

Call for Proposals

Research and Innovations Grants in Engineering

FY 2026/2027

Overview of KENET's Research and Innovations Grants Program

One of KENET's mandates is to catalyze collaboration in research and education among its member universities and research institutions. KENET promotes collaboration through facilitation of Special Interest Groups (SIGs) in priority academic areas, discovery of active researchers/faculty, provision of research and education grants to researchers and member institutions, as well as travel grants for faculty and/or graduate students in SIG areas.

As of April 2026, KENET was supporting three Special Interest Group areas, namely, computer science and information systems, computational modelling and materials science, and engineering. The target group for this Call for Proposal is early career PhD faculty and/or researchers in the SIG in Engineering academic area. However, it is possible for the Principal Investigator in the call to collaborate with faculty or researchers in other academic domains.

Artificial Intelligence is having a great impact on research in all engineering disciplines (e.g., electrical engineering, mechatronics, or agricultural engineering). AI applications in this area require some foundational AI infrastructure. KENET as the operator of the National Research and Education Network of Kenya has invested in research computing required to support the adoption and adaptation of AI by the SIG in engineering community. In addition, KENET is investing in LoRaWAN gateways to support Internet of Things applications in engineering.

This 2026 call, therefore, seeks to fund engineering research in Kenyan universities or research institutions that leverage advances in AI and exploit both the computational and LoRaWAN infrastructure installed by KENET. In addition, this call seeks to support early-career PhD faculty and/or researchers in advancing emerging areas of Artificial Intelligence through work that combines technical depth with demonstrable, real-world implementation. The grant is designed to catalyze the development of innovative ideas into functional pilots or prototypes that can be tested, refined, and shared as practical reference models. The call, thus, aims to strengthen institutional capacity in priority AI domains while generating insights, tools, and systems that can be adopted, adapted, and built upon by students, researchers, and other institutions.

This call has two areas of focus as follows:

1. AI in locally-relevant engineering research (2 grants)
2. Internet of Things in locally-relevant engineering research (2 grants)

Grants: Structure, Technical Brief and Schedule

Grants Structure

1. Four (4) grants will be awarded for the 2026/2027 round of funding.
2. Each innovation grant will be for a maximum of KES 1.5 million
3. The grant period is 12 months.

Research and Innovation Grant: Areas of Focus

1. AI in locally-relevant engineering research

AI for enhanced Engineering research in all engineering disciplines with a direct impact on Kenya’s development priorities and promoting efforts to attain the sustainable development goals (in particular SDG2 - Zero Hunger, SDG6 - Clean Water, SDG7 - Affordable and Clean Energy). Proposals that make use of the latest advances in AI, including generative AI and agentic AI, are of particular interest with AI playing a central role in the project. This could be a theoretical advance, for example, a new model or a novel application area. Examples of AI applications in different engineering disciplines include (note that this is only an indicative list meant to serve as a guide):

Table 1: AI applications in different engineering disciplines.

| Discipline | AI Application Area |
|--------------------------|--|
| Electrical Engineering | Applications of AI in telecommunications |
| | Generative AI for Circuit Design |
| | Smart Grids |
| Mechanical Engineering | Use of AI in engineering materials |
| | Industrial Processes |
| Civil Engineering | Digital Twins for Infrastructure development |
| | Urban Planning |
| Mechatronic Engineering | Automation |
| | Robotics |
| Agricultural Engineering | Precision Agriculture |

2. Internet of Things in locally-relevant engineering research

LoRaWAN (Long range wide area network) is a wireless communication protocol designed for connecting low-power devices over long distances useful in Internet of Things applications ranging from environmental monitoring to smart city applications.

We seek applications that will develop and deploy IoT solutions leveraging the KENET LoRaWAN network of gateways. The proposed work should be linked to goals advancing the sustainable development goals (in particular SDG2 - Zero Hunger, SDG6 - Clean Water, SDG7 - Affordable and Clean Energy).

Examples of LoRaWAN applications in different engineering disciplines include (note that this is only an indicative list meant to serve as a guide):

Table 2: LoRaWAN applications in engineering.

| Discipline | LoRaWAN Application Area |
|--------------------------|---|
| Electrical Engineering | Sensor development for environmental monitoring |
| Mechanical Engineering | Predictive maintenance |
| Civil Engineering | Infrastructure health monitoring |
| Agricultural Engineering | Precision Agriculture |

Research Computing and Research Data Storage

Simulations to study real systems for possible applications require computing resources beyond laptop and desktop computers. This calls for computing capacity that is dedicated to performing tasks that require large resources with calculations which run continuously with minimal interruption. Kenya does not have a national HPC facility for basic and applied sciences to support research that could benefit from computational modeling. In many cases, researchers undertaking work that requires intense calculations for a long period of time rely on supercomputers provided by collaborating institutions in other parts of the world.

KENET provides a select set of computing services to the grantees that includes access to computing facilities at partner institutions, such as the CHPC, as well as 24 hours local cloud services, that may be used as a platform to power computing needs of the research problem. All these are tailored towards development of HPC capacity, and efficient utilization of the same in the local research fraternity. These computing skills should enable the application of novel computational methods such as machine learning, both CPU and GPU based, to aid in innovation and design.

Successful applicants will be expected to use the recently launched CHUI GPU cluster for computational modeling to solve problems in science and technology.

Schedule

Table 3: Engineering grants call timeline.

| Activity | Dates |
|---|-----------------------------------|
| Call for Proposals open for submissions | May 11 – July 10, 2026 (2 months) |
| Review and evaluation of received proposals | July 11 – July 31, 2026 |
| Presentations of shortlisted applicants | August 1 – August 14, 2026 |
| Finalists announced and grants awarded | August 18, 2026 |
| Grantees on-boarding | September 7 – September 11, 2026 |
| Implementation period | September 2026 – June 2027 |
| Evaluation, monitoring, reporting and close-out | E & M – quarterly per group |

Eligibility, Terms and Conditions

Eligibility

Applicants must:

1. Have a PhD in one of the engineering disciplines awarded within the last 10 years.
2. Have an existing research team or show proof of the ability to establish a research team at their university. This team must include full-time postgraduate students.
3. Be based at an accredited engineering program at a Kenyan university with active postgraduate programs.
4. Show a track record of postgraduate student supervision.
5. Have published work in peer reviewed journals and conferences indexed in Scopus or Web of Science.
6. Obtain written approval from the Head of Department and Dean/Director of respective school of engineering.

Team Composition

One of the main objectives of this research and innovation grant is to develop expertise and build capacity in the areas of focus, and to grow a community of practitioners. To this end, it is important for faculty to work closely with students with a view to furthering their knowledge and capacities in the various technologies and issues of interest, in the areas of focus. Incorporating students as team members as well as designing student-level projects from the research activities to be undertaken is encouraged. The lead researcher(s) must be a PhD holder meeting the eligibility criteria above. The lead researcher is strongly encouraged to incorporate other researchers into their team, especially dedicated research staff or full-time MSc/PhD students. If other members are incorporated into the team, then the roles and extent of involvement of these team members must be clearly spelt out. A Letter of Commitment from each Team Member with support from respective Heads of Department or Deans must be included as part of the team's submission documents. Teams with multidisciplinary backgrounds are encouraged. The lead researcher will serve as the team leader and the primary point of contact on all matters related to implementation of the grant.

Collaboration and Partnerships

To enhance research uptake and utilization, it is important for researchers to identify and seek out collaborations and partnerships with strategic persons and institutions. This not only opens up pathways for moving research from the lab to the society, but also enhances visibility of researchers and their institutions, attracting even more funding and opportunities to further their research agenda. Given the identified areas of focus, it will be imperative for teams to identify strategic partnerships and collaborations with a view to modeling and planning for prototyping, testing and scaling at later stages in the research cycle.

Intellectual Property

Intellectual property derived from the funded R&D activities will be appropriated and protected based on the lead researcher's institution's IP policy and procedures.

Post-Award Requirements

The successful grantees will be expected to:

1. Provide quarterly progress reports to the Engineering research associate at KENET.
2. Prepare quarterly blog posts on research work for posting to the KENET website.
3. Participate and present project work at selected meet-ups organized by KENET.
4. Grow a community of improved research practice.
5. Actively seek funding to further their research work by writing (joint) funding proposals to other agencies.
6. Prepare a final project report at the end of the grant period and submit it to KENET.
7. Prepare an abridged version of the project report for profiling on KENET's and institutional websites.
8. Publish paper(s) on their work in reputable journals. These papers should acknowledge the KENET grant.

Proposal Submission

Concept Note Format

1. The concept note should not exceed 6 pages (12pt, single spacing, excluding appendices).
2. The concept note should be submitted in PDF format.
3. The research area should be clearly indicated in the title page.
4. No personal identification (names) or institutional affiliation should be included in the concept note.

Concept Note Structure

The concept note should have the following structure:

1. Title
2. Problem definition and justification
3. Proposed solution and justification
4. Methodology
5. Resources (human, hardware, software, etc.)
6. Work plan (not exceeding 12 months in duration)
7. Detailed Budget (not exceeding KES 1.5 Million)
8. Appendices

Supporting Documents

The following documents should be included as part of the concept note submission:

1. Team profile document, indicating the names, institutional affiliation and brief biographies of the lead researcher(s). Details of other team members and any collaborating institutions should also be included in the team profile.
2. CVs of the lead researcher(s), clearly profiling research activities undertaken to date as well as relevant publications.
3. Letters of Commitment from team members and any collaborating institutions.

Concept Note Submission

Concept notes with all supporting documentation should be sent via email to enggrants@kenet.or.ke by 10th July 2026, 5.00PM EAT.

Enquiries and Applicant Support

All enquiries and requests for further information related to this call should be addressed to grantsadmin@kenet.or.ke.

Proposal Evaluation

1. KENET will constitute a review panel of leading Engineering experts. Members of the review panel will sign Non-Disclosure Agreements, as well as statements acknowledging that they will make no claim to the intellectual property developed by the grantees.
2. The reviewers will review all received applications as per the evaluation criteria provided in Table 2 below and select the top three (3) proposals for each area of focus.
3. The top three (3) finalists in each area will be invited for a final face-to-face presentation. During the oral presentations, the applicants will respond to and clarify any questions from the panel that will have arisen out of their written submissions. They will also be required to respond to any ad-hoc questions arising from the oral presentation.
4. After the oral presentations, the reviewers will make their final decisions on which two (2) proposals will receive the grant, per area of focus. Four (4) teams will be selected.
5. Selected grantees will be notified formally and profiled on KENET's website.

Evaluation criteria:

Table 4: Engineering evaluation criteria.

| Evaluation Criteria | Evaluation Aspects | Weighted Score |
|---|--|----------------|
| Relevance and justification of proposed research topic | Is the proposed topic and preferred solution aligned with Kenya’s Bottom-Up Economic Transformation Agenda, Vision 2030 or SDGs? Is it an important problem to solve in a developing world context? Is there sufficient research uptake and utilization potential for the proposed research outputs? | 15% |
| Technical approach and methodology | Is the research concept innovative and effective compared to existing alternatives? Does the proposed approach have a potential experimental component partner to test the computational findings proposed? Is there a potential HPC development component? Is the proposed work doable given the time and budgetary constraints of the grant, considering the team’s composition? | 35% |
| Budget justification | Are the items to be procured related to the project objectives and activities? Can these items be obtained with the project timelines? | 10% |
| Viability assessment and scaling potential | Is scale built into the solution? Can it be replicated in similar contexts? Is there scope for furthering the research idea/prototype? Is there scope for future external research funding to scale-up the research? | 10% |
| Human capacity | Does the team have the required expertise, experience and necessary contacts to deliver? Do they have a local footprint? | 10% |
| Student engagement | Are there concrete roles and responsibilities for student team members? Are there clearly defined student-level project ideas? | 10% |
| Inter-university/industry involvement | Have critical partnerships in the main domain of application been identified? Is there a likelihood for collaboration during and after the grant period? Does lack of partnerships severely impede the research work during the grant period? | 5% |
| Potential for publication in refereed journals and/or conferences | Are the results likely to be published in international peer reviewed journals/conferences that are indexed in the Elsevier Scopus database? | 5% |