



Australasian Association for
Engineering Education



What's on in AAEE?

2024 Edition 2 - May

- AAEE2024 Conference Update
- New AJEE Articles Available and JEE special issue
- AAEE2026 Conference Announced
- 2024 AAEE Engineering Education Grants
- Early Career Academy Application Open
- Webinar: GenAI in Engineering Education

AAEE2024 Conference Update

EVENT:

AAEE 2024 – Call for full papers and workshop expressions of interest



ŌTAUTAHI CHRISTCHURCH AOTEAROA NEW ZEALAND

**35TH AUSTRALASIAN
ASSOCIATION FOR
ENGINEERING EDUCATION
ANNUAL CONFERENCE**

**8-11 DEC
2024**

THE ENGINEER AND THE WORLD

Authors in all areas of engineering education are invited to submit full papers and expressions of interest for workshops, with a particular emphasis on the following topics:

- Innovative pedagogy
- Learner perspectives
- Graduate outcomes
- Community and industry needs

Authors are encouraged to identify alignment with the [United Nations Sustainable Development Goals](#).

Templates and a submission link are available via the conference website: www.aace2024.org.

Full papers can be submitted without an associated abstract submission.

Authors who have submitted an abstract will receive a notification of the review and instructions for full paper submissions at the end of the month.

[Registrations](#) for AAEE2024 are now open & we look forward to welcoming you. Nau mai haere mai ki Ōtautahi!

Please refer your questions by email to aace24@easychair.org

UPDATE:

Australian Journal of Engineering Education (AJEE)

Have you seen the [latest from AJEE?](#)

- Gratchev, I., Howell, S., & Stegen, S. (2023). [Academics' perception of final examinations in engineering education.](https://doi.org/10.1080/22054952.2023.2284484)
- Simpson-Smith, C. (2023). [Recontextualising the teaching learning cycle within engineering education to improve the development of written communication skills.](https://doi.org/10.1080/22054952.2023.2287297)
- Kadam, K., Mishra, S., Iyer, S., & Deep, A. (2024). [Unfolding learning difficulties in engineering drawing problem solving.](https://doi.org/10.1080/22054952.2024.2309703)
- Khin, M. N., Nopparatjamjomras, S., Chittaree, R., & Nopparatjamjomras, T. R. (2024). [Development of the Bipolar Junction Transistor Diagnostic Test \(BJTDT\) to explore the second-year undergraduate Myanmar electronic and Thai electrical engineering students' understanding of BJT working principles and applications.](https://doi.org/10.1080/22054952.2024.2347792)
- De Zoysa, R., Male, S., & Chapman, E. (2024). [Motivation and the role of empathy in engineering work.](https://doi.org/10.1080/22054952.2024.2346410)

Call for papers:

The Journal of Engineering Education (JEE) Special Issue: Generative Artificial Intelligence in Support of Engineering Education Research and Other STEM Disciplines

Special Issue Guest Editors

Alejandra J. Magana, Purdue University (Lead Editor)
Ryan Watkins, George Washington University
Camilo Vieira, Universidad del Norte, Colombia

Generative Artificial Intelligence (AI) technology will substantially disrupt industries across economies, where education is not the exception (Johri, Katz, Qadir, & Hingle, 2023; Menekse, 2023). AI has the potential to address some of the pressing challenges in education, innovate teaching and learning practices, and accelerate progress towards equitable quality education (Miao & Holmes, 2023; Shiohira, 2021). Examples of how generative AI can be integrated into the context of teaching and learning, along with its opportunities and challenges in education, have started to emerge (e.g., Alasadi & Baiz, 2023; Baidoo-Anu & Ansah, 2023; Cao & Dede, 2023). In tandem, generative AI has the revolutionary potential to support or supplement (but not supplant) research. It can provide unique functionalities to process datasets, make predictions, and learn from its actions. However, research is needed “to demonstrate the efficacy and accuracy and to ensure that human agency in understanding the real world through research will not be undermined by the use of AI tools” (Miao & Holmes, 2023, p. 29). The editors of this special issue in the Journal of Engineering Education are interested in receiving manuscripts that showcase ways in which generative AI can be used to support engineering education research workflows. For instance, generative AI can support researchers (a) in the design and development stages of research by creating consistent experiences, (b) in the deployment stages by monitoring participant engagement, and (c) in the analysis stages by supplementing data analysis processes, among others (Charness, Jabarian, & List, 2023). Important considerations will be an emphasis on the validity and reliability of the AI-generated results, aspects of reproducibility and transparency, such as the use of embedding models or agents, fine-tuning for testing and performance, and the overall impact of the interpretations and implications of the AI-generated results and methodological contributions of the overall process (Hosseini & Horbach, 2023; Watkins, 2023). Investigating the potential uses, benefits, and limitations of the use of generative AI is timely; thus, we must establish conventions and standards for their application in education research (Watkins, 2023). Authors are highly encouraged to explicitly address equity ethics, bias, privacy, and security considerations, as applicable. For manuscripts in the context of other STEM domains outside of engineering, authors are advised to address implications for engineering education research.

Estimated Timeline

Call for special issue publicized:	May 1
Letters of intent with an extended structured abstract (around 1,500 words long):	August 1
Preliminary editors' feedback:	September 1
Submission of full manuscripts (~7,000–10,000 words long):	November 1
Notification of Reviewers' feedback:	January 30
Revised manuscript submission:	March 1

Correspondence and procedure for extended abstract submission:

Submission: The extended structured abstract should be submitted via email to JEE_Spe.djl3matzz685smdq@u.box.com with a copy to the Lead Guest Editor, Ale Magana, via admagana@purdue.edu

Preliminary Feedback: The authors will receive feedback on the extended abstracts via email as soon as submissions are received, along with instructions for submissions of full manuscripts. This step will ensure alignment with the special issue goals and also help editors start identifying suitable reviewers. Please note that positive feedback in this abstract stage does not guarantee the full paper's acceptance following the peer review process.

Full manuscripts: Manuscripts for the special issue will be submitted through the journal's online system, Research Exchange Journal of Engineering Education (wiley.com). Manuscripts will undergo a review process similar to that of regularly submitted papers. Special instructions for identifying your submission to the special issue will be sent with the preliminary feedback on the extended abstract.

Accepted papers: Manuscripts that are accepted will be published online as soon as the review and production processes are complete and will be compiled into the special issue (assigned to an issue and volume) once all articles for the special issue are published online. Questions pertaining to the special issue should be directed to admagana@purdue.edu

AAEE2026 Conference Announced

UPDATE:

UNSW Announced as Winners to Host AAEE in 2026

Following a two-stage process, the AAEE has approved the bid from the University of New South Wales to host our 37th conference, AAEE2026, in Sydney. The conference theme is 'Making the Impossible Possible'. As a reminder, AAEE2025 will be hosted by the University of Queensland in Brisbane.

Calls of Expressions of Interest in Hosting AAEE in 2027

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 AAEE2027 is **due on 18 November 2024**. 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 AAEE committee is currently reviewing the bid documentation, and we expect the 'Procedures to Host the 2027 conference' to be made available on the AAEE website by the end of July at the latest. In the meantime, please contact sasha@uow.edu.au with any questions or queries.

2024 AAEE Engineering Education Grants

INFORMATION:

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. 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.

Further information about the 2024 AAEE Engineering Education Grants will be sent out at the end of May.

Early Career Academy Applications Open

INFORMATION:

Call for Early Career Academy Applications

AAEE now encourages applications for its Academy of Early Career Engineering Educators.

This leadership and professional development program focuses on mentoring and supporting early career education-focused academics. It aims to inspire, motivate and educate its members through close networking of like-minded people, who will assist with professional development, employability and leadership potential in engineering education.

For more details and for candidate (& mentor) application forms, see <https://aaee.net.au/academy/>

If you need further information, then contact the current Academy Co-ordinator, Iain Skinner i.skinner@unsw.edu.au

Webinar: GenAI in Engineering Education

EVENT:

AAIEEC is pleased to announce its first webinar, a crucial platform showcasing Australasian engineering education-based GenAI projects and implementations and research studies. The event will be held on the 28 June 2024 10:00am to 12:30pm (Sydney time). More details: <https://www.aaieec.org/post/genai-webinar-28-june-24>