

Engineering a Better World Internships 2023

Student Application Guidance Notes

Deadline: Tuesday 31 January 2023 12pm (GMT)

All questions to be sent to alice.radley@raeng.org.uk

Introduction to Engineering a Better World Internships

The Engineering a Better World Internships place groups of talented engineering students from UK universities with alumni of the Academy's Africa Prize for Engineering Innovation for a fully-funded work placement between six to eight weeks over the summer in order to:

- Support the entrepreneurs with technical assistance
- Enable the exchange of knowledge through partnership
- Inspire the students to pursue a career in challenge-led innovation for sustainable development

The Africa Prize awards crucial commercialisation support to ambitious African innovators developing scalable engineering solutions to local challenges. By interning with these businesses, students gain first-hand experience of working in multicultural teams to solve practical problems and use creativity to address real, meaningful challenges. Students learn to live in a different cultural environment and gain understanding of the workings of a startup.

Previous students have worked on:

- Modifying the STEM curriculum for school students in Kenya.
- Designing and manufacturing water metering systems in Tanzania.
- Providing distributed renewable energy services in Zambia.
- Machine-learning and data analysis at a fintech startup in Kenya.



Successful applications will need to fit the following criteria:

- Over the age of 19 on 1 June 2023
- Full-time engineering undergraduate or postgraduate student at a partner UK university (This includes software/computer science and students studying dual courses e.g. engineering and business)
- Any nationality
- Second year of study or above
- Willing to participate in an internship placement in either a group of two to three or individually (please specify your preference on your application form).
- Willing and able to contribute time and relevant skills to an Africa Prize alumni engineering startup, in a country in Africa
- Application shows motivation for participating in the scheme, ability to show initiative as well as awareness of cultural considerations of working in a different country
- Be able to travel to sub-Saharan Africa for a period between six to eight weeks, between June and September 2023
- That you have discussed this internship opportunity with any relevant parent or guardian necessary.



Application are to be completed on the <u>Academy's Grant Management</u> <u>System</u> and no later than:

31 January 2023, 12pm GMT

- Any incomplete or late applications will not be considered.
- Successful applicants will be required to participate in an informal meeting with your matched Africa Prize alumni ahead of partnership confirmation.
- Successful applicants will be required to complete a brief report one month after the completion of the placement.
- Applicants will also be required to provide photographs from their time on the internship and may be asked to provide further information to order for the Academy to assess the impact of the internships.



How to apply

All applications must be submitted via the Academy's online application system at:

https://grants.raeng.org.uk/startapplication.aspx?id=10938

The applicant must first register with the system and provide some basic log-in details to create a profile.

After logging in to the online system and selecting 'Engineering a Better World Internships 2020: Students' 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 four sections of the application form:



At any stage in the application process, you can save your work and return to it later. The system will automatically save your work when you change pages, but we recommend that you also save your work at regular intervals to avoid loss of data. You can answer the questions in any order so you may skip sections and return to them later if you wish. To submit your application, all sections and all required questions must be completed. **We recommend you compose your answers offline and then copy and paste them into the form.**

The application should take no longer than one hour to complete. Once you have completed all sections of the application a **'Submit Application'** button will become available at the bottom of this summary page.

Please contact <u>alice.radley@raeng.org.uk</u> with any questions or queries.

1. Applicant details

Q. Lead Applicant Details *

Please provide your full name and contact details.

Q. How old will you be on 1 June 2023*

Please provide your age to confirm your eligibility for the programme.

Q. Your university*

Please select the university which you are currently studying at from the drop down list.

Q. What is your degree name and year of study *

Please include any applicable links such as your website, social media or video links to demos.

2. About you

Q. Why are you applying for this opportunity? What are you hoping to gain?

Please describe your reasons and motivations for wanting to travel to a country in sub-Saharan Africa and work with an engineering entrepreneur.

Q. What have you gained from pervious work or internship experience that may be useful for this opportunity?*

Please describe any study, work, internship, or voluntary experience that might support your application.

Q. It is essential that students are able to take initiative and seek out tasks. Please can you demonstrate how you have displayed this quality in your past experience? *

Please describe any study, work, internship, or voluntary experience that demonstrate where you have used your initiative in the past.

Q. Do you require any assistance or reasonable adjustments to take part in a placement, due to a health condition or disability?

If you answer yes, you will be prompted by a further questions to describe any assistance or reasonable adjustment necessary for you to be able to take part in the placement.

2. About Your Internship

Q. What specific skills do you think you can offer to the entrepreneurs and their innovations or business on your placement? *

Please be as specific as possible as we will do our best to match successful applicants with Africa Prize entrepreneurs.

Skills could include: AUTOCAD, Javascript, Raspberry Pi, welding, biogas processing, or proposal writing.

Q. With which entrepreneurs would you most like to be placed? *

Please read the short overview of possible placements in order to express any preferences you may have for where you would prefer to be located. These preferences cannot be guaranteed but will be taken into account.

Q. How do your skills match the needs of your preferred placements?

Please explain how your skills and experiences match those needed for each of your preferred placements.

If you chose 'no preference', please explain why.

Q. What challenges might you face as an international student travelling to work with entrepreneurs in sub-Saharan Africa? What cultural considerations are there? How might you mitigate them?

Please describe any challenges that you might face when undertaking a placement in a different country, and what you would do to overcome them. You may wish to consider potential issues such as safety, cultural differences, isolation etc.

Q. Please tell us how long you can commit to spend on your internship?

While it is expected the placement will be for eight weeks between June and August 2023, consideration will also be given for those wishing to spend a shorter amount of time on the placement, to a minimum of four weeks.

Q. What is the earliest possible start date for your internship?

Q. What is the latest possible end date for your internship?

Q. The Academy aims to place interns in groups of two or three, depending on the needs of the entrepreneurs and skills of the students. However, on occasion some students might be placed alone. Please outline if you have any preferences.

4. Supporting Information

Q. Please upload your CV

This should be no more than 2 pages.

Q. Have you discussed this internship with your family or guardians, and are they happy for you to travel to a country in Africa for an internship this summer?

We highly recommend this is discussed with your family or guardians prior to application.

Declaration:

By ticking 'I understand' you are agreeing to the delclaration required for this internship. Please ensure that you read it thoroughly.

The Royal Academy of Engineering is committed to diversity and inclusion and welcomes applications from all under-represented groups across engineering.

It is the Academy's policy to ensure that no applicant is disadvantaged or receives less favourable treatment because of:

- Age
- Disability
- Gender reassignment
- Marriage and civil partnership
- Pregnancy and maternity
- Race
- Religion or belief
- Gender and sexual orientation

The Africa Prize for Engineering Innovation welcomes applicants from all backgrounds, and particularly encourages women and applicants from countries with less established engineering or entrepreneurial ecosystems to apply.

