Royal Academy
of Engineering

Department for
Science, Innovation
& Technology

Higher Education Partnerships in sub-Saharan Africa (HEP SSA) 24/25

Applicant Guidance

Application deadline
1pm BST
Thursday 19
October 2023

Contents

Any questions
about this pack?

Please contact
**africaengineers@
raeng.org.uk**

About HEP SSA

Engineering education | Hub and spoke model

The Royal Academy of Engineering is harnessing the power of engineering to build a sustainable society and an inclusive economy that works for everyone.

In collaboration with our Fellows and partners, we are growing talent and developing skills for the future, driving innovation and building global partnerships, and influencing policy and engaging the public.

Together we're working to tackle the greatest challenges of our age.

The Higher Education Partnerships in sub-Saharan Africa (HEP SSA) programme was established by the Royal Academy of Engineering in 2016, following the successful pilot scheme Enriching Engineering Education Programme (EEEP).

The programme works with higher education institutions to address the engineering skills shortage in sub-Saharan Africa and showcase the role of engineering in driving inclusive and sustainable development in the region.

How? By fostering partnerships between academia and industry, HEP SSA supports the higher education system in sub-Saharan Africa to produce fit-for-purpose engineers with the necessary skills and knowledge to tackle local and global challenges. Through a 'hub and spoke model', the programme supports curricula development, research and industrial engagement activities between higher education institutions and industry in sub-Saharan Africa and with the UK.

The programme has three overarching objectives:

1 Enhance engineering capacity in sub-Saharan Africa by improving the knowledge, skills and employability of African engineering graduates.

2 Build on the research and innovation capacity of higher education institutions in sub-Saharan Africa.

3 Stimulate ties with industry to increase the scale of impact.

The HEP SSA 24/25 call awards grant funding of up to £100,000 for one year. HEP SSA is supported by the UK government through the Department of Science, Innovation and Technology (DSIT).

The hub and spoke model

The HEP SSA programme is implemented through a 'hub and spoke' model. The hub university is the lead applicant, responsible for the overall management and delivery of the project. The hub university collaborates with at least three national or regional spoke universities, at least one UK academic partner and at least one local or regional industry partner (although more than one is encouraged).

HUB UNIVERSITY
Lead applicant responsible for the HEP SSA project.

1 SPOKE UNIVERSITY
Local and regional universities involved in the project (three minimum)

2 SPOKE UNIVERSITY
Local and regional universities involved in the project (three minimum)

3 SPOKE UNIVERSITY
Local and regional universities involved in the project (three minimum)

4 INDUSTRY PARTNER
Local or regional industry partner to support and guide project (one minimum)

5 UK ACADEMIC PARTNER
Partner university or institution involved and supporting the project (one minimum)

To better understand how this model works in practice, you can download our case studies to see how previous projects have successfully partnered with local

academia and industry to strengthen engineering education and research capacity:

- University of Namibia – [Strengthening university research capacity through industry-academia partnerships](#)
- University of Zambia – [Creating graduates with the skills local industry needs](#)

Please refer to page 13 for a detailed description of expected roles and responsibilities per partner.

Applying to HEP SSA

Eligibility and expectations | reporting | diversity and inclusion (D&I)

The Academy welcomes proposals from sub-Saharan African universities to deliver one-year projects looking to strengthen the link between academia and industry to drive impact in engineering education.

We encourage applicants from underrepresented backgrounds in engineering, including women.

Up to £100k funding

Funding is available for up to £100,000 for projects starting in January 2024 and ending in January 2025.

Funds will be transferred according to the reporting and payments schedules defined by the Academy at the contracting stage. An indicative timeline can be found below:

- Upon completion of the initiation report in January 2024, awarded projects will receive a first payment of £50,000.
- Upon successful submission of progress report 1, a second payment of £20,000 will be made in April 2024.
- Upon successful submission of progress report 2, a third payment of £25,000 will be made in August 2024.
- Upon project completion and successful submission of the final report, a final payment of £5,000 will be made in January 2025.

All applications must be submitted via the Academy's online Grants Management System: **https://grants.raeng.org.uk**. All applicants must first register with the system and provide some basic details to create a profile as a lead applicant. All partners may collaborate on the application in the Grants Management System, but please note that applications received that list a partner as the lead applicant will not be considered.

The application form has seven sections and should take approximately 1 hour 30 minutes to complete, assuming questions have been answered offline and the applicant is copying and pasting in the information, rather than composing it from scratch. These guidance notes give details of all the questions included in the application form.
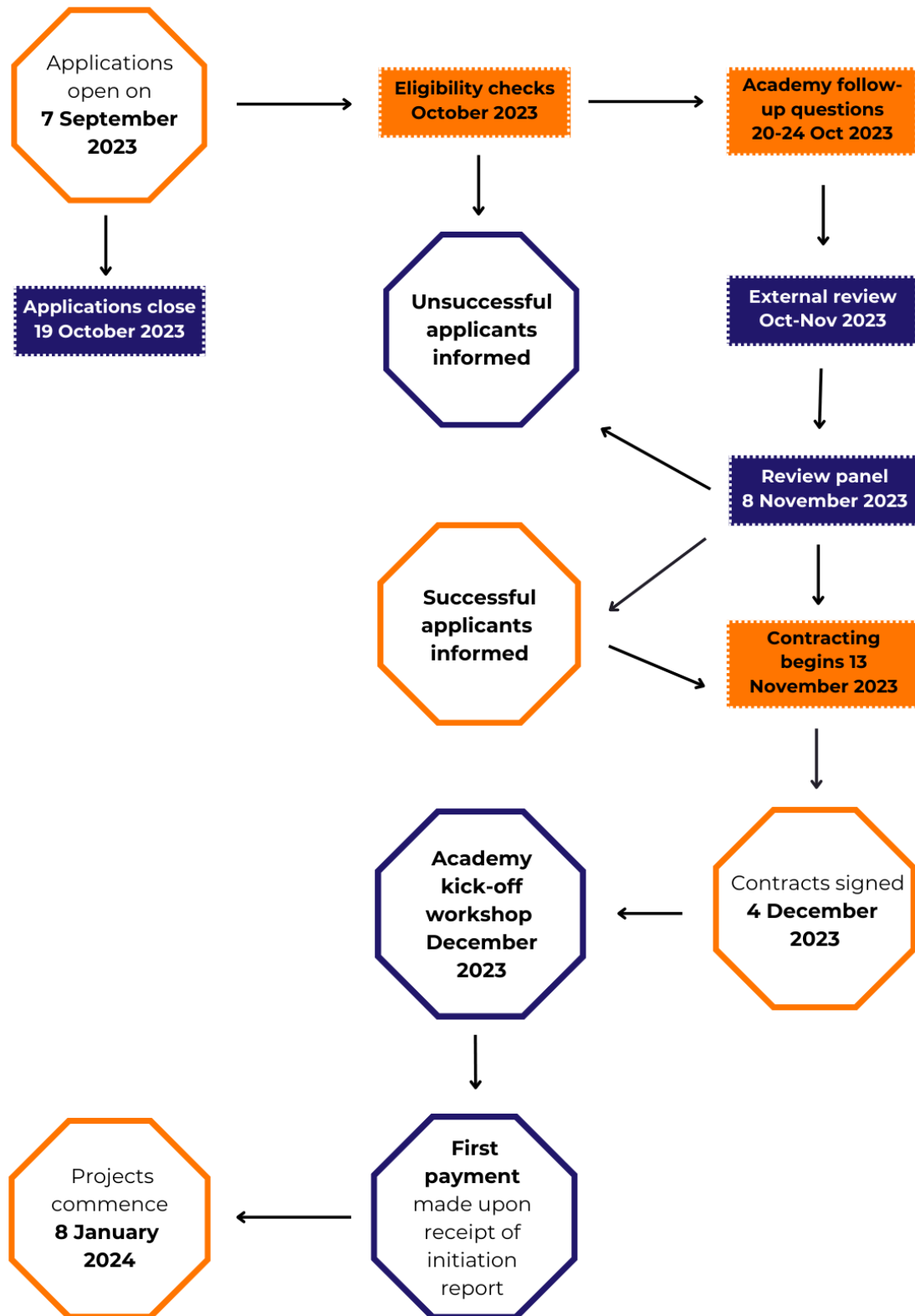
The Academy will hold two information sessions on 19 September and 3 October to answer any questions related to this scheme. You can find more information on the Academy website.

Since its start, HEP SSA has supported:

43 higher education institutions
130+ conferences and workshops
500+ joint research projects
100+ academia-industry secondments
57 publications and workshops
80+ curricula revised and updated

HEP SSA 24/25 application and award timeline

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Applications open on 7 September 2023
  ↓
Applications close 19 October 2023
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Applications open on 7 September 2023 → Eligibility checks October 2023 → Academy follow-up questions 20-24 Oct 2023
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Eligibility checks October 2023
  ↓
Unsuccessful applicants informed
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Academy follow-up questions 20-24 Oct 2023
  ↓
External review Oct-Nov 2023
  ↓
Review panel 8 November 2023
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Review panel 8 November 2023 → Unsuccessful applicants informed
Review panel 8 November 2023 → Successful applicants informed
Review panel 8 November 2023 → Contracting begins 13 November 2023
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Contracting begins 13 November 2023
  ↓
Contracts signed 4 December 2023
  →  Academy kick-off workshop December 2023
        ↓
     First payment made upon receipt of initiation report
        →  Projects commence 8 January 2024
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Programme expectations

- Project activities will promote African research and innovation capacity, with an emphasis on entrepreneurship and commercialisation skills, supported by both UK and sub-Saharan African partners.

- Secondments are an integral part of the programme. Academic staff will undertake secondments in industry to build skills and expertise while exploring opportunities for collaborative research. Local industry staff will undertake secondments in the hub and/or spoke universities to advise on curricula development, mentor students, lead on seminars, and deliver workshops, among others. Post doctorate and PhD students that show exemplary talent, and/or a novel and innovative research project will also be allowed to participate in activities such as secondments and workshops to strengthen research capacity. Please see page 13 for more detailed expectations per partner.

- Projects will ensure student engagement and understanding of the challenges present in industry, to ensure curricula content is linked to career context.

  We encourage students to be part of the delivery of project activities and input experiences during project ideation.

- Projects will ensure that the promotion of gender equality and equality for underrepresented groups is mainstreamed across all stages: ideation, implementation, and monitoring. We encourage applications that promote inclusive curriculum development to support D&I in engineering education.

- Projects will include an interdisciplinary approach to engineering education, considering the range of skills and expertise required to address the outcome/s of the project.

- Projects will meet the Overseas Development Assistance (ODA) objectives: promote the welfare and economic development of a country on the Development Assistance Committee (DAC) list of ODA recipients; be designed to address a development need; and focus on a specific challenge affecting a lower income country. For further guidance on ODA compliance, please follow this **link.**

- Original ideas and local solutions to promote research and innovation and nurture leadership and creative thinking skills are actively encouraged.

- Applicants are expected to present a detailed plan for project activities and outputs delivery, including sustainability plans for their project post funding.

- Successful applicants will participate in Academy-led workshops and embed learnings into project execution.

Eligibility criteria

- Projects should clearly align with the programme's overall aims and objectives.
- The lead applicant will be employed by a university in sub-Saharan Africa.
- Project activities must run between January 2024 and January 2025.
- Applications must include a detailed budget of up to £100,000 delivered over one year.
- Successful applicants will clearly outline direct funding allocated for spoke universities and partners in their application, where relevant.
- Applicants will develop formal partnerships with at least one industry partner, one UK institution and at least three spoke universities nationally or regionally.

  Please see page 13 for details on the programme expectations per partner.
- Projects must fit the criteria for ODA funding as indicated on page 8 of these guidance notes and question 2.15 of the application form.

In line with eligibility criteria set by the UK government's International Science Partnerships Fund (ISPF), lead applicant institutions must be from one of the countries listed below in order to be eligible to apply. The Academy will consider applications from the following countries in sub-Saharan Africa only:

Angola; Benin; Burkina Faso; Burundi; Cape Verde; Central African Republic; Chad; Comoros; Democratic Republic of the Congo; Djibouti; Eritrea; The Gambia; Guinea; Guinea Bissau; Kenya; Liberia; Lesotho; Madagascar; Malawi; Mali; Mauritania; Mauritius; Mozambique; Niger; Réunion; Rwanda; Sao Tome and Principe; Senegal; Seychelles; Sierra Leone; Somalia; South Africa; South Sudan; Sudan; Tanzania; Togo; Uganda; Western Sahara and Zambia.

Institutions from ineligible countries within sub-Saharan Africa can still participate in projects as spoke universities and industry partners.

What are eligible costs?

- Grant funding is intended for knowledge-sharing workshops, bilateral secondments between local industry and academia, training fees, travel and accommodation, resources and materials, and the host institutions expenses such as temporary replacement of staff or resources. This list is not exhaustive, please get in touch if you have queries on eligible costs.
- No more than £10,000 of the total project may be used on consumables and equipment costs. Consumables include specific project costs of equipment, computer software licences or publication costs.

- Up to 10% of the award (£10,000) can be used on project-specific staff salaries. In exceptional cases, this limit could go up to 15% (£15,000) but you must provide justification of this. You must also demonstrate how you will fund these costs beyond the grant duration, or that they are only temporary roles needed to carry out short-term specific grant activities.

- University overheads must not exceed 10% of the award in total. Please note that overheads should consider any potential losses from currency rates variations.

- Additional sources of funding are encouraged and should be included within the original budget and progress reports. Please note that additional costs on top of the grant funding must be met by the participating institutions or leveraged from elsewhere with clear indication with respect to the source of the contribution.

Please visit the How To Apply page on our website where you can download a HEP SSA budget template and other useful supporting documents.

What are ineligible costs?

- Activities that have already been funded by a previous Academy grant.
- Activities that are not ODA eligible and do not meet the grant objectives.
- Per diem expenditure.

Reporting timeline

Close and frequent communication with the Academy is a requirement for all successful applicants. Successful applicants are encouraged to stay in regular contact with their dedicated Project Manager. The Project Manager must be informed of any changes to activities, timings or the need to re-allocate funds over the course of the project.

In addition to regularly sharing relevant news about the project via email or meetings, successful applicants are expected to produce four reports during the duration of their HEP SSA grant. Accompanying each of the four scheduled reports will be a financial budget form detailing quarterly expenditure and an updated Gantt chart.

Please note, if your grant application is successful, regular financial spot checks will be conducted as part of the reporting process. Please ensure you have proof of payment (i.e., receipts) for all expenditure. The Academy will not support any per diem expenditure.

1 INITIATION REPORT

To confirm that the project has started to schedule and no challenges are envisaged.

2 PROGRESS REPORTS

Two quarterly reports will update on the project progress against the identified indicators. A Gantt chart will be submitted as a supporting document to track the delivery of activities.

3 FINANCIAL REPORTS

A financial report will update on the project expenditure against the budget and allow the Academy team to assess any necessary adjustments.

4 FINAL REPORT

Similar to quarterly reports, this final report will provide a holistic view of the project to reflect on successes, challenges, outputs and outcomes.

5 FINAL BUDGET

The final budget report will provide a full overview of project expenditure per activity and allow the Academy team to conduct financial spot-checking against activities costs.

D&I

The Royal Academy of Engineering strives to create cultures in which everyone can thrive, and we believe that diverse perspectives enrich our collective performance. In addition to being one of the Academy's values, D&I is a critical part of the Academy's strategy.

We know that underrepresented groups can be unintentionally excluded or overlooked unless specific attention is paid to their voices. Depending on the context, groups may be marginalised due to age, ethnicity, disability, gender and religion, and less visible differences such as sexual orientation, disability, religion, class, socio-economic status, education background, personality type, and nationality, to name but a few examples.

This has a number of implications for this call:

1. We **require** you to ensure that your project design and monitoring and evaluation is informed by diverse voices and enables participation by an appropriately diverse group of stakeholders. Please see question(s) 2.8 and 2.9 of the application form.

Why? We want to ensure that the planned activities, expected outputs and set outcomes are equitable and benefit underrepresented groups. This does not mean that your project needs to improve D&I directly. However, if you intend to create social impact, you should consider the different needs and interests of underrepresented groups who are part of the project target population or indirectly affected by the project activities and outcomes.

2. We **encourage** initiatives focused on addressing gender equality and the inclusion of underrepresented groups to build a sustainable society and an inclusive economy that works for everyone.

3. We will provide **support and guidance** to awardees on embedding D&I in their activities.

We will offer this support and guidance throughout the project cycle in the form of D&I awardee workshops. Successful applicants will receive further details in due course. In the meantime, here are some tips that can help you design your project in an inclusive way:

- Identify the underrepresented groups who, without focused attention, are at risk of being excluded from the project design or outcomes.

- Ensure the active participation of women and/other underrepresented groups in all phases of the project cycle and in ongoing monitoring. For instance, participatory approaches to project problem analysis and desirable results.

- Ensure ways or formats to support the communication of the project outcomes so that they are inclusive and reach out to relevant decision-makers, including women or other underrepresented groups.

- Ensure that a diverse range of stakeholders are involved in the project, including in your project team.

- Ensure that all stakeholders have timely access to information they require on the project.

- Ensure that the project approach is interdisciplinary, including an appreciation and integration of the range of skills and expertise required.

- Clearly define and communicate roles and responsibilities and ensure everyone has an equal opportunity to participate in the project design.

- Ensure project monitoring and evaluation is inclusive and involves all team members, key stakeholders and target populations. Where possible, monitor your D&I success through the collection of data relating to gender and underrepresented groups.

Partner expectations

Partnership roles | collaboration first | UK partner matching

A **fruitful partnership** is one that establishes a common understanding of the problem the project is trying to address and its intended objectives among all stakeholders. Partners should share compatible values to underpin collaboration even if they have different mandates. Differences must be recognised to allow greater opportunities for knowledge sharing, strategic synergies and improved outcomes.

Sustained collaboration should be cultivated from project ideation. We encourage all partners to participate in the problem ideation phase and help to define the project objectives and activities. The hub university should work to secure engagement from spoke and UK partners to ensure all parties see value in working together and look for opportunities for longer-term collaboration.

In practice, we expect to see a collaborative approach to project partnership. Collaboration can take the form of a memorandum of understanding that includes a work package that clearly states the role and expected outputs of each partner. Please see below the programme expectations of each partner.

The **hub university** is responsible for:
- engaging in formal partnerships with spoke universities, industry and UK partners to share knowledge and learnings throughout the project lifecycle and beyond
- managing the budget and distributing funding between partners, as appropriate. Please note that payments can be made directly to partners. This should be agreed at the contracting stage, so please notify the Academy team accordingly
- facilitating networking opportunities through the project partners
- implementing the project timeline and delivering a full set of activities and secondments with all stakeholders

- submitting an initiation report, two progress reports and a final report to summarise the outputs of the project. Please see page 11 for the reporting timeline

- providing regular updates on the project's development to the Academy and issuing invitations to Academy representatives to attend the workshops or other relevant project activities. Leading the project steering group and project team, as necessary

- disseminating the project activities and results among internal and external stakeholders to showcase impact

- attending Academy-led kick-off and project management workshops between December 2023 and March 2024

Forming and managing a minimum of five partnership agreements

Creating, measuring and showcasing impact

Submitting four project reports in total

Attending Academy-led awardee workshops

The **spoke universities** are responsible for:

- actively partaking in the project, and engaging relevant staff and students to participate and contribute towards project activities and outcomes

- collaborating with the hub university to deliver the project activities and outcomes such as workshops and secondments

- leading at least one knowledge-sharing workshop on a rotational basis. The host university will summarise the outputs of the workshops and share them with all project stakeholders. The spoke university will be actively engaged and involved in project activities, while also encouraged to lead some project activities

- actively participating on the project steering group to oversee project progress.

Hosting at least one workshop (in-person format whenever possible)

Participating in workshops as appropriate for the project objectives and needs

Seconding members of staff regionally

Contributing to progress reports

The role of **industry partners** in previously successful applications includes the following:

Any organisation or company that runs a business within the local or regional area and is addressing or supporting the growth of local engineering industry or infrastructure is eligible. This includes multinational companies, startups or government-run industries. The industry partner's role and contribution should be agreed formally with the lead applicant institution. The role of industry partners in previously successful applications included the following:

- Industrial secondments for academic staff to industry.
- Guest lectures and secondments from industry to academia.
- Joint research projects.
- Industry representatives actively participating in the project steering group.
- In-kind or financial support from industry partner(s).

The **role of UK partners** in previously successful applications included the following:

- Actively supporting and advising on project design and implementation.
- Actively participating on the project steering group to oversee project design and progress.
- Engaging in activities that enable access to research infrastructure and strengthen research capacity for African academics.
- Taking part in a two-way secondment, shadowing, teaching and/or completing research in one or more of the universities involved in the project. This will last typically between one and three months.
- Engaging in short intensive stays with emphasis on interaction with students.
- Taking part in, and collaborating with, curricula development.

To note: If a UK commercial partner participates in the project, then that partner is not expected to receive specific benefit from the financial assistance given to the research organisation, in line with section 15.33 of the Statutory Guidance for the UK Subsidy Control Regime: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1163028/subsidy-control-statutory-guidance.pdf.

If your project may involve a specific benefit to a participating UK commercial organisation, then please get in touch before submitting your application.

UK partner matching

To successfully apply for the HEP SSA 24/25 call a UK partner must be formally involved. The project must include at least one UK academic partner, though UK industry partners are also welcome.

If an applicant does not have connections or access to a UK partner, the Academy can facilitate this relationship. Please note that upon receipt of the partner request form, the applicant project details, and expertise request will be added to the partner matching form accessible on the Academy website. We will contact prospective applicants if there are any UK institutions showing interest and will connect the interested parts via email.

To increase the chances of meeting the call requirements and deadline, we encourage applicants to also explore other alternative ways to secure partnership agreements.

Please visit our website to fill out the **partnership request form.**

Deadline is **Thursday 12 October 2023.**

Please note that we cannot support any UK partnership requests after this deadline.

Completing the application form

Application questions and guidance | project sustainability | value for money

How to apply?

Lead applicants must log onto the online system and create an account if they do not already have one: **https://grants.raeng.org.uk.** It is important that the application is started and completed by the lead applicant, who will be the main contact for the Academy should the application be successful.

However, the lead applicant can invite other contacts, for example the co-applicant, to collaborate in the completion of the application form. Note that the lead applicant is responsible for submitting the application form.

Please note that the user who starts the application will automatically appear as lead applicant, so please make sure roles are assigned correctly.

Before completing the application form, applicants are asked to complete **a Diversity Monitoring Form** to help the Academy monitor and assess its equality, diversity and inclusion policy. The information will be treated as strictly confidential, non-attributable and only reported when collated. It is gathered, stored, and used in compliance with the Academy's Privacy Notice in line with the General Data Protection Regulations 2018. The information will only be used for statistical purposes with access restricted to staff involved in processing and monitoring the data. It will not be seen by anyone involved in any selection processes. No information will be published or used in any way that identifies individuals. **The Academy will retain personal information as per our Data Retention Policy.**

Once logged in, please select the scheme '**Higher Education Partnerships in sub-Saharan Africa**'.

Next you will see some general instructions about how to use the system as well as the following list of the seven sections of the application form:

1. **Applicant, institution and partnership details**
2. **Project details**
3. **Measuring progress and impact**
4. **Project planning and resourcing**
5. **Finance**
6. **Letters of support and declarations**
7. **Marketing**

Please note that questions with an asterisk are mandatory. Additionally, if a question requires a certain file format (i.e. PDF), you will not be able to upload an alternative file type.

At any stage in the application process, you can save your progress and return to the application later. Questions may be answered in any order – it is possible to skip some sections and return to them later. We advise applicants to start the form and view the questions early on so that the requirements are well understood. Applicants should also ensure that they have all the necessary documentation at hand before completing and submitting the application.

Supporting documentation

As part of your application, you will need to submit:

8. Lead applicant CV
9. UK partner CV
10. Collaborating partners' details
11. Letter of agreement project partner(s)
12. Images and diagrams (if applicable)
13. Project Gantt Chart
14. Project risk register
15. Budget
16. Letter of support lead applicant institution
17. Letter of support UK partner institution(s)
18. Declaration

Gender equality in research and innovation policy

In line with the UK government's Gender Equality in Research and Innovation Policy, all successful applications to this scheme must demonstrate consideration of the activities on gender. All funded activities will, and at a minimum, ensure that no harm is done to gender equity.

To this end, please outline any specific gender considerations and implications for your proposed project. This could include any measures you have put in place to ensure equal opportunities, any expected impacts on people of different genders, or any outcomes or outputs that you will measure disaggregated by gender.

Artificial intelligence guidelines for applicants:

1. Taking responsibility for content: applicants are fully responsible for all the content presented in their grant applications. The grant process does not penalise the use of generative AI tools, but it is imperative to ensure that the application reflects the applicant's own voice and ideas.

2. Rigorous approach: applicants should exercise caution when using generative AI tools to avoid the inclusion of 'hallucinated' references or factual errors. These often become more common when up-to-date content on a very specific topic is required, which is typical for most of our application areas. Such inaccuracies will be perceived as indications of a lack of rigor and will negatively impact the assessment of the application.
3. Partial use of AI tools: it is not acceptable to solely rely on generative AI tools to write the entire grant application from start to finish. While these tools may be used to assist in various aspects, the application must primarily represent the applicant's own work.
4. Plagiarism considerations: applicants should be aware that the output generated by some AI tools may use ideas from other human authors without proper referencing. As this is considered a form of plagiarism, it is essential to ensure that all sources are appropriately attributed.

Please note that if the application is successful, monitoring reports will be checked against the documents submitted in this application, in particular those in the 'Measuring progress and impact' and 'Finance' sections. If reports do not conform with this or do not present enough and accurate information, they will be returned for resubmission.

Guidance on completing each section of the application form can be found below.

1. Applicant, institution and partnership details

This section gives an opportunity for the lead applicant to provide more details on the lead institution and the partners that will be involved in the project.

Please provide the name and contact details of the lead individuals who will be involved in this project, including job title, email address, postal address and a telephone number. Your details will automatically be populated using the data provided when you registered – please check that they are complete and up to date.

1.1 Lead applicant contact details:
Please ensure the contact email address is correct and will be valid for the entirety of the application process as this will be the main method of communication regarding the outcome of the application.

1.2 Co-applicant(s) contact details:
Please enter the contact details of the co-applicants who will be responsible for the project if or when the lead applicant is unavailable. You must add at least two contacts with a full name, contact type, complete address, phone number and email specified.

1.3 Lead organisation:

This is the organisation represented by the lead applicant. Please state your organisation name, complete address, phone number and email.

1.4 Website:
This is the website of the lead organisation.

1.5 Lead applicant and UK partner CV:
This section requires a recent copy of the lead applicant and UK partner(s) CVs. The CV should be a maximum of four pages long, saved as a PDF file, and reflect their recent experience and suitability for their role on the project.

1.6 Suitability as a hub university (600 words max)
Please explain why your institution is a suitable candidate to be a hub university. Detail how your institution would ensure the maximum benefit from the programme, and the maximum participation and benefit for its project partners. Consider including any related programme the university is involved in across any department, the strategic vision of the university and the institutional support mechanisms in place to ensure maximum project success.

1.7 Collaborating partners' details:
Please upload a narrative summary detailing the partnering institutions as highlighted below. This narrative should be no longer than two A4 pages and saved as a PDF file. Please note that the review panel will favour projects where there are formalised agreements between project partners.

Spoke universities
- Lead contact's name, position and institution
- Type of formalised agreement (i.e., MoU or project partnership agreement)
- The institution's prior experience/role within HEP SSA, EEEP or other Academy schemes
- Engineering courses offered
- Number of students, graduates and employment statistics
- Number of staff and education level
- Link to website for engineering faculty

Industry partners
- Lead contact's name, position and institution
- Type of formalised agreement (i.e., MOU or project partnership agreement)
- Nature of business and type of products/services offered
- Name of department and institution
- Research development budget
- Indicator of size (i.e. number of employees, turnover and branches/offices)
- Link to website

UK partners
- Lead contact's name, position and institution
- Type of formalised agreement (i.e., MOU or project partnership agreement)
- The institution's prior experience/ role within HEP SSA, EEEP or other Academy schemes
- Please provide details on any prior collaboration with lead applicant
- Indicator of track record (rankings, awards)
- Link to website for engineering faculty

Other partners
- Lead contact's name, position and institution
- Type of formalised agreement (i.e., MOU or project partnership agreement)
- Nature of organisation (i.e., PEI, government, funder)
- Please provide details on any prior collaboration with lead applicant
- Indicator of track record (ranking, awards)
- Link to website

1.8 Involvement in other Academy programmes (600 words max):
Please include any current Academy application, award or project that you or your partnering institutions are involved in or have been involved in over the last three years.

Please note that while a hub university can only reapply as a hub once their current HEP SSA award ends, a spoke, UK or industry partner can and are encouraged to participate on multiple applications. Each application must be unique in addressing local or regional challenges.

<u>1.9 Role, contribution and benefits of the industry partner(s) (600 words max):</u>
Provide justification for the choice of the industry partner(s) including the strategic importance of this relationship to your institution.

Please specify the exact role of the industry partner(s) in the project, provide details of what will be achieved through this collaboration, the long-term vision of this partnership and how you plan to ensure sustainability post funding, and other information you deem of importance for the benefit of the industry partner(s) (i.e., research projects, graduates, access to equipment).

<u>1.10 Role, contribution and benefits of the UK partner(s) (600 words max):</u>
Provide justification for the choice of the UK partner(s) including the strategic importance of this relationship to your institution.

Please specify the exact role of the UK partner(s) in the project, provide details of what will be achieved through this collaboration, the long-term vision of this partnership and how you plan to ensure sustainability post funding, and other information you deem of importance for the benefit of the UK partner(s) (i.e., guest lectures, curriculum review, student/staff exchange).

<u>1.11 Role, contribution and benefits of the spoke university partners (600 words max):</u>
Provide justification for the choice of the spoke partners including the strategic importance of this relationship to your institution.

Please specify the exact role of each spoke partner in the project, provide details of what will be achieved through this collaboration, the long-term vision of this partnership and how you plan to ensure sustainability post funding, as well as other information you deem of importance for the benefit of the spoke university partners (i.e., access to equipment, networks, expertise, curriculum review).

<u>1.12 Project partner(s) formalised agreements:</u>
Please upload formalised agreements, signed on headed paper, by your industry partner(s), UK partner(s) and spoke university partner(s).

2. Project details

This section will give you the opportunity to provide details on your proposed project, including outcomes, activities, expected outputs, stakeholders and means of communication.

Please note that there is an option to upload supporting documents, diagrams and figures in section 4.

Starting with a holistic viewpoint, consider these concise steps for developing project components:

1. **Begin with the bigger picture**:

- Define transformative project goals that encapsulate your envisioned impact.
- Break down these goals into specific, measurable objectives that directly contribute to realising the overarching project vision.

2. **Link objectives to tangible outputs:**

- Identify concrete outputs stemming from each objective.
- Ensure a clear and direct alignment between outputs and their corresponding objectives.

3. **Design activities for output attainment:**

- Chart out activities that pave the path to each output.
- Explain how activities play a decisive role in directly generating the intended outputs.

4. **Harmonize inputs with activities:**

- Allocate essential resources, workforce, and expertise for your activities.
- Confirm that inputs align proportionately with the complexity of each activity.

5. **Integration of impact indicators:**

- Define specific indicators for both outputs and objectives.
- Ensure these indicators fulfil SMART criteria: specific, measurable, achievable, relevant, and time bound.

2.1 Project title (20 words max):
Provide a title for the proposed HEP SSA project.

2.2 Project keywords:
Please provide up to four keywords that best describe this project.
For example: education, gender equality, mechanical engineering, problem-based learning, entrepreneurship, practical education.

2.3 Project rationale and summary (250 words max):
What development challenge or need is the project trying to address? This should be a short statement or summary. Please include how the project meets the objectives of the HEP SSA programme.

For example, the country is undergoing rapid urbanisation and as a result, the population is growing in urban areas, increasing the need for infrastructure development; yet civil engineering graduates do not have the necessary skills required by industry and hence remain unemployable.

2.4 Project outcomes (250 words max):

What final result/s are you trying to achieve? This is the purpose of the project, and it should be clear and brief. Where possible, please limit your response to one or three major overarching outcomes and ensure the outcomes are SMART (specific, measurable, achievable, relevant and time bound).

> Please define the specific changes in behaviour and institutions that your project aims to achieve and how do you plan to measure them. What transformative change do you anticipate in the lives of individuals resulting from your project?
>
> Example:
>
> (1) Increase performance rates of first and second year civil engineering students by 20% in end of course test.
>
> (2) Hands-on teaching methods integrated in the civil engineering curriculum.

2.5 Project indicators (no word limit):

How will you assess progress against your outcomes? Please list all indicators that you plan to deliver under this project with their corresponding values.

> Indicators are means of measuring progress towards achieving the expected results and demonstrate the impact of your project. These should be SMART. We would like to see indicators for each activity of your project, reflecting the changes you anticipate and the progress you aim to track. Indicators can be quantitative or qualitative, depending on the nature of the objectives that the indicator aims to measure.
>
> Some types of indicators (e.g., number of organisations that sign internship agreements, number of times academic staff use resources etc.) will be meaningless if simple quantitative measures are used in isolation. These indicators will need to be supplemented by qualitative descriptions.
>
> Whenever possible, we suggest using a balance of quantitative and qualitative indicators to better communicate the extent to which the project delivers results e.g., describing the number of people benefiting from the project and the nature of those benefits.
>
> Example:
>
> (1) Improvement of final scores in first- and second-year civil engineering students who have received industrial exposure.
> (2) Positive response from first- and second-year civil engineering students on industrial uptake.
> (3) Creation of learning needs assessment methodology and evaluation system.

Please note that data on indicators is required to be disaggregated by age, gender, disability, and ethnicity. This disaggregation will provide valuable insights into the differential impact of your project on various groups within the community.

Successful applicants will also be required to monitor against programme-level indicators that will be provided by the Academy before projects start. Further support and resources will be provided at the kick-off and monitoring and evaluation workshops from December 2023 to March 2024.

2.6 Project key anticipated outputs (500 words max):
What are the particular outputs needed to achieve the outcome/s of the project? Please specify outputs that are directly linked to the desired changes.

'Project outputs' refers to the short- and medium-term direct and quantifiable results that the project intends to deliver. There may be several outputs. Outputs need to be specific, relevant, measurable, achievable and timebound.

Example:

(1) Creation of a civil engineering competency framework.
(2) Development of an enhanced method to evaluate teaching effectiveness in civil engineering courses.
(3) 60 first- and second-year students exposed to practical training.
(4) 40 academic staff trained on industry innovation and sustainability
(5) 30 academic staff and 20 industry representatives attend three skills development workshops.

2.7 Project activities (1,000 words max):
Please list all activities you plan to deliver under this project. Please include a short description, associated values and participants.

'Activities' refers to the main tasks that need to be completed for the outputs to be achieved. There may be several for each output. Statements should be brief and include action words.

Activity examples related to output one ('creation of a civil engineering competency framework') included on question 2.5:

(1) Assessment of learning needs of first- and second-year civil engineering students.
(2) Hold three skills development workshops with industry,
(3) Hold two training sessions for academic staff on industry innovation and sustainability.
(4) Second 10 academic staff to industry.

2.8 How have you considered gender equality in the project or activity design? (400 words max):

In line with the [UK government's Gender Equality in Research and Innovation Policy](), all successful applications to this scheme must demonstrate consideration of the activities on gender. All funded activities will, and at a minimum, ensure that no harm is done to gender equity.

To this end, please outline any specific gender considerations and implications for your proposed project. This could include any measures you have put in place to ensure equal opportunities, any expected impacts on people of different genders, or any outcomes or outputs that you will measure disaggregated by gender.

> Please read the D&I guidelines on page 11 of the applicant guidance notes, which can be found by visiting the Academy website HEP SSA page, under the 'supporting documents' menu on the right hand side of the page. Please also read the gender equality assessment guidance before answering this question.
>
> **Please note that progress on meeting gender goals should be tracked throughout the project life cycle and included on monitoring and evaluation processes**.

2.9 How will you contribute to advancing D&I through your project? (250 words max):

> To advance D&I through your project initiatives, consider your team, collaborators, communities the project works with, the implications for your project design and topic, and how you will measure success.
> In your response, please ensure you also clearly explain and outline how you will measure the progress and inclusion of underrepresented groups against project objectives.

2.10 Please explain how students and early career researchers will be participating in this project and to what extent they will be involved? (200 words max)

2.11 Stakeholder analysis and engagement (300 words max):

Please identify and list the project audience and stakeholders as well as local communities and end users who might be interested in and benefit from this project, as well as those who might oppose or be negatively impacted. For each stakeholder group, describe the 'how' and 'what' benefits/ negative impacts they will get from the project and if/how you intend to engage them during the project.

> For stakeholders: consider the relative interest each group or organisation has in your work, and their relative influence over your ability to achieve your impact goals. This influence could be negative (blocking you from achieving impact) or positive (enabling you to achieve things that would not have been possible without their help).
>
> For communities, end users, etc. in addition to considering their relative interest in your work, consider the extent to which different groups (e.g., demographics, interest groups) might benefit from the project, or might be

negatively impacted, and how you intend to engage them and ensure their voices are heard.

You might find the Academy's [Systems 101 workshop slides](#) useful in your thinking, (particularly slides 1 to 3).

2.12 Please select the primary Sustainable Development Goal (SDG) that your project will address from the list below:

For more information on the SDGs and the 17 goals, please visit: www.un.org/sustainabledevelopment/sustainable-development-goals/

2.13 You may select a secondary SDG that your project will address from the list below.

2.14 You may select a tertiary SDGs that your project will address from the list below.

2.15 ODA eligibility (100 max):
Please outline how your project fits the criteria for Official Development Assistance (ODA) funding.

For more information about ODA, please refer to www.ukri.org/research/global-challenges-research-fund

2.16 What platforms and communication channels will you use to deploy and implement your activities to ensure project success and raise the visibility of the project? (200 words max):

Reviewers are keen to see how the hub will communicate with the different partners and stakeholders involved in the project to achieve the objectives.

Reviewers are keen to see innovative approaches and the use of technology in the projects. For example, which technologies would be used to share messages and expand reach. This may cover the use of social media, online platforms or other technologies.

2.17 What type of challenges do you foresee and how will you overcome them? (200 words max):

We appreciate that current circumstances can be challenging for project delivery, for example countries affected by social unrest, conflict and/or climate change related crisis. In this answer, we would like to see that you and your team have considered these circumstances when making project plans and can adapt if necessary.

3. Measuring progress and impact

This section is critical because it will provide a blueprint for both the Academy and lead applicant to measure progress and to demonstrate the project's success, challenges and the sustainability, as well as its impact.

3.1 Monitoring and Evaluation

How will you and your partner(s) track progress against the project outcomes? Where will you find the relevant data and how often do you plan to collect it? What processes are in place to identify issues and mitigation strategies if activities are not going as planned? (600 words max)

> What information will you need, who will be in charge of collecting it and how and from where can it be gathered?

3.2 Learning and adaptation

Please tell us how you are planning to embed lessons learned during the implementation of your project and after project completion, and with whom you plan to share those experiences. (200 words max)

> Please describe how you will integrate lessons learned and whether you will share those lessons with anyone. If you will, please explain who they are and why you plan to share this information with them.

3.3 Project sustainability

Please tell us how you intend to sustain the project once the grant ends. (400 words max)

> Which project activities do you foresee being able to continue or scale up after this grant ends? If funding is necessary for those activities, please describe how you plan to secure further funding. Please describe sustainability plans beyond funding.

A note on project sustainability

In order to be sustainable and ensure that project objectives continue to be met beyond the funding period, a project must:

- be adaptable, to cope with a changing environment and unexpected circumstances
- be realistic and implementable
- be scalable, so activities can grow, or new activities can be brought in
- involve all relevant stakeholders in decision-making to ensure buy-in through active involvement.

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4. Project planning and resourcing

4.1 Intellectual property rights (IPR) agreement (300 words max):

> If the project involves the potential generation of Intellectual Property (IP), provide the details of any relevant agreements. If no formal agreement exists or is planned, include considerations of any potential risk to IPR and how the risk will be mitigated. Please note that if the project aims to generate IP, the Academy expects the hub and partner institutions to agree in writing on IPR

before the start of the exchange. Any agreement should allow for agreed dissemination activities to be undertaken unhindered. The Academy will not have any claim on any IP created. Guidance on reaching IPR agreements as well as model arrangements for collaborative research can be found here.

4.2 Will your project activities promote access to research infrastructure and/or entrepreneurship and commercialisation?
Please select the corresponding option. If you are planning to cover both in your project, please mark both options and expand your answers on questions 4.3 and 4.4 respectively.

4.3 Access to research infrastructure:
How will the project help increase the research infrastructure at the hub university and its spoke partners?

Please upload a list of activities including individuals' names, if possible, from the UK, spoke universities and hub institution that will enable access to research infrastructure. Please outline their role, duration and a detailed proposal for the activity that they will be undertaking.

4.4 Entrepreneurship and commercialisation (400 words max):
Provide a narrative summary explaining how entrepreneurship and commercialisation skills will be strengthened within your institution and the spoke university partners through your project activities.

For example, this could be through entrepreneurship and commercialisation theory being added to course curricula, or more practical skill development in research projects with industry partners.

Please include how this will:
(i) support the project in meeting its objectives overall
(ii) tie in with your institution's strategic priorities.

4.5 Images and diagrams:
Please upload any images or diagrams to support your application. You can upload a maximum of one file, so if you have multiple images to display then please collate them into a single file and be sure to arrange them in the order you would like them viewed. A PDF file would be the most user-friendly format.

Project Gantt chart
Please upload a project Gantt chart, using the template provided by the Academy. *You can find this template on the Academy website HEP SSA page, under supporting documents on the right side of the page.*
A Gantt chart is a type of bar chart that lists each planned activity under the project and shows when they will take place. It can also be useful to add a column that states who will undertake the activity. The more detailed this is, the better.

Project risk register
Please upload a project risk register, using the template provided by the
Academy.

A risk register is a living document, so will change during the project lifetime. It
is, however, important that you submit a pre-project risk register that details
the potential risks, the likelihood and consequences of those and what will be
done to mitigate the risks. A risk register is presented as a grid.

5. Finance

Total grant funding requested (£):

Please note that this shouldn't exceed £100,000.

Please convert your currency to pound sterling (GBP) using this online tool:
www.xe.com/currencyconverter/

Budget
Please upload a budget, using the relevant template provided by the Academy.

The budget template is split into 'revenue costs' and 'capital costs'.
Revenue costs includes items such as salaries, the cost of knowledge-sharing
workshops and secondments.

Capital costs include items such as equipment.

While the Academy will fund capital costs, any such purchases should be
justified and clearly needed for the project implementation.

Please note that the budget must be submitted to the Academy in pound
sterling (GBP). Budget lines for bank charges and inflation can be included
where necessary – please explain how these have been calculated in the 'notes'
section.

It is important that your budget is activity based, meaning that each budget
line should be broken down into as much detail as possible. Please add
headings and additional rows as needed. For example, a heading such as
'selection of participants' could be broken down into stationery, venue hire,
chair hire, with one row each.

It is important that your figures are realistic and based on real quotes. If you
have a finance department, please ask them to check that your budget is
realistic before submitting this. Where possible, including a document that
demonstrates sign off from the finance department will add weight to your
application.

5.1 How have you considered value for money in your project design? (400 words

max)

Value for money (VfM) is not always about getting the cheapest option, but about using resources well. It means finding the best balance between the four Es (economy, efficiency, effectiveness, and equity) to ensure the quality of the project outcomes to create value.

Please outline what you have done to address this in your project proposal.

VALUE FOR MONEY AND THE FOUR Es EXPLAINED

Economy refers to the costs of the inputs needed for the project. For example, are project inputs of the appropriate quality at the right price (inputs can be staff, consultants, etc)?

Efficiency refers to the costs of delivering the expected outputs (results). For example, how well are the inputs being converted into outputs? Is the project spending well?

Effectiveness refers to whether the project's outputs translate into the project's outcomes (objectives) and desired impact, and at what cost. For example, are the outputs produced by the project having the intended effect on the hub and its partners, and the project target groups?

Equity means assessing how fairly the benefits of a project are distributed and the extent to which those benefits reach excluded and underrepresented groups. For example, is the project benefiting some groups more than others? Are outputs reaching woman and girls? It is also important to consider what will happen if these groups are not reached. Are your project benefits available to and reach all people that they are need to?

The purpose of the VfM framework is to develop a better understanding of costs and results so that the project team can make more informed, evidence-based choices to determine what outputs and outcomes a project can realistically expect with the desired quality and at the lowest price.

These results are not just short-term tangibles but should also be longer-term sustainable benefits for the hub and its partners, and the target groups.

Please note, if your grant application is successful, regular financial spot checks will be conducted as part of the reporting process. With this in mind, all expenditure should be able to be receipted (proof of payment). The Academy will not support any per diem expenditure.

6. Letters of support and declaration

6.1 Letter of support lead applicant institution

Please upload a letter of support from the vice-chancellor or equivalent at the lead applicant institution.

The author should include:
- confirmation of their support for the application
- why they support the project
- how it fits the department's aims
- what form the support will take.

Please also copy the bullet points below directly into your institution's letter of support:
- The project will be led by an appropriate member of staff throughout the project.
- The applicant, and any co applicant(s) will be given full access to the facilities, equipment personnel and funding as required by the applicant.
- The costs submitted in the application are correct and sufficient to complete the award as envisaged. Any shortfall in funding will be met by the institution/university.
- The institution will ensure that the proposed programme of work has been agreed between all institutions involved in the project and that all necessary contracts, visas, IPR agreements, financial processes and other necessary arrangements are in place before the start of the exchange.
- The institution is satisfied that language will not be a barrier regarding a successful collaboration and, if necessary, sufficient language support and training will be obtained in advance of the project.

6.2 Letter of support UK partner institution
Please upload a letter of support from the UK partner taking part in the project.

The UK partner letter of support should include:
- confirmation of their support for the application
- outlining their role within the project
- how it fits within their strategic aims
- what form the support will take (staff time, guidance, facilities, facilitation, etc).

6.3 Declaration
This section asks the lead applicant to indicate that they understand that they will be required to sign a contract; confirm that the information stated in the application form is correct; that they agree to work with the Academy to mitigate fraud; and that they agree that the application will be shared with external assessors.

You can upload the statement found in this section as an additional scanned document if you wish.

I confirm here and by submitting this application that:

- all information is accurate at the time of submission
- the ideas presented are my own and not plagiarised or containing IP that is not owned by myself
- all contributions have been appropriately referenced or credited including the use of any online tools such as AI generative tools used in developing my application
- I understand that failure to cite and declare references or sources will result in my application being removed from the process
- I understand that my application and any content including IP shared within will be shared with reviewers as part of our application process
- I have the express permission of any individuals whose contact details I have shared as part of our application process, to share these details with the Royal Academy of Engineering.

Once your application is complete, a 'submit application' button will appear at the top of this page.

If you think you have completed the application, but the button has not appeared, please go back through and ensure every question is complete and that you have pressed save on every page. Likewise, any co-applicants who have edited this form must press save on every page before the button will become available.

Assessment of applications

Applicants will be evaluated by a specially convened panel with expertise spanning the breadth of engineering, professional institutes and international development. Applicants may be required to answer follow-up questions based on the review. Applications should be understandable to the non-specialist engineer. Reviewers will allocate a numerical score to each application and give comments. All applications will be assessed against the following judging criteria:

- Has the awardee submitted all requested relevant documentation (Gantt chart, risk register, budget, letter of commitment)?
- Does the organisation have suitable capacity and experience to carry out the project?
- Has the applicant included a suitable budget, within the financial parameters of the call, that links cost to the project activities outlined?
- Is the timeline realistic?
- Does the project demonstrate value for money?
- Does the application meet the programme objectives and expectations?
- Does the application meet ODA eligibility criteria?
- Are the partnerships suitable and sensible?
- Are suggested activities achievable and sensible?
- Is it innovative in the approach and is technology used in an appropriate way?
- Quality of monitoring and evaluation plan – are the processes clear and appropriate?
- Sustainability – will it have lasting impact beyond the lifetime of the project?

Please note that the Academy will retain personal information as per our Data Retention Policy.

Gender equality statement

Question 2.8 and 2.9 of the application form refer to the inclusion of gender diversity and marginalised groups in the project design and implementation, as well as in the monitoring and evaluation plan.

This is a key question, and your project's eligibility will be assessed against this. Please see the criteria below

RED = fail: ask for more details:

- Response is minimal or dismissive. No considerations are evident, or there is not enough information to demonstrate understanding of gender implications.
- Potentially negative implications have been ignored, or are acknowledged but not mitigated for.
- The project is likely to exacerbate gender inequality.

- Note: If the response still receives a RED score after the applicant has had the chance to revise their statement, the application will fail eligibility checks and will not progress to review stage.

ORANGE = pass: neutral/do no harm achieved

- Gender implications have been considered in the project design, and there are no obvious negative impacts on gender equity.
- Where potential negative impacts are identified, efforts have been made to mitigate.
- Evidence that gender norms or barriers are understood, but it has been assessed that the project has no implications on gender and will do no harm to different genders.

GREEN = pass: specific gender equality benefits likely

- Clear evidence that gender implications have been well considered in the project design, and there is a clear pathway to a positive impact on gender equality.
- Gender impacts will be measured, monitored, and managed and clear evidence of active mitigation of any negative impacts.
- There may be reference to gender in Monitoring, Evaluation and Learning plans, including KPIs, sex disaggregated data, or specific measurement of gender-related outcomes.
- There may be reference to stakeholder consultation with a gender lens.

During the eligibility check period (19 October to 26 October 2023) please be ready to answer questions on your gender equality statement as this is a key part of the eligibility process.

Contact us

If you have any questions about your eligibility, the programme, or any problems, please contact **africaengineers@raeng.org.uk**

Frequently Asked Questions can be found on our **website.**

Log in to start your application at **https://grants.raeng.org.uk**