

RIE2030 (*with effect from 1 July 2026*)

**NTUITIVE-ZIMIN GAP FUND
FOR THE ZIMIN STUDIO AT NTU
GRANT SCHEME
DETAILED GUIDELINES FOR APPLICANTS**

1 Objectives

- 1.1. The NTUitive-Zimin Gap Fund grant scheme will provide funding for beyond proof-of-concept¹ development (> TRL 5) to researchers at NTU in the domain of Physical Artificial Intelligence (Physical AI), so as to facilitate the commercialisation of technology developed here in NTU.
- 1.2. In the context of this Gap Fund Grant Scheme, Physical AI shall be defined as follows: artificial intelligence systems that can perceive, reason, and act in the physical world through the integration of AI, robotics, sensing, autonomous decision-making, and actuation. These systems are designed to interact with real-world environments and can learn, adapt, and perform tasks autonomously or collaboratively with humans. The scope may include robotics and autonomous systems, AI for manufacturing, embodied AI, edge AI and intelligent sensors, healthcare and assistive robotics, smart infrastructure, and AI for mobility and logistics, encompassing areas such as humanoid and industrial robots, digital twins, human-robot interaction, sensor fusion, autonomous vehicles, warehouse automation, and intelligent buildings.

2 Overview of NTUitive Gap Fund Grant Scheme

- 2.1. The NTUitive-Zimin Gap Fund grant will be awarded through a competitive application process to support projects in the domain of Physical AI which are technically sound and commercially viable. The work must be conducted in NTU and should yield results pertaining to viability for commercialisation.
- 2.2. Approved proposals will be divided into two phases, Phase 1 and Phase 2. Phase one will be managed in a separate budget supported by the Ministry of Education (MOE) and Phase 2 will be in a separate budget supported by Zimin Studio,
 - (i) Applicants awarded Phase 1 of the grant will receive up to S\$100,000 for Phase 1 of the project, which should span no more than 8 months. The actual amount awarded will depend on the extent of work to be carried out.
 - (ii) Upon completion of Phase 1, the Applicants will submit their projects for a mid-term review by NTUitive-Zimin, of the Phase 1 projects. Those projects that are approved by NTU-Zimin shall proceed to Phase 2.
 - (iii) Applicants awarded Phase 2 of the grant will receive up to S\$100,000 for Phase 2 of the project, which should span no more than 8 months. The actual amount awarded will depend on the extent of work to be carried out

¹ In general, Gap Fund projects should seek to validate the use of a technology in the context of a specified commercial application.

3 Eligibility

- 3.1. Only faculty members and researchers from NTU are eligible to apply for the Gap Fund. For each project team, there should be a lead Principal Investigator (lead-PI) to head the team.
- 3.2. Lead-PIs with ongoing NTUitive Gap Fund projects are eligible to apply for a new Gap Fund Grant, in assessing the eligibility of applicants with ongoing Gap Fund Projects, NTUitive will give additional consideration to such applicant teams' ability to conduct two Gap Fund Projects concurrently.
- 3.3. While project teams may include collaborators from private sector companies, this program will only support the work conducted in NTU. In particular, only manpower, equipment and operating expenditure incurred at NTU may be charged to this Fund.

4 Application and Call Processes

- 4.1. On announcement of the NTUitive-Zimin Gap Fund grant call opening, researchers can submit their applications to gap_fund@ntu.edu.sg by filling up the Gap Fund application form and submitting it together with a presentation slide deck
- 4.2. Proposals submitted should contain all relevant information required for a proper and complete evaluation of their merits without the need to revert to applicants for additional information. Relevant privileged or confidential information should be disclosed if necessary to help convey a better understanding of the proposed project. However, such information should be clearly marked as such in the proposal.
- 4.3. All applicants must comply with the relevant ethics and other regulatory approval requirements needed to carry out their project, as per NTU's policies and regulations.
- 4.4. **Evaluation and endorsement by NTUitive.** An internal NTUitive panel will evaluate eligibility, technical soundness and commercial viability, in line with the guidelines in Annex B.
- 4.5. Only those proposals which are eligible and meet the criteria of the guidelines in Annex B will be then shortlisted for presentation to the NTUitive-Zimin panel.
- 4.6. **Evaluation by NTUitive -Zimin Panel and award of grant.** The NTUitive-Zimin evaluation panel will convene to assess the proposals that have been endorsed by NTUitive and make recommendations on those to be awarded the NTUitive-Zimin Gap Fund grant, based on meeting the selection criteria listed in Annex B. Following recommendation by the panel, NTUitive will inform successful applicants.
- 4.7. **Finality of decision.** Any decision made by the NTUitive-Zimin panel shall be final and conclusive.

- 4.8. **Phase 2 approval.** Upon completion of Phase 1 and approval of the mid-term review by the NTUitive-Zimin Committee, which shall consist of one representative each from NTUitive and Zimin. If the project objectives are deemed by the NTUitive-Zimin Committee to have been met, the project will be eligible to progress to Phase 2.

5 Training, Progress Reports and Presentations

- 5.1. (a) **Phase 1.** All awarded project teams are required to submit an end-of-Phase 1 report one month before the end of Phase 1. The project teams are also required to give a project progress presentation to the NTUitive-Zimin Committee. Based on this report, the NTUitive-Zimin Committee will make a determination, and if successful, the project shall proceed to phase 2.
- (b) **Phase 2.** Final project reports must be submitted to the NTUitive-Zimin Committee within a month of completion of Phase 2. Every project team shall be invited to deliver an end-of-project presentation. These reports are to follow the templates provided by NTUitive. NTUitive reserves the right to request for progress reports more frequently when necessary.
- 5.2. The Lead PI may be invited to participate in the National Graduate Research Innovation Programme (GRIP) prior to the completion of the project. National GRIP is a deep-tech venture-building programme that supports researchers in translating research outcomes into market-ready startups through structured entrepreneurial training, expert mentorship and commercialisation support.
- 5.3. The Applicants acknowledge that in consideration of the Phase 2 Grant, NTU will grant to Zimin a first right to look at the research results arising from Phase 2 projects. Applicants understand that this first right to look does not grant to Zimin any pre-emptive rights to the Intellectual Property rights in the research results; however, as the Phase2 has been funded by Zimin, applicants shall make good faith efforts to discuss any commercialization plans they may have in relation to the research results with Zimin.

6 Intellectual Property Management

- 6.1. Applicants agree to be bound by NTU's policies on Intellectual Property (IP), Technology Transfer and Research Collaboration as may be in force at the material times. In the event Applicants require the services of external (that is, non NTU) collaborators, Applicants shall ensure that the relevant IP arrangements are in place to clearly define the rights and obligations of Applicants and the external collaborators.

7 Funding Support

- 7.1. Under the NTUitive-Zimin Gap Fund scheme, NTUitive offers Phase 1 funding support of up to S\$100,000 per project over the maximum Phase 1 duration of 8 months, Zimin offers Phase 2 funding support of up to

S\$100,000 per project over the maximum Phase 2 duration of 8 months. The total cost of both Phase 1 and Phase 2 of the project includes only approved direct costs, which are defined as the incremental cost required in executing the project. This excludes contributions in-kind, existing equipment and the cost of existing manpower as well as building cost. All expenditures should be budgeted inclusive of any applicable Goods and Services Taxes (GST) at the prevailing rates.

- 7.2. Any direct cost charged to both Phase 1 and Phase 2 of the POC grant must be reasonable and for the proposed developmental activities of the project. Supportable direct costs can be classified into the following three cost categories:
- i. Expenditure on manpower (EOM);
 - ii. Expenditure on equipment;
 - iii. Other operating expenditure (OOE).
- 7.3. NTUitive (in respect of Phase 1) and Zimin (in respect of Phase 2) will support 100 percent of the approved direct cost for projects from NTU. For projects involving private sector participants, the Gap Fund grant will only fund the portion of the developmental work conducted in the NTU (i.e. only manpower, equipment and operating expenditures incurred in NTU may be charged to the grant).
- 7.4. Please refer to Annex A for a detailed guide on non-fundable cost items. NTUitive's decision on the funding support to be awarded for each project is final.

8 Changes to Guidelines

- 8.1. NTUitive reserves the right to make changes to the above guidelines and any submission templates related to the Gap Fund scheme, as and when it deems fit.

Annex A: NTUitive-Zimin Gap Fund – List of Non-Fundable Items

1. This annex specifies the items and categories of expenditure that are non-fundable by NTUitive-Zimin Gap Fund.
2. The following general policies apply:
 - Procurement and expenditures for all items are subject to the formal established financial policies of NTU that are consistently applied, regardless of the source of funds.
 - Fractional charging for staff costs based on time commitment to the project must be practised.
 - The funding covers Good and Services Tax (GST), customs duties/taxes and/or fees, and bank charges incurred in specific relation to the procurement of fundable items.

Type of Expenses	Description
Salaries of Programme Director/ Lead Principal Investigators/ Project Leads and Investigators	Not allowable, salaries for Programme Director/ Lead Principal Investigators/ Project Leads and Investigators are typically funded by their employing institutions or from the institutional budget or capitation grants. Charging these salaries to grants would result in double-dipping.
Salaries of teaching staff and teaching substitutes	Teaching duties are part of the institution's normal operations and are funded through institutional budgets or capitation grants. This does not include Backfilling – manpower cost for staff hired to offload teaching duties of Principal Investigators / Co-Investigators to do project work (fractional charges based on time committed).
Undergraduate tuition support	Tuition fees are educational expenses, not costs that directly contribute to the Project's deliverables or outcomes.
Salaries of general administrative staff	General administrative staff (e.g. human resource, finance, procurement, research support office etc) provide institutional support services and their salaries are part of the institution's operating expenses, which are typically funded through indirect costs or the institutional budget. In addition, these are not costs that directly contribute to the Project's deliverables or outcomes.
Salaries of visiting professors, researchers and collaborators	Their salaries should be funded by their home institutions.

Costs related to general administration and management	These costs cover broad institutional functions such as human resource, procurement, and governance, which are not specific to the Project. Such costs are part of the institution's operating expenses, typically funded through indirect cost or other internal budgets. Such costs include common office equipment, such as furniture and fittings, office software ¹ , photocopiers, scanners and office supplies.
Costs of office or laboratory space	This is an indirect cost that should be funded from other funding sources. Such costs include renovation/outfitting costs, rent, depreciation of buildings and equipment, and related expenditures such as water, electricity, general waste disposal and building/facilities maintenance charges.
Personal productivity tools & communication expenses	Not allowable, unless the use of mobile phones and other form of smart devices were indicated in the methodology for the Project.
Costs of Entertainment	Such expenses (e.g. meals, social events) are discretionary and do not advance the objectives of the Project.
Costs of Refreshments	Not allowable, unless this is related to a hosted conference or workshop for the Project.
Audit fees (Internal and external audit) and Legal fees	This is an indirect cost that should be funded from other funding sources.
Costs for staff retreats and team-building activities	These are discretionary costs that are unrelated to the Project's deliverables.
Professional Membership Fees	Such costs are institutional or personal development expenses and are not directly tied to the Project's objectives or deliverables.
Fines and Penalties	These costs arise from negligence and non-compliance by the institution or individual, not from the Project's activities. Such costs should be borne by the party responsible for the infraction.
Costs of Patent Application	Not allowable, as this should be supported from the funding allocated to the I&E Office, which supports patent application filing, maintenance and other related costs.

¹ This is defined as the basic set of office software, such as the Microsoft suite of applications.

ANNEX B: EVALUATION CRITERIA FOR NTUITIVE-ZIMIN GAP FUND

NTUitive-Zimin Panel will evaluate the submitted proposals based on the following criteria:

Criteria	Guiding Questions
Technical Innovation (55%)	• Technical Differentiation: Is it faster, cheaper, better? Is it a Me-too, Enhancer, or Disrupter? • Technical Landscape: Are competing technologies well understood? • Strength of IP: Is the technology defensible, or not encumbered? • Technical scalability/manufacturability: Can it be engineered/deployed at scale? • Technical Readiness: Is it too early, POC ready, or ripe for commercial prototype?
Value Proposition (25%)	• Is the problem statement well defined and scoped? • Is the pain point clearly articulated and significant: frequent, prevalent, expensive? • Does the product offer a unique solution? Does it solve pain points effectively/uniquely?
Market Opportunity (20%)	• Is the addressable market(s) large, clearly identified and within reach? • What is the market growth rate?