Introduction
The Higher Education Partnerships in Sub-Saharan Africa Programme – supported by the Anglo American Group Foundation and the UK Government through the Global Challenges Research Fund – was established by the Royal Academy of Engineering following the successful pilot scheme, Enriching Engineering Education Programme to help address the engineering skills shortage in sub-Saharan Africa and to showcase engineering’s role in driving economic development in the region.

By forming and strengthening relationships between academia and industry, the programme aims to ensure that the higher education system in sub-Saharan Africa produces engineers with the skills and knowledge required to meet the needs of industry and to tackle local challenges.

To maximise the impact of this collaboration, the programme is implemented through a ‘hub and spoke’ model. In the pilot phase of this programme, which ran between 2013 and 2015, the two Hub universities were the University of Zimbabwe (Southern Africa) and the University of Dar es Salaam in Tanzania (East Africa). The Hub universities were funded to undertake bilateral staff and industry work placements with local industry partners, and in turn, share their experiences with a larger number of Spoke universities through a series of workshops that they organised and funded. During the pilot ten Spoke universities across a further five countries in sub-Saharan Africa participated in the programme.

After a funding call earlier this year five universities were selected:
The University of Botswana, Botswana
Moi University, Kenya
The University of Dar es Salaam, Tanzania
Makerere University, Uganda
The National University of Science and Technology, Zimbabwe

The Royal Academy of Engineering is delighted to this month launch a new call for additional hub institutions in sub-Saharan Africa. Academic Institutions are invited to bid to receive two years of grant funding totalling up to GBP £140,000. This will be expended in four equal payments.

Applicants are now expected to incorporate a UK partner as part of their application, as well as partners from local industry and Spoke institutions. Please note, for any applicant that does not have a UK partner, the Royal Academy of Engineering will be able to facilitate this connection.

Eligibility criteria

- The suggested project should clearly align with the overall aims and objectives of the scheme; however, original ideas and local solutions are actively encouraged.
- Project activities must include a budget of up to £140,000 delivered over a maximum of two years.
- Project activities must run between March 2017 and March 2019.
- Applicants must be a university in sub-Saharan Africa* and must not be currently receiving funding from the Royal Academy of Engineering.
- The university must propose a means of collaboration with at least one partner based in the UK. A partner may also be considered as the UK institution if it is headquartered in the UK.
- The lead applicant will be a university in sub-Saharan Africa and must propose a means of collaboration with at least one industry partner, one UK institution (academic or industry) and at least three Spoke universities nationally or regionally.

*For the purposes of the programme, the Academy considers the following 49 countries to be part of sub-Saharan Africa:

Programme objectives

This programme aims to bring engineering curricula in universities in line with current industrial practice, and to improve teaching practices and research output in engineering, through a structured partnership between universities and industry.

Programme expectations

- The successful universities will forge partnerships with local industry, universities within their country and/or region and establish/develop a relationship with a UK partner.
- Teaching staff (professors/technicians etc.) will undertake secondments – ideally over the summer teaching break – to local industry settings, and their cost of living and any replacement staff costs will be covered by the programme grant.
- Local industrialists will undertake secondments into the university setting to advise on curricular, mentor students, teach classes etc.
- At least one workshop per year will be hosted on a rotational basis throughout the Spoke network of universities discussing the lessons learned and potential actions to be taken.
- Students will be encouraged to participate in the programme through workshops and exposure to industrial secondees.
- The Hub institution will provide regular reports on the programme’s development to the Academy, and issue invitations to Academy representatives to attend the workshops.
- The cost of living and any replacement staff costs will be covered by the programme grant, in addition to hosting and travel to dissemination workshops.
- In addition to bilateral secondments and dissemination workshops throughout the Spoke network, applicants are invited to consider other activities which will meet the programme objectives to bring engineering curricula in line with current industrial practice, and to improve teaching practices and research output in engineering, through partnerships between universities and industry.

Submission deadline

The deadline for applications is 4pm (GMT) on Tuesday 31 January 2017. Any incomplete applications, or applications received after this date, will not be considered.

Monitoring and evaluation

The Academy has a requirement of close communication, should your application be successful. Awardees will be required to report on progress to the Academy every six months, to detail completed activities and future plans. The payment schedule for the grant will be contingent on these reports being received.

Awardees will also provide a follow-up report 12 months after the completion of the project, to demonstrate the longer term impact of the secondments.
### Payment/Reporting schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Report due</th>
<th>Payment due from RAEng</th>
</tr>
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<tbody>
<tr>
<td>March 2017</td>
<td>Initiation report</td>
<td>Up to £35,000</td>
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<tr>
<td>September 2017</td>
<td>Progress report</td>
<td>Up to £35,000</td>
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<tr>
<td>March 2018</td>
<td>Progress report</td>
<td>Up to £35,000</td>
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<tr>
<td>September 2018</td>
<td>Progress report</td>
<td>Up to £35,000</td>
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<tr>
<td>March 2019</td>
<td>Final report</td>
<td>No</td>
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<tr>
<td>March 2020</td>
<td>Follow-up report</td>
<td>No</td>
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### Contact details

If you have any questions at all, please don’t hesitate to contact:

Sebastian Scott  
Programme Officer, GCRF  
Royal Academy of Engineering  
Sebastian.Scott@raeng.org.uk  
+44 (0) 20 7766 0616

### How to apply

All applications must be submitted via the Academy’s online application system ([https://grants.raeng.org.uk](https://grants.raeng.org.uk)). The applicant must first register with the system and provide some basic log-in details to create a profile.

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.

The application form has seven sections and should take approximately two hours to complete, assuming you have answered the questions offline and merely need to enter the information, rather than compose it. The guidance notes below are more detailed so we recommend you keep this document to hand.

The primary purpose of this application form is to identify whether the applicant has a project plan suitable to the aims of the scheme. You will have the option to download a pdf of your application after submission, which may be useful for future reference.

Please note that we do request a letter of support from your UK partner and Vice Chancellor.

If you have any questions concerning the application or the online application system, please contact Sebastian Scott.
Completing the application form

After logging in to the online system and selecting the scheme titled ‘Higher Education Partnerships in sub-Saharan Africa’ you should be presented with the ‘Instructions’ screen. Here you will see some general instructions on how to use the system as well as the following list of the seven sections of the application form:

1. Applicant and institution details
2. Project details
3. Goals, objectives, and outcomes
4. Partners and Organisational Support
5. Support Requested
6. Letters of support and declaration
7. Marketing

At any stage in the application process you can save your progress and return to the application at a later time. You can answer the questions in any order you like so it is possible to skip some sections and return later. It is therefore advised to view the application early on for an indication of what is required, and you should also ensure that you have all the necessary documentation at hand when you start completing the application.

Please note: Applicants can only submit one application per institution.

1. Applicant and institution details

Please provide details of individuals and their respective institutions involved in this project.

Q. Lead applicant contact details
These are the details we will use to contact the lead applicant. The lead applicant must be a representative from a university in sub-Saharan Africa.

Q. UK partner contact details and any other partner details
Please list the contact details of a representative from the UK partner for the project, as well as any other notable partners.

Q. CV of lead applicant
Please upload the CV for the lead applicant.

CVs should be a maximum of four pages long. There is no set format for the CV but it should include information on posts held in at least the last five years together with information on education and qualifications obtained (with dates), evidence of eminence and seniority (for example: details of awards and prizes won, invited lectures, national/international committee membership/leadership). CVs longer than four pages will not be accepted.
Q. List of collaborating partners
Please provide a summary list of all potential partners for this project.

This could include potential Spoke institutions, industry partners and UK partners (from industry or academia)

You have up to 350 words to answer this application.

2. Project details

This section asks for summary details of the application.

A Project refers to a description of the activities that you will be undertaking throughout the two-year funding period.

Here you will provide the main summary details for the application, covering the dates of the visits, the costs, the general subject area and an abstract of the proposed activities.

Q. Project details
Please provide a project title.

Q. Summary/abstract of the project
The project summary should provide a brief overview of your aims, the programme of activities and the benefits of the activities to be undertaken during the project.

You will have further opportunity in subsequent questions to go into more detail, this is a simply an overview of the proposed two years of activities.

You have up to 300 words to answer this question.

Q. Total project cost
Please enter the total project costs, including costs covered by other sources of funding.

Q. Funding sought
This should state the exact amount of funding contribution sought from the Royal Academy of Engineering.

(Please note: The maximum available funding is £140,000)

Q. Keywords
Please identify keywords which sum up your application for the purpose of categorisation and review.

You have up to 10 words to answer this question.

Q. Suitability
Please explain why your university will be suitable as a Hub university, clearly explaining how you would ensure that it gained maximum benefit from the programme.
Please consider any other, related programmes the university is involved with – across any department, as well as the strategic vision of the university.

You have up to 500 words to answer this question

Q. **Is this a new collaboration or a pre-existing collaboration with the UK partner?**
Please select which option applies from the drop-down list. The scheme allows both new collaborations and excellent proposals where links or collaboration already exists.

3. **Goals, Objectives, and Outcomes**

In this section, please indicate the main activities to be undertaken and the expected outcomes, including how you intend to maximise the benefits gained from the project and the methods that you will implement to monitor and mitigate risks.

Q. **Outputs, outcomes and impact**
Please list all expected outputs, at least three outcomes and a short narrative description of the long term impact of the project.

You have up to 600 words to answer this question

Outputs definition:

What does your project produce? For example, number of students taught by an industrial secondee, a change in curriculum, a certain number of staff trained on certain technical equipment, or a number of secondments completed.

Outcomes definition:

An outcome is a change that occurred because of your project. For example, employment of graduates, an improved curriculum leading to an increase in skills of students, or an increase in skills of staff.

Impact definition:

Impacts are the long-term effects of your activities. They are what you hope your efforts will accomplish. For example, it may be increased local industry production, increased university ranking, increased native engineers undertaking national engineering projects/ reduced reliability on foreign engineering consultancy.


Q. **Key indicators**
What will you measure to see if there is any progress towards your outputs, outcomes or impact? (i.e. staff involvement, number of workshops, number of secondments)
Q. Data collection methods

How will you measure the above indicators? (i.e. surveys, evaluations)

Q. Risks

Here identify any potential risks that could threaten the success of the project, and what measures or plans will you put in place to reduce or eliminate the potential risks involved. (i.e. lack of industry involvement is a risk & engaging multiple industry partners would reduce this risk).

Q. Provide a detailed description of the activities to be undertaken

Describe the programme of work to be undertaken during the secondment including how novel, realistic/ambitious the project is. **Outline the specific deliverables anticipated and appropriate milestones by which to measure progress.** There is an option to upload any supporting documents, figures and diagrams in the next question. Your description should include:

- Description of the agreed work programme(s), including a breakdown of tasks
- Context of the proposed programme and the need it addresses
- A detailed technical case for the programme of work

**Please note:** All responsibility for arranging travel and accommodation will lie with the lead applicant

Q. Supporting Documents

This is an optional question and not a requirement.

Upload any supporting documents related to your project. 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 would be the most user-friendly format.

Q. How will the collaboration continue following the Academy’s support and how will the outcomes be built upon?

Provide details on how you will sustain the outcomes of the project, for example: how you will maintain collaboration. Please also provide information about how this could be funded.

Q. Please provide details on the ownership of any future Intellectual Property which may result from the project, and any formal agreements to this effect
**Please note:** The Academy expects the researchers and institutions to agree in writing on Intellectual Property Rights (IPR) before the start of the project, if relevant. Any agreement should allow for agreed dissemination activity to be undertaken unhindered. The Academy will not have any claim on research funded by the scheme.


You have up to 200 words to answer this question.

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4. **Partners and Organisational Support**

**Q. Organisational capacity**

This is your opportunity to highlight the level of support from within your university, who will support in the deliverance of this project, and the support you will receive from the university’s Vice-Chancellor or equivalent position. This is an important part of the application process as it outlines the organisational support for the project.

There will also be a request to upload a letter of support from the Vice-Chancellor or equivalent in Section 6.

You have up to 500 words to answer this question.

**Q. Potential Spoke University Partners**

As a Hub university, we expect you to engage and share knowledge with Spoke universities regionally and nationally within Africa. Please note down whether you have approached any regional or national university at this stage, and what steps you have taken to involve the Spoke universities. Spoke universities can include neighbouring and regional countries.

You have up to 500 words to answer this question.

**Q. Potential industry partners**

We expect the Hub university to work with industry partners nationally and/or internationally. Please suggest local industrial partners you would expect to involve if successful. Please also indicate whether you have approached them regarding involvement at this stage.

You have up to 350 words to answer this question.

**Q. Choice, role of and benefits to the UK partner**

Provide justification for the choice of the UK partner including the strategic importance of this relationship to you and your institution. Specify the exact role of the UK partner in this project. Provide details of what has been achieved so far through any existing collaboration and what is the overall perceived long term vision for this relationship along with expected benefits to the
UK partner and UK in general which will result from the collaboration.

If you do not have a UK partner, please contact Sebastian Scott for help securing one.

You have up to 350 words to answer this question.

5. Support Requested

Please use the budget template provided by the Academy on the website. If you cannot find it, please contact Sebastian Scott. Clearly outline how you would allocate you grant if successful, over a two-year period.

If your project will cost over £140,000, please explain how the extra funds will be secured.

Q. Outline budget

Please upload the project budget in the provided budget template.

Funding guidelines:

- This programme offers financial support for travel, subsistence and salary support costs related to your proposed activities amongst industry and academic partners in sub-Saharan and the UK. As well as any additional activities proposed.
- Successful applicants will receive four equal payments throughout the two-year period on receipt of the progress reports.
- The totals may come to more than the maximum funding you can request under this scheme. If the amount noted is higher than the award can provide, please state the contribution to be made from an external funder.
- The bulk of the funding provided should not be used to pay for equipment.
- Organisational overheads should not exceed 10%

Q. Justification of costs

Please provide a brief explanation of all costs, covering both what the funds will be spent on and why. We require evidence that you have researched the costs for which you are seeking support; for example, you could include the cost per night of accommodation. Travel costs should be based on the most suitable and economical form of travel.

You have up to 300 words to answer this question.

Q. Additional funding to be received (if applicable)

Please provide details of additional funding which will be provided by the partnering organisations or others in support of the project if applicable.

This may include ‘in kind’ support such as time donated by experts or laboratory equipment donated by industry partners.
6. Reference and Declaration

Q. Vice-Chancellor Support
Letters of support should be written by the applicant’s university Vice-Chancellor or equivalent.

As a minimum the author should include:
  • Confirmation of their support for the application
  • Why they support the project
  • How it fits in with the department’s aims
  • What form the matched contribution will take (financial, staff time, guidance, facilities)

The letters should be on headed paper, a maximum of two pages long, signed by the author, and uploaded by the Applicant as a pdf.

Please note: The quality of institutional support is a key factor in the strength of the application

Q. UK Partner’s Letters of support
If you have secured or have a pre-existing relationship with a UK partner, please attach a letter of support confirming their commitment to the project, and level of involvement. Please refer to the FAQs on the website for UK partner eligibility.

The letter of support should include:

  • Confirmation of their support for the application
  • Why they support the project
  • What role they will have in the project
  • How this matches with their area of interest/expertise?

The letters should be on headed paper, a maximum of two pages long, signed by the author, and uploaded by the Applicant as a pdf.
The Application and Award Process:

1. **Submit Application**
2. **Eligibility Check**
3. **Further information sought if necessary**
4. **Panel reviews sought**
5. **Panel selects applicants for awards**
6. **Unsuccessful applicants informed**
7. **Offer Made**

Timeline:

1. **November – January**
   - Call Open
2. **January – February**
   - Eligibility checks and panel review
3. **February – March Selection Meeting**
4. **March Offers made/Unsuccessful applicants informed**