

AI CENTRE FOR EDUCATIONAL TECHNOLOGIES (AICET)

REQUEST FOR PROPOSALS: GUIDELINES

Artificial Intelligence (AI) is rapidly transforming how we teach, learn and conduct assessment. NUS recognises the potential for AI to enhance our educators' capabilities, address pedagogical challenges, and to augment the learning experience for our students. To this end, the AI Centre for Educational Technologies (AICET) has been tasked to support NUS educators in this effort to achieve the long-term goal of NUS becoming a global thought leader in pedagogical and EdTech innovation.

2 AICET provides both pedagogical and technical consultancy services to faculty members. We aim to facilitate the process as you plan, design, test and refine your ideas around the use of AI to address existing teaching and learning gaps, and to attempt bold experiments to teach in new ways. In other words, we aim to help you to:

- (a) apply AI to enhance teaching and learning; and
- (b) discover innovative applications of Generative AI (GenAI).

3 This is our second Request for Proposals (RFP). A total of 19 proposals were received in AY 2024/5, Semester 1, and we are currently working with faculty members on 9 projects. We received feedback that our form was too complicated, so we have redesigned the RFP process into a 2-stage process to streamline the process. We have also simplified the evaluation criteria.

4 We will also be conducting a workshop to help you understand the RFP process, what we are looking out for, and how we will support you. We will also conduct demonstrations of our in-house AI platform for your reference. The workshop is also a good opportunity for you to clarify your questions about the application forms. You may sign up for the workshop using [this link](#).

CONSULTANCY SERVICES

5 Our consultancy services include:

- (a) **Pedagogical Guidance:** Providing expert pedagogical guidance to aid with the development of new teaching and learning practices, as well as guiding the implementation of AI that best support student learning.
- (b) **AI and Technical Support:** Offering technical assistance and advice to ensure effective integration and use of AI technologies.
- (c) **Software Engineering Assistance:** Providing support for the development of new educational tools, if required.
- (d) **Research Assistant/Student Support:** Facilitating student involvement in the design, implementation, and evaluation phases to ensure practical relevance and effectiveness.

Note: Support from AICET under the RFP is provided in the form of expertise and technical resources from specialists and potentially temporary manpower (which AICET will directly hire for PIs); we do not provide grant/financial support. Based on the submitted proposals, AICET will select a number of applications to work with in each cycle. Some proposals might not be selected because of resource constraints and not because of lack of quality or merit.

ELIGIBILITY

6 Application is open to all faculty teaching members of NUS, working either individually or in small groups.

THEMES

7 To help you identify potential directions for your proposal, we have categorised pedagogical problems around four themes. You are invited to submit proposals based on these themes, demonstrating how you intend to use AI to address the problem:

No.	Theme	Description
1	Self-directed Learning	<p>Students may lean excessively on external loci, or may not have the skills, to set learning goals.</p> <p>AI has the potential to:</p> <ul style="list-style-type: none">• Cultivate intrinsic motivation in students to set, track and achieve learning goals.
2	Cognitive Skills of Students	<p>There may be uneven development of students' cognitive ability (e.g. problem-solving). Students currently face difficulty thinking about the limitations of their thought-processes, and/or lack awareness about how they learn.</p> <p>AI has the potential to:</p> <ul style="list-style-type: none">• Differentiate instructional methods to address varying cognitive needs of students.• Engage learners at a suitable entry point en masse.• Teach students to think about thinking• Facilitate learning about learning.
3	Affective and Behavioural Skills of Students	<p>It may be a challenge to teach affective and behavioural skills (e.g. open-mindedness and thoughtful communication) using conventional methods.</p> <p>AI has the potential to:</p> <ul style="list-style-type: none">• Engage students in authentic scenarios.• Make accessible the understanding and practice of abstract notions such as 'reading people's emotions' and 'practising compassion'.
4	Efficiency	<p>There are tasks that educators currently do that consume excessive resources.</p> <p>AI has the potential to:</p> <ul style="list-style-type: none">• Streamline routine tasks.• Add/create value to tasks.

You can also choose to submit proposals that do not fall completely within these categories. If so, please explain/articulate the learning objectives clearly.

EVALUATION CRITERIA

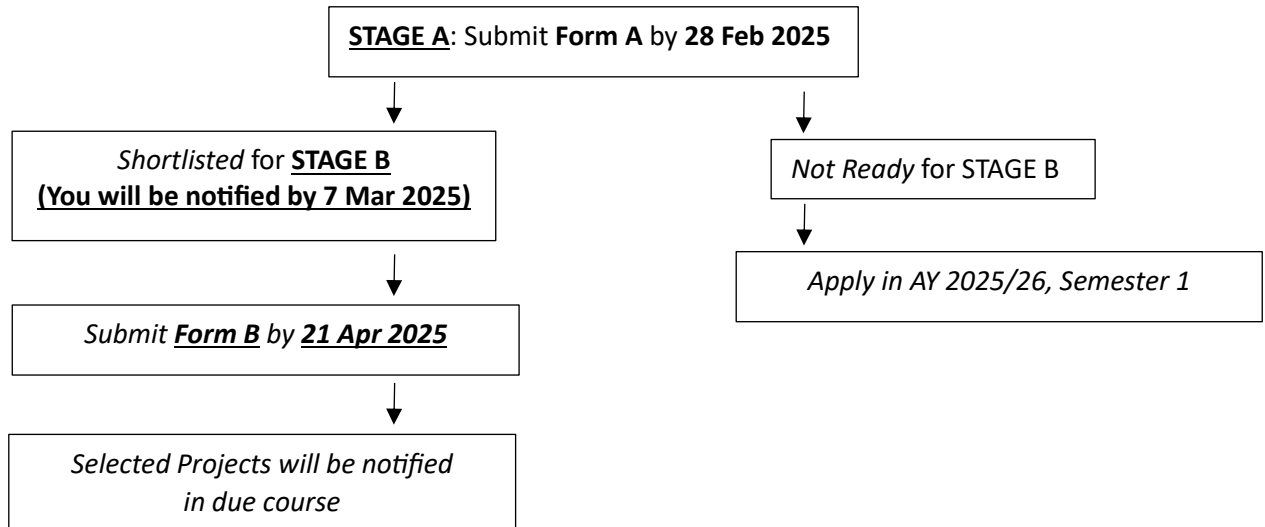
8 Proposals will be evaluated using these criteria:

Criterion	Description
Cost	<ul style="list-style-type: none">• The proposed project costs a reasonable sum and provides better than expected Returns to Investment.
Feasibility	<ul style="list-style-type: none">• The proposal defines the goals and specific aims of the project, outlines the learning outcomes, and demonstrates how these outcomes will be measured and/or assessed.• The proposed activities are appropriate to the projects' intended learning outcomes.• The proposed project can be carried out within one semester.
Impact	<ul style="list-style-type: none">• The proposal articulates the deliverables to be produced by the end of the project, and what one will do to share project findings and insights with other faculty members in the NUS community and beyond.• The proposal articulates potential impact for a significant number of students or the potential to support a group of students with specific needs.
Scalability	<ul style="list-style-type: none">• The project provides a model for other courses or sections.• The activity or AI-solution could potentially be adapted to benefit other disciplines, programs, or target student groups.

Note: AICET is limited by our available resources and can only support a certain number of projects at any given time. If your project is not selected, it does not necessarily reflect the quality of the proposal

SUBMISSION OF PROPOSALS

9 There are two stages to the submission process:



All proposals are to be submitted to AICET at ask-aicet@nus.edu.sg

Important Notes:

- For projects involving NUS courses, AICET will generally support the development and implementation of the project within one semester. To ensure adequate time for planning and integration into your course, we highly recommend starting the project at least a month before the semester begins.
- Projects that are not tied to NUS courses can have a longer period of support. Applicants can choose to propose projects that are not tied to implementation during the semester and propose a suitable duration up to a maximum of one year.