

Royal Academy of Engineering Research Internships Scheme (Pilot Round 2) 2024-25

Application to Host Guidance Notes Deadline: 01 November 2023, 4pm

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1. Introduction

The Academy is deeply committed to improving diversity and inclusion in the engineering profession. The Academy's [Strategy](#) includes specific goals to boost the numbers and diversity of those entering engineering careers and to promote and expand the use of innovative approaches and best practice in engineering education and training. The Research Internships (Pilot) is a positive action initiative targeted at undergraduate students that are from a socio-economically disadvantaged backgrounds.

Through the **Research Internships Scheme (Pilot Round 2)** we will match Academy supported researchers with students to work on some of the most challenging problems facing society. These placements will increase the transition of diverse students into employment whilst also providing meaningful exposure to the engineering research world. It will also provide researchers with practical opportunities to develop inclusive leadership skills and give them access to research support and insight from a new generation of engineering talent. Up to eight interns will be funded in this pilot. All internships will take place in the summer of 2024.

2. Eligibility criteria for Hosts

To be eligible to host, applicants must ensure that they meet the following criteria:

- 2.1. Applicant (Host) must be an awardee of one of the following Royal Academy of Engineering (Academy or RAEng) research schemes; Research Fellowships, Research Chair/Senior Fellowships and Chairs in Emerging Technology.
- 2.2. Internships must take place during the summer break between 3 June 2024 to 4 October 2024, lasting between four to twelve weeks in total. Hosts can indicate in their applications the amount of time they can accommodate an intern for.
- 2.3. Hosts can be from any engineering discipline.
- 2.4. Hosts in their first year of their Academy research scheme are not eligible to host.
- 2.5. Hosts in their final year of their Academy research scheme must outlast the duration of the internship. Ideally their Academy research scheme should end after December 2024.
- 2.6. Hosts on costed or non-costed extensions are not eligible to host.
- 2.7. Hosts must provide the intern with the following: appropriate supervision and training; a meaningful project for the interns to work on (that can be carried out at the university premises or online if COVID-19 restrictions still apply); an appropriate, COVID-19 secure working space, including necessary equipment available for the duration of the project.

Any applications that are incomplete or do not adhere to the guidelines may be rejected.

The Academy is committed to diversity and inclusion and welcomes applications from all underrepresented 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, sex, and sexual orientation (defined as Protected Characteristics in the UK Equality Act 2010). In addition, the Academy will not discriminate against people on the grounds of class, caring responsibilities, gender identity, parental status, political opinion, or spent criminal convictions.

3. Application and selection process

3.1. Application process

3.1.1. This internship scheme follows a five-part process:

- Call for applications for researchers to host an intern – See 3.1.2.
- Host organisation advertising and call for student internship applications – See 3.1.3.
- Selection of successful student internship applications – see 3.1.4.
- Matching of hosts and successful interns – 3.1.5.
- Contracts and contracts of employment – see section 4.

3.1.2. Call for applications for researchers to host an intern

The first stage requires that eligible research awardees express their interest and commitment by applying to host an intern. This application will be submitted via the [grants management system](#) (GMS) and will be assessed by the Internship Scheme panel that includes an Academy Fellow. Applications will be assessed on the suitability of the project for an intern and the appropriateness and extent of the proposed supervision.

Once checked, eligible host applications will be listed on the website as an internship project that students will need to apply for. The Academy will provide a media card/advert and unique URL for hosts to advertise their internship internally. Host applicants will have to wait until the second stage has concluded before finding out if they have been successfully paired with an intern student.

3.1.3. Call for student internship applications

In the second stage, the 'student research internships' call will be launched on GMS. Students will be invited to submit their applications, by invite only, for the internship. Students can submit more than one application.

3.1.4. Selection of successful student internship applications

Student eligibility and applications will be reviewed by an Academy panel and peer review (RAEng Industrial Fellowships, Research Fellowships, Research Chair/Senior Fellowships and Chairs in Emerging Technology). The assessment criteria will include (but not limited to) the following:

- Eligibility.
- Overall quality of the application.
- Availability of the student to undertake the placement as per the hosts requirements.
- Strength of case as to why and how a research internship would benefit the student and their career.
- Distance of the host university from student.

3.1.5. Matching of hosts and successful interns

Once student applications have been reviewed, they will be ranked based on the reviewers' scores. The Academy panel will then match and rank student applicants with each host. The host will be informed when they have been successfully matched and advised to interview top ranked students. After all parties have accepted the arrangement in principle contracts will be drawn up before the start of the internship.

Please note that only the top ten ranked student and host partners will be funded for this pilot round.

4. Contracts and Contracts of Employment

- 4.1. In all cases, all award funds will be paid to the university (without exception). The university must use the funding to cover the salary of the intern.
- 4.2. For successful applications (*meaning that an awardee has successfully been matched with an intern for the internship to take place in the summer*), a contract will be drawn up and signed by the Academy and the University. This contract will contain details of the project to be undertaken, hours of work and reporting and payment schedules for the internship and any conditions for payment.
- 4.3. An appropriate employment agreement between the University and the intern is also required. The University is responsible for drafting this employment agreement or equivalent. The Academy needs to be in receipt of a signed copy of this employment agreement before the start of the internship. This agreement will detail the roles and responsibilities of each party.

5. Submission deadline

- 5.1. The submission deadline for applications to host is **01 November 2023, 4pm**
- 5.2. The submission deadline for student intern applications is **25 January 2024, 4pm**

6. Funding and duration

6.1. Funding

The scheme provides funding to cover the basic salary costs (excluding overheads) of the intern (including National Insurance and superannuation). In all cases, all award funds will be paid to the university (without exception). The university must use the funding to cover the salary of the intern as appropriate.

- 6.1.1. Intern's gross salary will be paid at £10.90/hr¹ or £11.95/hr if in London. Please indicate if your institution has a policy that is different to these suggested rates. Salaries will be paid pro-rata for the amount of time worked. These figures are accurate as of Autumn 2023. **If the real living wage increases before the internships are awarded, the total amount awarded may be increased by to reflect changes in the living wage.**

If your application is successful the final date for cost amendments is 28 March 2024, 4 pm GMT.

- 6.1.2. Additionally, the Academy can provide up to £2,000 over the course of the internship for additional expenses which will cover costs of intern caring responsibilities (e.g. childcare), in accordance with the Academy's caring responsibilities policy. If required, students will need to indicate this in their application. They will also be required to submit their caring expenses directly to the Academy along with any relevant documentation, receipts, and invoices. This will only be required if/when caring expenses are incurred.
- 6.1.3. Upon request, the Academy will also provide additional funding to cover (reasonable) travel and accommodation expenses of the intern. For these expenses to be eligible, they must be incurred due to business reasons related to the internship. Such as but not limited to, business trips outside of the agreed upon internship location. Please note that these requests need to be submitted in advance by the intern and are subject to approval of the Academy.
- 6.1.4. Please note that it is expected (though not a requirement) that the university provide in-kind or cash contribution towards this internship. For example, to cover career development, training, or any additional expenses the intern may incur.
- 6.1.5. If required, up to £2,500 may be claimed for additional *university costs of hire*. Other costs (not including intern salary) requested from the Academy need to be evidenced, itemised and signed for in your "Letter of Support". Eligible costs include employers NI, pension, annual leave or sick pay.

¹ [The London living wage](#) is suggested as a minimum of £11.95 and £10.90 UK wide this is over the [government national wages](#) and is not reduced by age.

Table One: Example of costings calculation for intern award value.

Item	Description
Intern Salary (London)	35-hour work week (12 weeks) @ £11.95 per hour, maximum £5,019
Intern Salary (UK, excluding London)	35-hour work week (12 weeks) @ £10.90 per hour, maximum £4,578
University costs of hire	Any other costs (not including intern salary) requested from the Academy needs to be evidenced and signed for in your "Letter of Support". The maximum available is £2,500.

6.2. Duration

Internships must last between four to twelve weeks in total. Flexibility on full/part time equivalent positions will be considered. As stated in the eligibility criteria, internships will take place during the summer break between 3 June 2024 to 4 October 2024. Hosts must be able to accommodate an intern during this time.

7. Roles and responsibilities

7.1. Role of the host

The expectation is that the host will provide the undergraduate student intern the opportunity to work on a suitable clearly defined project or set of tasks that will last for the duration of the internship. The host is also responsible for the following:

- 7.1.1. Hosts must ensure that interns will always be supervised and have access to help or guidance when required.
- 7.1.2. Hosts must ensure that an induction meeting takes place with the intern before the start of the internship. The aim is to introduce the intern to the project, the team and set the expectations. **Please note that this is a condition for the first payment to the university.**
- 7.1.3. Hosts must provide details to the interns of the specific tasks or roles the intern is expected to undertake.
- 7.1.4. Hosts must provide interns with an appropriate working space, including necessary equipment for the intern, for the duration of the project. Where possible, this should consider limitations around COVID-19. This may involve giving interns the opportunity to carry out some of the project remotely and ensuring that all working environments provided by the host are COVID-secure.
- 7.1.5. Hosts must provide a letter from the university confirming that health and safety training will be given as well as all other necessary training relevant to the project.
- 7.1.6. Hosts must ensure that interns fulfil their commitment to the internship by ensuring that the interns work the right number of hours and meet all project aims and objectives.

- 7.1.7. Hosts must ensure that any intellectual property (IP) generated throughout the project will adhere to university IP guidelines.
- 7.1.8. Hosts must notify the Academy of any changes or concerns that may arise throughout the internship. This includes any issues with interns not fulfilling their time commitments or any other agreed commitments to the internship.
- 7.1.9. Hosts must complete a pre- and post-placement survey as part of the Academy's evaluation process.

7.2. Role of the intern

Interns are expected to work on a research project set out by the host. It will be a suitable project that may consist of several tasks that will last for the duration of the internship. Interns can expect to receive clear aims and objectives which must be met before the end of the internship.

- 7.2.1. Interns are expected to report progress made to their internship supervisor and to maintain a frequent line of communication.
- 7.2.2. Interns must attend an induction meeting arranged by the host. The aim is for the host to introduce the intern to the project, the team and set the expectations.
- 7.2.3. Interns are expected to complete all specific tasks and meet all research aims and objectives set out by the host.
- 7.2.4. Interns must adhere to all health and safety regulations and follow all relevant guidance and procedures.
- 7.2.5. Interns are expected to attend the place of work as per the requirements set out by the host, ensuring that the agreed working hours, patterns, aims, objectives and commitments are adhered to and fully met.
- 7.2.6. Interns must notify the Academy of any changes or concerns that may arise throughout the internship. This includes concerns around either party's capacity to fulfil their commitments to the internship.
- 7.2.7. Interns must complete a pre- and post-placement survey as part of the Academy's evaluation process.

8. Monitoring

- 8.1. This scheme will not require extensive reporting. A monthly email from the host to the Academy's programme manager confirming that all terms and conditions are being met will suffice. The host or intern may contact the Academy at any time to express any concerns or to inform us of important developments. For more information on how to get in touch, please refer to the '**contact**' section of the guidance notes.

- 8.2. As this is a pilot round 2, feedback questionnaires will be circulated to all hosts and interns before and after the internship to assess impact and to improve the scheme.

9. How to apply

- 9.1. All applications to host an intern must be submitted via the Academy's online grants management system: <https://grants.raeng.org.uk>
- 9.2. The application form should take approximately two hours to complete. A summary of the guidance notes is embedded within the system itself. However, the guidance notes below are more detailed so we recommend you keep this document to hand.
- 9.3. You will have the option to download a pdf of your application after submission, which may be used for future reference.
- 9.4. If you have any questions concerning the application or the online system please email the Programme Manager at research@raeng.org.uk.

10. Completing the application form

After logging in to the system via the Academy website and selecting the **Research Internship Scheme – Applications to Host** 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 below list of the five sections of the application form:

1. Applicant and institution details
2. Project details
3. Case for support
4. Letters of support and declaration

At any stage in the application process, you can save your work and return to it later. You can answer the questions in any order, and you may freely skip some sections to return to later if you so wish. It is therefore worth viewing the entire application before beginning it for an indication of what is required.

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 for six years.

10.1. Applicant and institution details

As a registered user, the form should autocomplete your name, institution and contact details. You must ensure your email address is recorded accurately, as this is how the Academy will contact you regarding the application.

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 application.

10.1.1. Q – Research Programme

Please select the research programme which you are an awardee of. Only eligible schemes are listed.

10.1.2. Q - Position within home institution

Please provide the name of your position within your organisation.

10.1.3. Q – Lab website (if applicable)

If possible, please provide the web address for your lab or research group. If successful, this will help with promotion of your placement.

10.1.4. Q – Name of supervisor

If supervision responsibilities will be delegated to another individual within your team, please complete the table with summary details of the supervisor that will be the intern's main point of contact. If you will be the direct supervisor and the intern's main point of contact, please enter NA in all the fields as this does not apply. Please note that **PhD students are not eligible supervisors**. The supervisor must be at post-doctoral level or higher with experience of supervising and supporting interns.

10.2. Project details

This section asks for summary details of the application.

10.2.1. Q - Project start date

Please enter your proposed project start date. All projects must start on or after 3 June 2024.

10.2.2. Q – Project end date

Please enter the expected end date of the project. All projects must end on or before 4 October 2024. Please note that projects must last between four to twelve weeks in total.

10.2.3. Q - Type of internship – full or part time

Pick one of the options from the drop-down menu. If the number of hours worked is less than 35, then please select part time.

10.2.4. Q – Maximum hours per week required for research intern

Please indicate the maximum number of hours per week the research intern will be required to work for.

10.2.5. Q – Minimum hours per week required for research intern

Due to individual circumstances, not all interns will be able to commit to the maximum amount of time required. Therefore, please indicate the minimum number of hours per week the research intern will be required to work for to achieve the desired internship objectives.

10.2.6. Q – Award Costing Table

The *intern salary* is calculated as the gross salary (excluding overheads) of the intern (including National Insurance and superannuation) paid pro-rata against the time to be spent on the internship. The Academy will fund the hourly wage of the student based on the Real Living Wage, £10.90 across UK and £11.95 in London. Please see <https://www.livingwage.org.uk/what-real-living-wage> for more information. Please do not include any other projected expenses either than the intern's salary as part of this calculation.

You must do this calculation yourself and enter the correct calculated amount into your online application. You must enter the full amount you wish to apply for, which covers the entire duration of the intern's salary (not the monthly or weekly amount).

If required, up to £2,500 may be claimed for additional *university costs of hire*. Other costs (not including intern salary) requested from the Academy need to be evidenced, itemised and signed for in your "Letter of Support". Eligible costs include employers NI, pension, annual leave or sick pay.

Table two: award costings table

Cost Item	Total award value
Gross Intern Salary e.g. 35 hours for 12 weeks	£4,578 (UK) - £5,019 (London)
University Costs of Hire	Up to £2,500
Total	£7,078 (UK) - £7,519 (London)

10.2.7. Q – Research internship project title

The project title should be a one-line description of the research project. It should not be longer than 10 words and should be understandable to undergraduate students. **This information will be made public on our website.**

10.2.8. Q – Abstract

Please describe the research project in terms that can be understood by undergraduate students. The essence of the project should be captured in this section and should be as informative as possible. **This information will be made public on our website.**

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 and reflects the applicant's own voice² and ideas. If applicable, please contact the Programme Manager at research@raeng.org.uk for guidelines on the use of generative AI in the grant application process.

² For applicants whose first language is not English, machine translation may be used, but care should still be taken to ensure the accuracy of this translation, especially for technical vocabulary.

You have 100 words to answer this question.

10.2.9. Q - Subject category

Please see Appendix A.

10.2.10. Q – keywords relating to the project.

The keywords help in the selection and matching process. You may wish to include relevant words from the subject categories provided.

10.3. Case for support

In this section, please indicate the main activities to be undertaken and the expected outcomes.

10.3.1. Q – Detailed description of the project.

This project description will be used to advertise this internship, therefore please ensure that the terminology used is accessible to undergraduate students.

The expectation is that the intern will have a clearly defined project (and/or a set of tasks) for the duration of the internship. Please provide details of the specific tasks/role the intern will undertake. **This information will be made public on our website.**

You have up to 500 words to answer this section.

10.3.2. Q – Details of supervision and training required

Hosts must provide interns with appropriate support, supervision, and training. Please provide details of how interns will be supervised and supported for the duration of internship as well as details of any training required to ensure that the intern meets the internship objectives.

You have up to 200 words to answer this question.

10.3.3. Q – Relevant managerial or supervisory experience.

Please provide details of any experience that you or (if applicable) the named supervisor has supervising, managing, and supporting the work of students, graduates, or researchers.

You have up to 150 words to answer this question.

10.3.4. Q – Details of how diversity and inclusion is promoted in the working environment.

How do you promote and maintain an inclusive research culture and environment in how you manage, support, and supervise others? This includes promoting a healthy working environment that supports wellbeing and mental health.

You have up to 150 words to answer this question.

10.3.5. Q – Preferred intern working pattern.

Please provide details of the preferred working pattern for the internship including requirements for the intern to travel, preferred workdays and minimum hours worked per day. If there is flexibility with start dates and working patterns, please outline this here to help encourage a wide range of applications from eligible students. **This information will be made public on our website.**

You have up to 200 words to answer this question.

10.3.6. Q – Will there be an appropriate working space provided?

This includes any necessary equipment available for the intern to use for the duration of the project.

Please select 'Yes' or 'No' from the options below.

10.3.7. Q – Can the internship be carried out from home (remotely)?

If required due to COVID-19 restrictions or to meet any other specific needs of the intern, could the intern carry out the internship remotely from home? **This information will be made public on our website.**

Please select 'Yes' or 'No' from the options below.

10.3.8. Q – If required, will remote working equipment be provided?

Equipment may include items such as (but not limited to) a laptop, monitor, mouse, keyboard and/or access to any specific software licenses required to carry out the internship. **This information will be made public on our website.**

Please select 'Yes' or 'No' from the options below.

If 'Yes', please provide details of what equipment can be provided.

10.3.9. Q – If required, please confirm that the project can be carried out in a COVID-secure manner.

Please select 'Yes' or 'No' from the options below.

If 'No', please provide details of the COVID-secure limitations.

10.4. Letters of Support and declaration

This section seeks confirmation that the host university fully supports the internship application. This letter should not be longer than one page.

Please note: the application deadline will not be extended if your support letters are not ready to upload before the deadline, therefore please ensure you request these support letters well in advance.

10.4.1. Letter of support from the university

Please upload a signed letter of support from the head of department/school confirming their commitment to this application to host an internship.

The letter of support should contain the following:

- Confirmation of the university's support towards the internship programme, confirming that the university believes the internship will give the intern meaningful and valuable work experience.
- Confirmation of the start and end dates of the internship.
- Details on how the university plans on supporting this internship. This may include more information on any cash or in-kind support the university may provide to cover any expenses.
- *University costs of hire* value requested needs to be evidenced and itemised here.
- Support of the suitability of the host applicant to oversee this internship.
- Confirmation that the university will provide the intern an appropriate, COVID-19 secure working space (if necessary), including necessary equipment available for the duration of the project. This will include any remote working equipment if necessary.
- Confirmation that health and safety training will be given to the intern as well as all other necessary training relevant to the project.
- Confirm the university will provide a contract of employment (or equivalent) to the student to cover the duration of this internship.

10.4.2. University declaration

Please upload a declaration completed and signed by an appropriate officer of the Central Research Office or equivalent confirming their support for this application to host an intern. The letter should be on university headed paper and should carry the signatory's name and position, and the university's official stamp (if applicable).

The purpose of this declaration is to check that the university is in principle willing to host an intern, subject to contract. Therefore, the letter must confirm that the application has been approved by the university and must contain the wording given in the box below. A pdf of the letter should be uploaded by the applicant as part of their submission.

This is for administrative purposes only.

Applicant Declaration

I confirm here and by submitting this application that:

- All information is accurate at the time of submission, and I will update the Academy of any material changes which may affect the project
- The ideas presented are my own and not plagiarised or containing IP that is not owned by myself, except for that IP that I have express permission to utilise in this way
- 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 for material information will result in my application being removed from the process, or the uncorroborated information disregarded.
- I understand that my application and any content including any commercially sensitive information such as IP, business plan, and financial performance that is included 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 this application process, to share these details with the Royal Academy of Engineering for the purposes of administering the application

By ticking the checkbox above, I agree to be bound by the conditions for this scheme.

11. Contact

If you have any questions concerning the scheme, please email the Programme Manager at research@raeng.org.uk.

Appendix A

Please select the broad engineering category that best describes your research area. This will be used to guide the selection and matching process. If your research fits into several categories, please pick the category that is most applicable to your proposal.

1) Civil, construction and environmental

Including aspects of civil and structural engineering; construction materials; earthquakes; wind and fire engineering; building engineering physics; construction management; numerical modelling; environmental engineering; water resources and flooding; offshore and coastal engineering; hydraulics; climate change and sustainability; waste management; geotechnical engineering; geomatics/surveying.

2) Materials and mining

Including metallurgy; metal forming; corrosion; failure analysis; structural integrity; non-destructive testing; inspection technologies; failure prevention; fabrication and repair technologies; welding and joining technologies; discovery and development of mineral resources; extraction and processing of minerals; mining engineering; materials performance; materials research; plastics and composites; structural materials (excluding materials specifically covered elsewhere).

3) Chemical and process

Including all aspects of chemical and process engineering; aspects of fuel technology; oil; coal and gas technologies; carbon; carbon sequestration; clean technology; combustion; catalysis; particulates; food processing; fermentation processes; pharmaceutical engineering; biotechnological processes.

4) Aerospace

Including all aspects of aeronautical engineering and aerospace manufacturing; turbomachinery and aerothermal engineering; avionics; radar systems; antennae; satellite systems; autonomous systems; aspects of systems engineering; airlines; materials for aerospace.

5) Transport and mechanical

Including all aspects of mechanical engineering; automotive; rail and marine engineering; transportation infrastructure; engines; turbomachinery; mechatronics; acoustics and vibrations; ultra-sonics; heat and thermodynamics; fluid dynamics.

6) Manufacturing and design

Including manufacturing management and manufacturing process innovation; manufacturing business improvement and re-engineering; CAD/CAM; robotics for manufacturing; engineering design.

7) Electrical and electronic

Including electrical, electronic and control engineering; design for electronics; aspects of nanotechnology and semiconductor engineering;

lasers; optoelectronics; photonics; microwave engineering; instrumentation; display technology; solid state electronics.

8) Energy and power

Including energy technologies; electric power and energy systems engineering; nuclear and renewable energy generation; energy infrastructure; management of energy and energy resources for generation, storage and transmission; distribution and conversion of electric energy and power; electricity supply and energy conservation; hydrogen power; fuel cells.

9) Medical and bioengineering

Including all aspects of medical and biomedical engineering; orthotics; prosthetics; ultrasound for medicine; medical scanning and imaging; drug delivery; biomedical materials; tissue engineering; medical devices; medical robotics and computer-assisted surgery.

10) Computing and communications

Including computational and software engineering; informatics; web and data science; telecommunications; mobile telephony; broadband; wireless spectrum; signal processing; television, film, and broadcasting; computer and video games; special effects.