | 21–24 September 2025
- Become an Accreditation Discipline Expert for Engineers Australia
- October CREITE meeting
- AI SIG Update
- Calls for Expressions of Interest in Hosting AAEE in 2028
- Engineering Registration & Chartered Information
- AJEE News

# President's Message

#### Dear Members

With AAEE25 just around the corner, please finalise your registration and travel. I note that the HDR Symposium will be held on the Sunday again. This worthy event for HDRs is being organised by Amy Young and Sarah Dart. It 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.

Nominations for the AAEE Committee 26/27 recently closed. Good luck to everyone who applied. Soon you will receive further communications regarding voting. I encourage all members to vote.

Well done to all members who have submitted grant and award applications. I wish you all the best. Don't forget that the newly established Whakatere Navigation Grants are still open.

SEFI is a well-respected sister association, and many AAEE members engage with their services and opportunities. This year, many Australasians received much-deserved recognition at the SEFI2025 Annual Conference in Tampere, Finland. For the second year in a row, AAEE members have taken out the EJEE Best Paper award, with it going to Swapneel Thite, Jayashri Ravishankar, Inmaculada Tomeo-Reyes and Araceli Martinez Ortiz from the University of New South Wales for their paper "Design of a simple rubric to peer-evaluate the teamwork skills of engineering student." The Best Practice Paper award went to Ruth Fisher, Divya Nair, Javier Mario and Shamin Aryampa from the University of New South Wales for their paper "Reviewing Reviews: Using Multistage Peer Reviews to Provide Feedback and Improve Student Learning." The Leonardo da Vinci Medal, SEFI's highest distinction, was awarded to Arnold Pears (currently at KTH Royal Institute of Technology).

A huge congratulations to all the winners. With AAEE just around the corner, I am looking forward to further congratulations and celebrations. If you have or know someone who has won a major award, then please let me know so that I can promote their success.

There was no executive committee meeting held since the last newsletter to report on.

Have a great October.

Sasha Nikolic

# 2025 AAEE Annual Conference



AAEE2025 is shaping up to be an interesting and provocative examination of the theme Engineering education: between the human and the digital. The keynote speakers are ready to dive into the theme but so too is the engineering education community based on submissions received so far!

Please note that recently the Australian Men's Test Ashes has been scheduled for 4-8 December in Brisbane. As a result, this has put a huge strain on Brisbane accommodation options. Anyone planning to attend the conference is encouraged to book flights and accommodation as soon as they can.

# 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 **December 7** in the lead up the AAEE conference welcome event. Further details will be announced in due course.

We invite Masters by Research and PhD candidates in EER to apply to participate in the AAEE HDR Symposium by submitting the <u>expression of interest (EOI) form</u>.

We welcome both new and returning participants who are at any stage of their candidature. Fields of interest include those outlined in the aims and scope of the <u>Australasian Journal of Engineering Education</u> and the 2025 AAEE Conference.

The deadline for submission is October 31, 2025, with decisions returned to applicants by November 7, 2025.

Accepted participants will be required to prepare a summary slide of their work for facilitated group discussions (further details provided to those accepted) and register for the main AAEE conference.

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

# History Committee

We are also committed to preserving and celebrating AAEE's history. To that end, we would like to form an AAEE History Committee to develop a dedicated 'history' page on our website. Volunteers are invited to help curate resources and shape how we present our rich heritage.

Please contact Sasha sasha@uow.edu.au if you are interested

# Call for Early Career Academy Applications

AAEE now encourages applications for The Academy of Early Career Engineering Educators (closing date Friday 14 November 2025).

This leadership and professional development program supports early career education-focused academics through networking of like-minded people and professional development opportunities. More details and the application form is available at <a href="https://aaee.net.au/academy/">https://aaee.net.au/academy/</a>

Questions can be directed to the Academy Convenor Iain Skinner (<u>i.skinner@unsw.edu.au</u>) or AAEE Committee member Nick Brown (<u>nick.brown@rmit.edu.au</u>)

# REMINDER: Whakatere | Navigation Grants 2026 - due 31 October

A reminder that applications for the **Whakatere** | **Navigation Grants** are closing soon! Note that no extensions to this date are possible. Please see below for further information.

Are you an early or mid-career engineering academic passionate about transforming engineering education?

Following the success of the 35<sup>th</sup> AAEE Conference in Ōtautahi | Christchurch, and with financial support from the New Zealand Council of Engineering Deans, the first applications for the **Whakatere** | **Navigation Grant** scheme is now live.

The **Whakatere** | **Navigation Grants** will support innovative, collaborative research projects that address key challenges in engineering education across **Aotearoa New Zealand and the Pacific**. Backed by AAEE and Engineering New Zealand | Te Ao Rangahau, these grants empower academics from Engineering New Zealand accredited institutions from to lead impactful projects, build national and international partnerships, and contribute to the growing community of engineering education researchers. Successful applicants can bid for funding for project activities, salary recovery, and AAEE conference travel. The total funding pool for 2026 is NZD\$25,000 ex. GST. One or two projects will be funded, commencing in 2026. Projects must demonstrate strong institutional support and a clear plan for impact and dissemination. Named investigators must be <u>AAEE members</u> at the time of application, and the Principal Investigator must be from an <u>institution accredited by Engineering New Zealand</u>.

Applications close **31 October 2025**. Don't miss this opportunity to shape the future of engineering education in the Pacific! Learn more at <a href="https://aaee.net.au/current-grants">https://aaee.net.au/current-grants</a>

Submit your application to <a href="mailto:aaee@engineersaustralia.org.au">aaee@engineersaustralia.org.au</a>

# Seeking a Host for the 2026 AAEE Engineering Education Research School

The Australasian Association for Engineering Education (AAEE) is seeking Expressions of Interest from universities to Host the 2026 AAEE Engineering Education Research School.

Since 2011, The EER School (previously known as Winter School), has directly supported over 200 participants to develop the knowledge and skills required to successfully undertake EER. The EER School has traditionally been hosted by a university to provide an in-person active and engaging training environment that connects novice, emerging and experienced education researchers. Hosts of the EER school receive a free place and

benefit from significantly reduced travel and accommodation expenses for participants from their institution. In return the host provides a venue and catering for the 5-day event. For reference, the 2025 EER School was hosted at the RMIT Activator in Melbourne.

Universities or consortia interested in hosting the 2026 Engineering Education Research School should contact Nick Brown (AAEE Executive Committee – Education Portfolio) <u>nick.brown@rmit.edu.au</u> to receive an Application Pack. Applications will be due by Friday 14th November 2025 with all applicants notified of the outcome by Tuesday 25th November 2025.

#### AAEE members receive EJEE and SEFI awards

Congratulations to a number of AAEE members who have picked up EJEE's Best Paper Award and the Best Practice Paper at the 2025 SEFI Conference in Tampere, Finland. It's great to see our members having such a strong presence in Europe!

#### **EJEE Best Paper Award**

Teamwork is consistently highlighted as one of the most important professional skills for engineers. Yet, assessing it fairly and consistently remains a challenge, with many existing approaches fragmented across disciplines.

To help address this, the *DRIVE rubric* was developed. It is a simple, reliable, and student-friendly tool designed for peer evaluation of teamwork. Grounded in both a broad literature review and experiential learning theory, the rubric brings together five core dimensions of teamwork: dispute management, reflection and feedback, information sharing, versatile leadership, and ethical behaviour.

When trialled with postgraduate engineering students, the *DRIVE rubric* showed strong validity and reliability, with peers assessing each other on par with trained teaching assistants. We hope this tool encourages educators to spark reflection, foster teamwork awareness, and open up conversations about the skills that matter most in professional practice.

Further details can be found in the published paper: "Design of a Simple Rubric to Peer-Evaluate the Teamwork Skills of Engineering Students" by Swapneel Thite, Jayashri Ravishankar, Inma Tomeo Reyes, and Araceli Martínez Ortiz, published in the European Journal of Engineering Education. https://doi.org/10.1080/03043797.2024.2338239

#### **Best Practice Paper at 2025 SEFI Conference**

Teaching students to give and receive feedback is crucial for engineering practice, but we don't always do this explicitly in our courses. Peer feedback is a good way to teach them how to give feedback but is not always implemented in a structured way. So, we decided to try something different: instead of just having students review each other's work, we had them review the reviews themselves - a "meta-review" approach.

We tested this approach in four different courses from the School of Civil & Environmental Engineering, using different types of assignments from site reports to sustainability presentations. The process consisted of three main steps: students submitted work, peers reviewed it, then the original authors evaluated the quality of the feedback they received.

We analysed all the written feedback using LLM-assisted thematic analysis and found that students valued feedback that was specific, actionable, constructive, and professionally toned. When we compared reviewers who were experts in the topic versus those who weren't, both groups provided useful but different types of feedback - experts caught technical issues while non-experts focused on communication and structure. In one course where we tracked grades before and after the feedback process, student performance improved (from 7.99 to 8.54 out of 10). Students also reported feeling more confident about understanding what was expected of them.

The meta-review method offers a practical way to teach feedback literacy while improving student learning outcomes. It's scalable, adaptable to different courses, and addresses a real gap in how we prepare students for professional practice.

Further details can be found in the <u>published paper</u>: R.M Fisher, D.J Nair, Mario, J. V., & Aryampa, S. (2025). Reviewing Reviews: Using multistage peer reviews to provide feedback and improve student learning. Proceedings of the 53rd Annual conference of SEFI 2025, Tampere, Finland.

# AAEE at WEEF 2025 in Daegu, South Korea | 21–24 September 2025

A/Prof Steven Goh, Immediate Past President of AAEE and VP (Engineering Education) of IFEES represented the association at the World Engineering Education Forum (WEEF) 2025, held in Daegu, Korea. He co-hosted the IFEES Forum, a 75-minute session that aims to explore collaborative opportunities for engineering education societies to work together on new global initiatives and explore opportunity to share resources. He delivered a concise 5-minute pitch which introduced AAEE's mission in Australia, NZ and South Pacific, our programs and initiatives, and proposed collaborative opportunities for global engagement in engineering education, especially for early career academic development and networking.

In addition to the IFEES Forum, Steven also presented at the International Session of the Korean Society for Engineering Education (KSEE) annual conference, alongside representatives from the Chinese Society for Engineering Education (CSEE) doing the same. His presentation highlighted AAEE's commitment to advancing engineering education through the various programs and awards, professional development, research and journal, and regional collaboration in the Australasian and South Pacific regions. There were also several papers presented by AAEE members from Monash University, UTS, and Curtin University at the conference.

The overarching theme of WEEF 2025 focused on diversity and capacity building, AI in engineering education, and sustainability and peace engineering. With over 30+ regions represented, the forum provided a vibrant platform for cross-cultural exchange and strategic dialogue on the future of engineering education. WEEF2026 will be hosted in Cartagena, Columbia.

# 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 <a href="mailto:hfairweather@engineersaustralia.org.au">hfairweather@engineersaustralia.org.au</a>

#### October CREITE meeting

October CREITE session Wed 15th 1230-2pm - SEFI in Sydney!

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 1230-2pm, Feb-Nov.

Our next CREITE session is planned for Wednesday October 15, 12:30-2 (as usual, lunchtime on the third Wednesday of each month, February to November). This session we'll be focusing on hearing some highlights from the recent SEFI Conference (held in Tampere, Finland).

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

The annual SEFI conference is a warm and welcoming environment for exploring the latest in engineering education research in Europe. However, it falls at an awkward time for our Southern hemisphere semesters, so in this session we're hoping to bring a little taste of SEFI to you.

#### What is it?

In this session we will hear from a few CREITE members who presented at the recent European Engineering Education Research (SEFI) conference - what they presented and their reflection on the experience.

Join us 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
- · Peter Neal <u>peter.neal@unsw.edu.au</u>
- · 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. The different clusters have had a range of papers and workshops accepted for AAEE2025. The members look forward to presenting their latest research. It appears the AI Stream will be jammed packed, so there will be lots of sharing taking place.

New Blog Post: Teacher + AI as Co-Creators: GenAI doesn't replace me; it extends what I can offer – Hamish Fernando from the University of Sydney provides an example of how GenAI can be used to reimagine learning resources. By using AI as a co-creator, his own creativity can be turned into reality. Students take part in a long-running science fiction story, adding gamification to enhance the learning experience. Developing such a resource would normally be workload-prohibitive!

https://www.aaieec.org/post/teacher-ai-as-co-creators-genai-doesn-t-replace-me-it-extends-what-i-can-offer

# 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.

# **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: <a href="https://eaondemand.engineersaustralia.org.au/Search?searchtext=registration">https://eaondemand.engineersaustralia.org.au/Search?searchtext=registration</a>

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

#### AJEE News

# Latest Papers in the Australasian Journal of Engineering Education (in order of date published)

Yun, M., & Crippen, K. J. (2025). Work systems in underwater ROV operations: educational insights for workforce development in maritime engineering. *Australasian Journal of Engineering Education*, 1–17. https://doi.org/10.1080/22054952.2025.2485010

O'Connor, S., Power, J., Blom, N., & Tanner, D. (2025). Engineering students' perceptions of problem and project-based learning (PBL): comparing online and traditional face-to-face environments. *Australasian Journal of Engineering Education*, 1–25. https://doi.org/10.1080/22054952.2025.2493419

Richter, T., & Kjellgren, B. (2025). Comparing peer-reviewed competence frameworks for engineers: a systematic review and critical discussion of backgrounds, development, and content. *Australasian Journal of Engineering Education*, 1–22. <a href="https://doi.org/10.1080/22054952.2025.2509390">https://doi.org/10.1080/22054952.2025.2509390</a>

Forero-Gómez, A., Valdez Jiménez, W., Rojas-Chávez, A., Rosado-Mendinueta, N., Benítez-Velásquez, T., Yepes-Martínez, J., ... Pastrán Chirinos, M. Y. (2025). Exploring the role of writing in the Mechanical Engineering curriculum: an integrative approach. *Australasian Journal of Engineering Education*, 1–14. https://doi.org/10.1080/22054952.2025.2517947

Techanamurthy, U., Chuah, K. M., & Yee, I. van. (2025). Developing engineering students' empathy skills using serious games in project management: an exploratory study. *Australasian Journal of Engineering Education*, 1–15. <a href="https://doi.org/10.1080/22054952.2025.2538329">https://doi.org/10.1080/22054952.2025.2538329</a>

McHenry, R., Krishnan, S., Beer, A., & Tuck, L. (2025). Towards the development of hydrogen engineering education curriculum in Australia: recommendations from the world of engineering practice. *Australasian Journal of Engineering Education*, 1–18. https://doi.org/10.1080/22054952.2025.2559486

McHenry, R., & Krishnan, S. (2025). Observations of cultural influences on sociotechnical practices of three early career engineers: a multiple case study analysis. *Australasian Journal of Engineering Education*, 1–19. https://doi.org/10.1080/22054952.2025.2565027