Whakatere | Navigation Grants for 2027

Introduction

The 35th Australasian Association of Engineering Education Annual Conference in Ōtautahi | Christchurch was a resounding success. This success resulted in a surplus of funds. Following this and together with the financial support of the New Zealand Council of Engineering Deans, and the in-kind support of AAEE and Engineering New Zealand, the Whakatere | Navigation Grants were established to support engineering education research in Aotearoa |New Zealand and beyond.

These instructions provide information for applicants and their institutions for the Whakatere | Navigation Grants. Three funding rounds have been made available; one in 2026, 2027 and in 2028. These guidelines relate to the Whakatere | Navigation Grants for 2027, herein termed the 'Grants'.

The information covers the selection criteria, the application process, and the selection processes. The Grants encourage **Engineering Education Research** excellence by supporting a Team, lead by a Principal Investigator in New Zealand and/or the Pacific, and supported by Co-Investigator(s). The Team will possess the desired mix of demonstrable expertise and skills and/or are emerging leaders in the field to:

1. identify engineering educational issues and to facilitate an evidence-based approach to address these issues
2. raise the profile of engineering education research
3. show leadership in promoting and enhancing engineering education research
4. establish and build on national and international partnerships in engineering education research
5. foster national collaboration and collegial networking for sharing research, innovation and good practice in engineering education
6. contribute to the growing community of engineering education researchers in higher education

Grant Program Support

The Grants aim to support **one or two (2) projects over a period of between 1 and 2 years** through provision of funding. **Up to two projects will be funded to a maximum of NZD$25,000 ex. GST per project. The total funding pool for 2027 is NZD$25,000 ex. GST.** Grants will be paid at the commencement of the project.

The nature of project activities

AAEE seeks to select projects that have identified an issue of relevance across the engineering education sector in New Zealand and/or the Pacific, either within engineering discipline(s) or across disciplines, and designed a programme of activities with the capacity to draw collaborative expertise from other institutions, and create significant impact.

Project activities should be designed to draw upon and build the team members' particular areas of expertise. While all projects should address the aims of the Grants, the specific activities suited to a project will depend upon the research question(s) identified by the researchers. This grant scheme is designed for **early or mid-career engineering academics** to lead a scholarly or research project as either Principal Investigator(s) (PI) or as a Co-Investigator (CI) that will have a significant and broad

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impact to the engineering education sector. More senior academics can participate as a CI or through in-kind contributions (in a mentoring or coaching capacity).

The response to the selection criteria should include the academic record, professional standing and/or leadership capabilities of the PI and CI(s) in relation to engineering education research. The significance of the engineering education issue to be addressed by the proposed project is an important consideration, as is the originality and viability of the activities and the likely breadth and depth of impact of the outcomes.

To be successful, the applicants must include strong statements of support and/or in-kind support from their home institution(s). The Grant will fund salary costs (including salary recovery and salary on-costs). The Grant will not fund institutional and/or departmental overheads.

Grant Funding Objectives

The Whakatere | Navigation Grants aim to foster collaborative research projects that will have a positive impact on engineering education. To fulfil this objective, the application will:

1. identify an engineering education issue, within or across the discipline, and facilitate an approach to addressing the issue
2. show leadership in promoting and enhancing engineering education research, within and beyond their home institution
3. establish and build on partnerships in engineering education research across institutions, ideally within New Zealand and/or the Pacific and beyond
4. foster networks and dissemination of project outcomes with the AAEE community and wider engineering education communities (e.g. publication at AAEE conference or in the Australasian Journal of Engineering Education)

The funding will normally support project activities **within a calendar year period**. Applications which involve human participants must account for the time needed to prepare, apply for and secure ethical approval from their institutions in the project plan within the time period of the project.

The project can provide for part-time release from academic activities for the funded period. Outside this funded period, the applicant will undertake project activities through the in-kind support of their home institution(s). The applicant should actively contribute to the AAEE community of scholars during the project period.

Eligibility

The Principal Investigator (PI) must be a current member of **AAEE and must be employed by an institution which offers an Engineering New Zealand Accredited Engineering Qualification**. The Principal Investigator will be an **academic** engaged in scholarly practice and/or engineering education research in higher education or equivalent at the Lecturer, or Senior Lecturer level or equivalent.

Named Co-investigators (CIs) who are engineering academics must be current AAEE members. CIs need to be academics employed at a tertiary institution. CIs do not need to work at an institution offering an Engineering New Zealand Accredited Engineering Qualification. Named CIs will be at the Lecturer, Senior Lecturer, Associate Professor or Professor level.

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The PIs and CI(s) will have demonstrated expertise and scholarship in a field of relevance to the proposed project activities, including engineering education research or affiliated disciplines. The application should clearly identify the PI and the CI(s). Any conflicts of interest should also be declared in the application.

Senior researchers (e.g. at the level of Associate Professor or Professor) can be named in an advisory or mentoring capacity.

Individuals can be part of multiple project teams (and thus on multiple grant applications), but they must be separate bodies of work.

Only one application per team will be accepted in a single call.

The research activities must not previously have been funded from another source.

Only one (1) application form from one (1) institution is required for multi-institutional applications, however **ALL institutions' letter of support** for the PI and named CIs must be attached to the application.

Selection Criteria

The following three criteria will be applied in the selection of Whakatere | Navigation Grants 2027. The selection criteria are:

1. Track record and collaboration (30%)

• Research track record of the PI and CIs, relative to opportunity

• Ability of the Team to deliver on proposed activities, including the:

- Mix of expertise required to deliver the project
- Track record of research collaboration (which can include with other PI / CIs) or active contribution to collegiality
- Evidence of impact in engineering education research or affiliated disciplines.

2. Alignment with grant aims and research quality (60%)

Proposals will be assessed on the degree to which the proposed project aligns with the aims of the Grants and demonstrates a rigorous and feasible research plan, with a view to achieving meaningful impact. The alignment with grant aims and research quality will be assessed against:

- **Significance**: The importance of the engineering education issue being addressed and its relevance to current and future challenges in the field.
- **Impact and Reach**: The potential of the project to influence engineering education practice, including the breadth of this impact.
- **Originality and Innovation**: The extent to which the project introduces novel ideas, approaches, or tools in engineering education.
- **Research Design and Methodology**: The coherence, appropriateness, and robustness of the research design and methods, including clear articulation of research questions, data collection and analysis strategies, and ethical considerations. Applicants are strongly encouraged to engage with relevant engineering education research literature, including the Australasian Journal of Engineering Education and the AAEE Conference Proceedings.

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- **Feasibility and Viability:** The practical viability of the project activities within the proposed timeline and budget, the realistic plan for achieving intended outputs.
- **Impact**: The potential for the project to have a lasting impact, including consideration of scalability, sustainment, or adaptability.

3. Endorsement and support from the PI and CI(s) home institution(s) (10%)

Detail the direct and indirect support that the institution will provide during the project. Similar statements of support are required from all participating institutions if the proposed activities include extensive involvement with institutions other than the applicant's institution. This statement should be provided and signed by the appropriate financial delegate

The selection process

Applications are assessed on the basis of the documents provided, including the PI and CI(s) curriculum vitae(s) and references, research proposal, and the statement(s) of institutional support.

This assessment is carried out by a panel nominated by the AAEE Executive Committee. The panel reviews all applications and assessments. The final selection of project rests with the AAEE Executive Committee. Decisions will be based on the panel's recommendations. In making its recommendations, the panel will consider the funding requested relative to the total funds available and may propose an alternative budget if necessary. Where appropriate, the panel may also recommend collaboration between applicants. The AAEE Executive Committee reserves the right not to award any projects.

Successful applicants will be notified and announced by December 2026, and the successful projects are expected to start from February 2027.

Project activities, outputs and impact

Research proposal and plan

Applicants are required to develop a robust research proposal, grounded in academic literature. This proposal should describe the project, the background to the project, a literature review, the research question, the project objectives, the methodology, a research plan including provision for human ethics (as needed), and a plan for impact and evaluation (see below), including the expected outputs and dissemination strategy. A reference list should be included. The referencing style is not prescribed.

The research plan should include a work-breakdown structure of the activities required to complete the objectives, including anticipated start/end dates, and which investigator(s) are assigned to each of these activities. The research plan should be presented in a table or in a Gantt chart.

The contribution of each team member to the proposed research must be detailed, and named investigators need to demonstrate prior successful research collaboration (not necessarily with the other named investigators).

Applicants are required to identify any other funding sources for the proposed project. The research activities must not previously have been funded from another source.

A plan for impact

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Broad impact and influence are the cornerstones of a successful project. It is therefore important to project and plan for impact as part of the design and development of the proposal. AAEE expects a systematic approach to be taken to achieve impact and encourages the use of the Impact Management Planning and Evaluation Ladder (IMPEL). Information about impact and IMPEL is available in Appendix A.

An important way to achieve impact is through effective dissemination and engagement with project activities. Such approaches may involve strategic engagement with relevant groups within institutions and outside the engineering education sector, and the creation of opportunities to promote their project activities and to explain their goals and outcomes. A dissemination strategy should be included in the project proposal.

Evaluation of the project

Successful applications will include evaluations of projects – this encompasses the activities, outputs, outcomes and impact. An evaluation strategy should be included in the project proposal.

Grant funding

Applicants are required to submit a fully itemised budget and justification for the funds being requested. The funds provided to successful applicants will be administered by their home institution(s) and invoices must be raised within the calendar year of the award. **A maximum of NZD$25,000 (ex. GST) cash funding is available**.

AAEE acknowledge the support provided by the Organising Committee for the 35th Australasian Association of Engineering Education Annual Conference, the New Zealand Council of Engineering Deans (NZCED) and Vocational Engineering Education New Zealand, who contributed support for the Whakatere | Navigation Grants.

Employment costs

The grant funding can be used for salary recovery for the Principal and/or Co-investigator (s) base salary, plus on-costs (e.g. ACC, KiwiSaver) at their home institution(s) at rate of up to 28%. Salary on-costs must be fully detailed and this upper limit is not to be treated as an indication of overhead recovery. The use of salary-recovery (e.g. to 'buy-out' teaching) is at the discretion of the institution.

Employment of temporary research staff at the PIs or CIs home institution is permitted, including a base salary and on-costs (e.g. ACC, KiwiSaver). Salary on-costs must be fully detailed. Such staff should be identified as an unnamed CI.

Student stipends and fees

The grant funding can be used for funding student stipends (undergraduate and/or postgraduate), funding fees for postgraduate research students (in partial or full). Funding cannot be used for student service levies for students.

Expenses not covered

- Depreciation or procurement of equipment, including electronic devices
- Consumables or software licences
- Institutional or departmental overheads

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- Building works
- Purchase of motor vehicles
- General recurrent funding
- Travel which is not directly related to achieving the outcomes of the project

Conference travel

Funding can be used for travel and attendance at the annual AAEE conference: for conference registration fees, economy class flights and/or accommodation for one investigator (PI or one CI or one student). Applicants are advised to include this as a single budget item of **up to NZD$2,500 (ex. GST) per application.**

Project Reporting and Acknowledgement

Successful applicant(s) will provide reports and information to the AAEE Executive Committee:

- An interim, or progress, report due halfway through the project period, which articulates progress made against the plan of activities and intended outputs, and including a statement of expenditure of funds. This is intended to be no more than one page.
- A final report that profiles the outputs and impacts of the project, highlighting the impact the project has had and can have in the future, and describing how others (scholars, students, institutions, and profession as relevant) can make use of what has been delivered and achieved. The report will also briefly document how the project was undertaken, including activities.
- A financial acquittal of all expenditure associated with the project is submitted with the final report.
- A presentation of the outcomes of the project as a webinar and/or recorded presentation for dissemination to the wider AAEE community.

The final report and financial acquittal must be submitted to the AAEE Executive Committee **within three months** of completing the project. The successful applicant(s) will provide the AAEE Executive Committee with a complete set of any publications and materials produced, electronically and in an appropriate format.

For all research outputs, successful applicants will be required to acknowledge AAEE and Engineering New Zealand, as well as the financial support provided by the Organising Committee for the 35th Australasian Association of Engineering Education Annual Conference, the New Zealand Council of Engineering Deans (NZCED) and Vocational Engineering Education New Zealand, who contributed support for the Whakatere | Navigation Grants.

Invoicing

Invoicing for the grants will be managed by Engineering New Zealand, in conjunction with AAEE. Grants will be payable in the first year of the project.

APPLICATION INSTRUCTIONS

Applications must include the documentation, presented in this order and labelled, Parts A to F, as appropriate.

A. Application cover pages

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The application cover page should include the applicant's contact details, and an abstract of the proposed project (max. 150 words). The abstract must clearly state what will be delivered by the project, i.e. output/s. Abstracts must be in plain English and avoid the use of jargon. The completed application must be signed by the head of department or relevant organisational unit. The pro forma application form must be used (see below).

B. Curriculum vitae (aligned to Criterion 1)

The application should include the curriculum vitae for the PI and all CIs using the New Zealand Standard Curriculum Vitae Template. Please note the page limits within each section. No CV is required for those academics acting in an advisory or mentoring capacity.

C. Two independent references (1 page maximum for each reference, aligned to Criterion 1)

Applicants are required to attach written references from two (2) scholars recognised for their contribution to engineering education in higher education and/or in a relevant field or discipline. The references should support the proposed project activities and the capacity and capability of the project team (i.e. the PI and CI(s)) to complete the project objectives within the specified timeframe. These references must be signed by the referee (electronic signature is acceptable).

D. Project proposal (aligned with requirements in Criterion 2, 10 pages excl. references)

- **Project Overview (0.5 page)**. Description of the project. Project background and context.
- **Literature Review (1.5–2 pages). Grounding of the proposal in academic literature. Identification of research gap the project addresses.** Identification of research questions and project objectives
- **Methodology (1.5–2 pages)**. Description and justification of methods and approach to meet the objectives. Human ethics considerations, as required
- **Research Plan (1.5–2 pages).** Work Breakdown Structure (WBS) including activities required to complete the project, start/end dates for each activity, assignment of investigators to each activity. Presented as a table or Gantt chart. Include a summary of each team member's contribution. Evidence of successful prior research collaboration by named investigators (not necessarily together). Confirmation that the research activities have not previously been funded elsewhere. Projects can be between 1 and 2 years in duration.
- **Impact Plan (1–1.5 pages).** Systematic approach to achieving impact using the IMPEL Framework (see Appendix A). Description of how the project will create influence and benefit within and beyond engineering education.
- **Impact and Evaluation Strategy (2 pages).** Engagement approaches with relevant stakeholders (institutional and broader sector). Plans to promote project activities, goals, and outcomes. Evaluation of project activities, outputs, overall impact.
- **References (not included in page limit)**. Style not prescribed, but should be consistent.

E. Budget and justification (aligned with requirements in Criterion 2)

The application must include a detailed budget for project expenditure. The budget should justify proposed expenditure in relation to the project activities and outputs. Funding will be to a maximum of NZD$25,000 (ex. GST) per project.

The budget should be based on the table presented in the pro forma provided.

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F. Institutional statement of support (1 page maximum from each institution; align with requirements in Criterion 3)

Applying in te reo Māori

If applicants wish to complete some, or all, sections of their proposal in te reo Māori, they are able to do so. However, because some of the panellists who will be assessing their proposal will not be fluent in te reo Māori, an English translation of the section(s) will be necessary. Applicants, therefore, must provide a translation for those sections as supplementary material over and above the page limits set for the relevant section of the proposal. Applicants must still keep to the set page limits for the "official" proposal but can use additional pages for the translation.

Lodgement and processing

One PDF document including parts A to F, clearly labelled with the name of the corresponding applicant and the institution (e.g. Manaia AUT), must be submitted.

The documentation, except for the standard CV, should be prepared in A4 layout using Calibri or Arial in no less than 11 point type. A narrow font should not be used. The left margin should be at least 2.5 cm deep.

The PDF should be submitted via email to aaee@engineersaustralia.org.au and cc both Tania Machet and Steven Goh (emails below) by 5 pm (Australian Eastern Standard Time) by Friday, 30th October 2026. No extensions will be granted.

Any enquiries can be addressed to Tania Machet Tania.Machet@uts.edu.au and Steven Goh Steven.Goh@unisq.edu.au

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APPENDIX A: PROJECT IMPACT PLANNING

The Impact Management Planning and Evaluation Ladder (IMPEL)

The IMPEL model provides a framework for describing different types of change that can be achieved through educational development activities. Each stage, or ladder rung, is incrementally broader in impact than the last. These rungs are:

1. Changes for project team members
2. Changes by project team members leading to changes for students who are directly influenced
3. Contributions to knowledge in the field; growth or spread of disseminated ideas; serendipitous adoption/adaptation by people beyond the project's intended reach
4. Changes by opportunistic adopters at participating institutions leading to changes for students who are directly influenced
5. Systemic changes at participating institutions leading to changes for all relevant students
6. Changes by opportunistic adopters beyond participating institutions leading to changes for students who are directly influenced
7. Systemic changes beyond participating institutions leading to changes for all relevant students.

The model offers both a prompt for project teams in the planning, execution and reflection stages of educational development projects, as well as a cogent frame for funding agencies to enunciate expectations, make funding decisions and evaluate the efficacy of funding in facilitating strategic educational change.

Impact Template for Projects

Impact is the difference that a project makes in its sphere of influence, both during and after the funding period. Maximising impact requires forecasting and planning. The questions and matrix (Hinton, 2012) provide a structure to prompt active and ongoing consideration and re-evaluation of impact and how it may be maximised given the evolution of the project. Maintaining updated responses to the template is not intended to be a reporting requirement, rather a strategic steering tool for the project. AAEE Executive Committee will be interested in discussing evolving projections of impact at key points during the project, including at progress and final reporting points, and expect realistic impact assessment in line with the funding provided. The template is accessible via the link below.

The full version of the IMPEL model, developed by Tilly Hinton is online at;
https://intranet.ecu.edu.au/__data/assets/pdf_file/0008/777977/IMPEL-Designing-for-impact-Resources-and-information.pdf

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Application Form

Part A: Application Cover Pages

Role	Title	First Name	Last Name	Position	School / Faculty	Institution	Email Address	AAEE ☑
PI								☐
CI 1								☐
CI 2								☐
CI 3								☐
CI 4								☐
CI 5								☐

☐ AAEE Member: Tick to confirm current AAEE membership. Membership is required for the PI and all named CIs. No AAEE membership is required for those participating in an advisory or mentoring capacity only. Add further CI rows as required.

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Applicant's declaration

I am applying for the Whakatere | Navigation Grants for 2027 and agree to its conditions.

Signature Date

Head of Department's / Organisation unit's support for application and authorisation

I support this application on the basis of the attached documentation. I undertake to support this applicant in the activities associated with the project in accordance with the attached statement of institutional support. I confirm that the information above is true and correct and that the applicant named on this form is currently a staff member of this institution.

Title/Name	
Position	
Faculty/Unit	
Signature	Date

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Part E: Budget

The budget must be itemised, detailing all components of the project expenditure.

The total budget should not exceed NZD$25,000 ex. GST and must exclude in-kind contributions.

Budget item	***Amount***
Salary	
Project activities support	
Conference travel expenses (up to NZD$2,500 for one investigator)	
Evaluation expenses (if applicable)	
Other Please provide details as separate line items	
TOTAL BUDGET	

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