



Royal Academy
of Engineering

Research Fellowships 2025/26

Applicant guidance notes

Deadline: 17 September 2025

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Programme overview

The Royal Academy of Engineering (the Academy) offers Research Fellowships each year to outstanding early-career researchers to support them to become future research leaders in engineering. The scheme's objectives are to:

- Support the best early-career researchers in establishing their independence and international reputation.
- Provide long-term support enabling the pursuit of an ambitious programme of engineering research and impact.
- Develop ambassadors for the Academy and advocates for STEM (science, technology, engineering, and mathematics) disciplines.

The Academy welcomes applications from early-career researchers worldwide who have been awarded their PhD in the last four years. The scheme provides funding for five years. Each application is capped at a maximum contribution from the Academy of **£625,000 over the five-year period**, at 80% of the full economic costs (fEC). Research Fellowships must be held at a UK higher education institution/university or at a UK research organisation that is eligible to receive UK Research and Innovation (UKRI) funding. See the [UK Government's website](https://www.gov.uk/government/publications/ukri-endorsement-employing-or-hosting-institutions-global-talent-visa/ukri-list-of-approved-research-organisations) (https://www.gov.uk/government/publications/ukri-endorsement-employing-or-hosting-institutions-global-talent-visa/ukri-list-of-approved-research-organisations) for more relevant information on this.

In addition to the direct financial support, the scheme benefits include:

- Mentoring support from an Academy Fellow to offer advice on research and career development.
- Reduction of teaching and administrative duties to dedicate time to research.
- Training and additional funding opportunities.
- Networking opportunities with other Research Fellows and Academy Fellows.
- An opportunity to establish a strong research track record which will improve the chances of securing additional funding and expanding their own research teams.
- Be part of the RAEng Awardee Excellence Community. [See the RAENG Awardee Excellence Community](https://raeng.org.uk/about-us/awardee-excellence-community) website (https://raeng.org.uk/about-us/awardee-excellence-community) for more information.

Unlike previous rounds, the **2025/26 round would only include the Research Fellowship scheme and the Engineering for Development Research Fellowship (EDRF) scheme has been removed.** However, we will continue to accept applications under the EDRF umbrella in the current round and they would be treated no differently to Research Fellowship applications. The schemes are funded by the **Department from Science, Innovation and Technology (DSIT).**

The Academy is in discussions with UK based medical charities to co-fund medical engineering research that improves the health and well-being of society. Our current co-founder is [Rosetrees](https://rosetrees.org.uk/) (<https://rosetrees.org.uk/>). Applicants that are in the remit of these charities will be contacted at interview stage to confirm their interest in being co-funded. Please note that co-funded research fellowships will be required to sign both Academy and medical charity terms and conditions.

All information in this document applies to Research Fellowships Scheme.

Diversity and inclusion

The Royal Academy of Engineering is committed to diversity and inclusion and welcomes applications from all underrepresented groups across engineering. It is the Academy's [policy](https://raeng.org.uk/media/flghp4gn/rae005-diversity-and-inclusion-policy-2024.pdf) (<https://raeng.org.uk/media/flghp4gn/rae005-diversity-and-inclusion-policy-2024.pdf>) 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, or sexual orientation.

Before you commence your application, you will be asked a few diversity monitoring questions to help the Academy monitor and assess our progress on diversity and inclusion in Academy programmes. It will only be used for statistical purposes with access restricted to staff involved in processing and monitoring the data. 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](https://raeng.org.uk/media/duhjwap2/raeng-privacy-policy-grant-or-award.pdf) (<https://raeng.org.uk/media/duhjwap2/raeng-privacy-policy-grant-or-award.pdf>) in line with the General Data Protection Regulations 2018.

The information will be treated as strictly confidential, nonattributable and will not be seen by anyone involved in any selection processes. You will need to complete the diversity monitoring section before you can see the grant application form but can choose “prefer not to say” as responses.

The Academy is committed to making reasonable adjustments to remove barriers that hinder applicants from applying.

Access Mentoring support

The Academy aims to provide additional support to applicants from groups that are persistently underrepresented within UK engineering through the grant application process. This [positive action](https://www.legislation.gov.uk/ukpga/2010/15/section/158) (https://www.legislation.gov.uk/ukpga/2010/15/section/158) will contribute to improving diversity in the talent pipeline and widening the diversity of applicants and awardees within the Academy's research grant schemes. To be eligible for Access Mentoring support, applicants must meet the eligibility criteria for the Research Fellowships scheme and must be either:

- **Women**
- **Black people, including those with any mixed ethnicity with Black ethnic background(s)**
- **Disabled people**

The Academy accepts applicants' self-declaration on the above identified underrepresented groups.

Access Mentoring is a resource-limited opportunity. Applicants do not need to wait until the deadline to submit their application and can be matched with a mentor as soon as the application is approved. Early submission is encouraged. Mentors will be assigned on a first come first served basis. For more information on Access Mentoring please see [guidance and how to apply](#).

Part-time and flexible working

The Academy wants to support applicants to achieve a balance between their personal and work demands and is happy to discuss individual requirements and consider part-time and other flexible working arrangements.

Previously Research Fellowships could be held part time but must have been the only form of employment, however from round 25 this requirement has been removed. **The part-time requirement is limited to a minimum of 50% of the fellowship time. The other source of employment should be external to the host organisation**, such as industry, government, or other stakeholders. The request for a part-time Research Fellowship (at no less than 50% of full-time equivalent) must be clearly stated within the application. Alternatively, the Research Fellowship can be converted from full time to part time, or from part time to full time, during the fellowship, assuming the host institution supports the request.

Research Fellows are entitled to maternity, paternity and adoption leave under the host institution's normal conditions of employment. The Academy will extend the duration of the Research Fellowship pro-rata to take into account such periods of leave and any conversions to part-time working. Research Fellows with caring responsibilities should liaise directly with the host institution if they wish to apply for part-time or flexible working.

Submission deadline

There is one application round each year. The online application system for 2025/26 round will open in February 2025. The submission deadline for 2025/26 round will be **4pm on Wednesday 17 September 2025**. Applicants will be informed of the result in June 2026.

Eligibility criteria

1. Research Fellowships must be held at one of the following eligible institutions that can show it is capable of fully supporting an engineering-focused research project and researcher:
 - a UK higher education institution/university or
 - a UK research organisation that is eligible to receive UKRI funding. A list of eligible research organisations is included in the [UK Government's website](https://www.gov.uk/government/publications/ukri-endorsement-employing-or-hosting-institutions-global-talent-visa/ukri-list-of-approved-research-organisations). (<https://www.gov.uk/government/publications/ukri-endorsement-employing-or-hosting-institutions-global-talent-visa/ukri-list-of-approved-research-organisations>).
2. The host institution must agree to provide the Research Fellow all the support normal for a permanent employee.

- 3.** The proposed research project must be in an engineering subject area. Engineering is defined in its broadest sense, encompassing a wide range of diverse fields.
- 4.** Research Fellowships are aimed at early-career researchers. Applicants must have a PhD, which was awarded (or the PhD has been unconditionally approved) no more than four years before the submission deadline: Wednesday 17 September 2025. This period includes applicants' work experience in academia or/and in industry in the UK or/and worldwide. A margin of up to three months more than the four-year limit is acceptable and does not require justification or explanation of extenuating circumstances for those 3 months.
- 5.** In addition of the four years and three months limit, we will take extenuating circumstances into consideration, including maternity and paternity leave, extended sick leave, national service, caring responsibilities, and relocation due to fear of persecution or human rights violation. Please ensure the relevant dates and details are provided in the application form.
- 6.** The other source of employment should be external to the host organisation, such as industry, government, or other stakeholders. If the Research Fellow needs to work more than 50% of the Research Fellowship outside the host institution, justification must be provided in the application form (choice of host institution). If the Research Fellow needs to work more than 50% of the Research Fellowship outside the host institution, justification must be provided in the application form (choice of host institution).
- 7.** There are no nationality and age restrictions for applicants. The host institution is responsible for securing all necessary work permits and related costs for the Research Fellows.
- 8.** Applicants who have applied to this scheme before and were unsuccessful are eligible to reapply. These applications will be considered as new applications.
- 9.** Research Fellowships must begin between **1 August 2026 and 31 October 2026**. The duration of a Research Fellowship is five years full time, calculated on a pro-rata basis for part-time awards. Requests for a shorter Research Fellowship are not accepted.

There is a limit on the number of applications each host institution can submit ([see Application limit](#)).

Please note in previous rounds applicants must not hold a permanent academic position. This eligibility criterion is no longer applicable.

We remind you also that:

- Research Fellowships cannot be jointly hosted by multiple institutions.
- It is the applicant's responsibility to contact the host institution to gain their formal approval before applying.
- Any applications that are incomplete or do not adhere to the guidance will be rejected.

Mentoring and monitoring

Awarded Research Fellows will work with the Academy to identify an Academy Fellow to be their mentor. The mentor will provide expert, independent advice, and support for the duration of the Research Fellowship and will also formally monitor the Research Fellow's progress for the Academy.

Research Fellows must submit an annual progress report and expenditure statement to the Academy. At the annual review meeting the Research Fellow, mentor and Academy staff will discuss the report, progress made and future plans. Research Fellows will also be asked to provide some key data on their annual performance (e.g. publications and additional research funding) for the purpose of auditing and reporting to the Academy's funders.

Application limit

The application limit applies to the host institution, where the Research Fellowship will be held. This may or may not be the applicant's current employer but must be a UK higher education institution/university or an eligible UK research organisation. If a host institution submits more than the permitted number of applications, they will be asked to withdraw any applications exceeding this limit. Due to the application limit, host institutions are likely to have an internal selection process, and it is the applicant's responsibility to find out about this.

The standard application limit for each host institution is two applications, but the host institution can **submit up to four applications** as part of our [positive action](https://www.legislation.gov.uk/ukpga/2010/15/section/158) (<https://www.legislation.gov.uk/ukpga/2010/15/section/158>) initiative with the following conditions:

- If the submission is four applications, at least two of the four applications must be submitted by candidates from the identified underrepresented groups.
- If the submission is three applications, at least one of the three applications must be submitted by a candidate from the identified underrepresented groups.
- If the submission is one or two applications, the application or applications do not need to be submitted by candidates from the identified underrepresented groups. However, the expectations of host institutions still apply.

Host institutions are expected to:

- Adopt appropriate mechanisms to ensure only the highest calibre of candidates are submitted to the scheme in line with the principle of the [Declaration on Research Assessment \(DORA\)](https://sfdora.org/read/) (<https://sfdora.org/read/>).
- Adopt a proactive approach in encouraging and supporting researchers from groups underrepresented within UK engineering research to apply and succeed in their applications.
- Evidence their commitment to equality and diversity if requested by the Academy. They must be able to demonstrate that their selection criteria do not unlawfully discriminate or disadvantage candidates because of their personal characteristics or background.

How to apply

All applications must be submitted via the Academy's online grants system available here: <https://grants.raeng.org.uk>. All applicants must first register and provide some basic login details to create a profile.

The application should be submitted by the applicant. We recommend leaving plenty of time to complete the application form ahead of the deadline and thoroughly going through your application prior to submission. While the guidance notes are embedded within the system itself, we recommend you keep this document to hand when completing the application form.

The application form has eight 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. To compose the application in its entirety will take significantly longer.

Many of the questions have prescribed word limits, which are designed to keep answers focused and give applicants an indication of the level of detail required. In such cases the number of words used will be displayed beneath the question and updated in real time.

Applicants can download a PDF of their application after submission, which is recommended for reference. There is only one application stage and those meeting the eligibility criteria will enter the assessment stages.

Policy on National Security-Related Risks

The Academy is the UK's National Academy for engineering and technology and seeks to increase the potential positive benefit that innovations can have for society, whilst reducing the risks of harm. Hence, in all our activities, we seek to minimise the risk that technology developed as part of work that we support could be misused by a foreign state to build a capacity to target UK interests in a hostile fashion or to control or repress their population. There is a risk that for some grant activities, failure to protect IP and a lack of due diligence into collaborators could result in sensitive technology being transferred to and misused by a hostile or repressive foreign state. As such all applicants should ensure they are familiar with the Academy's [Policy on National Security-Related Risks](#).

Use of generative AI tools in funding applications and assessment

The Academy has aligned with other UK funders around the use of generative AI tools in funding applications through the Research Funders Policy Group [joint statement](#).

Regarding the use of AI, 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. 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.

Applicants must provide clear acknowledgement if they have used generative AI tools in the process of writing their grant applications. This includes disclosing the name of the tool used and describing how it was utilized. The following style should be employed for referencing:

I acknowledge the use of [insert AI system(s), version number and link] to generate materials for background research, styling, proofreading, etc.

Or,

I acknowledge the use of [insert AI system(s), version number and link] to generate materials that were included within my final assessment in modified form.

Subsidy Control

The UK subsidy control regime began on 4 January 2023. As part of this regime, the Academy is required to report to the UK Government on how award funding is being used when applications collaborating with commercial enterprises are awarded. The regime determines the lawfulness of monetary awards made using public sector resources when given to businesses and other organisations that are engaged in economic activity.

To assist with subsidy control compliance, you must confirm whether your research project is either a piece of non-economic scientific research (with or without commercial collaborators) in terms of the [Statutory Guidance on Subsidy Control](https://www.gov.uk/government/publications/uk-subsidy-control-statutory-guidance) (<https://www.gov.uk/government/publications/uk-subsidy-control-statutory-guidance>) clause 15.33 or an Industrial Research project with identified commercial collaborator(s). The latter confirmation will be requested at the award stage.

Research involving human participants or tissue

Research, development and innovation involving human participants, human material or personal data can contribute to a better understanding of human health and disease as well as the technological efficacy of new and evolving innovations. The Academy will fund research, development and innovation involving the use of human participants, human material or personal data which complies with our Humans in RD&I Policy. If your proposal includes the use of human participants, human materials or personal data you will be asked to provide details of your work at application stage.

Please note: applicable regulatory approval and licenses are not required to be in place at point of application, but all necessary approvals must be in place before the work begins and a clear plan to achieve this at application stage.

Animals in research

The Academy acknowledges that, at present, the use of animals remains the only way for some areas of research to progress. Research involving animals is regulated by comprehensive and strict legislation in the UK and must be conducted with a high regard for animal welfare. The Academy will fund work involving the use of animals in the UK which complies with our [Animals in RD&I Policy](https://raeng.org.uk/media/ctelvlvi/animals-in-research-innovation-and-development-policy.pdf) (https://raeng.org.uk/media/ctelvlvi/animals-in-research-innovation-and-development-policy.pdf). If your proposal includes the use of animals you will be asked to provide details at application stage.

If your proposal involves the use of animals and takes place outside of the UK, the Academy will generally not fund this work. Please contact the Academy before proceeding with your application.

Please note: applicable regulatory approval and licenses are not required to be in place at point of application, but all necessary approvals must be in place before the work begins and a clear plan to achieve this at application stage.

Export Control Rules

As part of the application process, we ask that you ensure compliance with UK laws and regulations relating to **export controls**, particularly concerning military and dual-use items.

Export Control and Licensing: For further information on export controls, including how they apply to military and dual-use items, please refer to the **Government Export Control Joint Unit (ECJU)**, which administers the UK's system of export controls and licensing. You can visit their website for detailed guidance on licensing and controlled goods: [ECJU Website](#).

If you are unsure whether your research, product, or technology may be subject to export control, it is essential to seek clarification from the ECJU.

Important Note: If your application response includes a “don't know” answer regarding export control, please be aware that this may result in a delay in processing your application. This is because we will need to clarify your position and, if necessary, consult with the ECJU to confirm whether any export licensing requirements apply to your work.

We encourage you to **take the necessary steps** to confirm whether export controls are relevant to your application before submitting it, as this will help us process your application without unnecessary delays.

Completing the application form

After logging into the GMS and selecting 'Research Fellowships', you should be presented with the 'Instructions' window. Here you will see some general instructions on how to use GMS, as well as the seven sections of the application form listed below:

1. Applicant and institution details
2. Applicant profile
3. Project details
4. Responsible Research
5. Case for support
6. Resources requested
7. Statement of support and declaration
8. Marketing

You can save your work at any stage in the application process and return to it later. You can answer the questions in any order you like, so you can freely skip some sections and return to them later. **Please read the guidance provided in this document in detail before starting an application.** You should also ensure that you have all the necessary documentation to complete the application, such as a copy of your CV and supporting letters.

1. Applicant and institution details

Q. Applicant name and contact details (This question is not visible to reviewers)

Please provide your name and preferred contact details.

Q. Host institution details

Please provide the details of the host institution where the Research Fellowship will be held and confirm that this is the 'lead organisation'. If you are not currently employed by the host institution, you should also add your current employer.

2. Applicant profile

This section requests details about your suitability and eligibility for the Research Fellowship. You will need to answer some general questions on your experience and upload your CV.

Q. What date was your PhD Certificate awarded?

Applicants must have a PhD, which was awarded **no more than four years** before the submission deadline (17 September 2025). Please enter the date your PhD Certificate was awarded or the date your PhD was unconditionally approved by the university.

Q. Extenuating circumstance (Optional question. This question is not visible to reviewers)

If your PhD Certificate was awarded more than four years before the submission deadline (17 September 2025), please provide details of extenuating circumstances. Please cover any periods of maternity/paternity leave, extended sick leave, national service, part-time employment for caring responsibilities or any other activity that you feel should be considered when assessing your eligibility for this Research Fellowships. The Academy's decision on eligibility is final.

200 words maximum

Q. Applicant's CV

The format and content of your CV is left to your discretion but should include a list of publications. You may wish to indicate which publications you deem most significant and include a link to any that are open access. You do not need to include contact details as these are included earlier in the application form. **Please do not include personal information (e.g. gender, date of birth, and nationality) in the CV.** The CV must also not include an identifying photo for Equity, Diversity and Inclusion reasons. **The CV must be uploaded as a single PDF and the file size should be less than 5MB.**

Q. Profile of applicant

Outline how your skills, experience and track record would enable you to successfully complete the five-year Research Fellowship and become a future research leader in your chosen field. You may also wish to include:

- Any relevant collaborative work and visits with other researchers, research organisations, industries, or other beneficiaries, both nationally and internationally.
- Impact of your research on improving the quality of life.
- Any successful grant applications and their values.
- Any other information that demonstrates your independence and your track record as a researcher.
- Career goals resulting from the fellowship.

600 words maximum

Q. Applicant's most significant achievements

Please describe three to five of your most significant achievements in your research career. We would like to emphasise that all achievements and outputs are welcome and considered valuable to the Academy, not just peer-reviewed publications. Outputs also include, and are not limited to code, patents, spin-out companies, events, public engagement, and policy impact. Please briefly explain the significance of the achievement in a way that will explain it to a researcher from your discipline who may not be familiar with the latest work in the particular field.

500 words maximum

The Academy's research programmes are aligned with the principles of [DORA](https://sfedora.org/read/). (https://sfedora.org/read/). If research articles published in peer-reviewed journals are to be included in an application, we would therefore like to emphasise that the scientific content of a paper is much more important than publication metrics or the identity of the journal in which it was published.

Q. Impact of COVID-19 (optional question)

The Academy understands that the impact of the coronavirus pandemic on researchers and their work is varied. If you wish, please provide a summary of how the pandemic has affected your research activities that reviewers and panel members should consider. Reviewers and panel members will be advised to take into consideration the unequal impacts that COVID-19 related disruptions might have had on individuals.

The impact can include, but is not limited to, the following examples: pause on experiments/research plans, reduced ability to work due to additional caring responsibilities, delays in publishing/submitting a key paper(s) (please note pre-prints can be included in your publications list).

500 words maximum

3. Project details

Q. Project title

Applicants must have a PhD, which was awarded no more than four years before the submission. The essence of the research should be captured in the title and should be as informative as possible. Please use **no more than 10 words** and ensure that it is **understandable to a non-specialist reader**.

Q. Abstract

Describe the research in terms that can be understood by a non-specialist reader. What similar research is being/has been undertaken nationally and internationally, and how does your project differ?

300 words maximum

Q. What is the start date of the proposed project?

Research Fellowships must begin between **1 August 2026 and 31 October 2026**. The duration of a Research Fellowship is five years full time, calculated on a pro-rata basis for part-time awards. You must agree these timescales with the host institution. Requests for a shorter Research Fellowship are not accepted.

Q. What is the end date of the proposed project?

Example, if your project starts on 1 September 2026, it will need to finish five years later (on 31 August 2031).

Q. Subject category

Select one single broad engineering category that best describes your research proposal. **The category selected will be used to help identify reviewers and panel members.** If your research proposal fits into several categories, please pick the category that is most applicable to your proposal. See [Appendix A](#).

Q. Please provide keywords relating to the project

The keywords provided help the Academy identify suitable reviewers.
10 words maximum

Q. List all external organisations that you will collaborate with as part of the project.

Please list any collaborators from universities and industry in the UK or worldwide. This will help avoid any conflicts of interest during the assessment process. **You should not explain the extent or nature of the collaboration here, as that is covered later.**

50 words maximum

4. Responsible Research

The following questions address responsible research practices in alignment with the Academy's [Animals in Research Policy](https://raeng.org.uk/media/ctelvlvi/animals-in-research-innovation-and-development-policy.pdf) and [Humans in Research Policy](https://raeng.org.uk/media/4qmhhqf4/human-participants-in-research-development-and-innovation-policy.pdf).

For proposals involving animals or animal tissue, and for research involving human participants, tissue, or personal data, you must provide detailed information to ensure compliance with ethical and regulatory standards. While applicable approvals and licenses are not required at the point of application, all necessary approvals must be secured before the work begins, with a clear plan outlined at the application stage.

For further guidance, please refer to the linked policies.

Animals in research, development and innovation

Q. Does your proposal involve the use of animals or animal tissue as defined by the [Animals \(Scientific Procedure\) Act 1986](https://www.gov.uk/government/publications/consolidated-version-of-aspa-1986)

(<https://www.gov.uk/government/publications/consolidated-version-of-aspa-1986>) This is a multiple-choice question and requires you to declare if your proposal includes research involving animals or animal tissue and whether that research is conducted within the UK and the UK's regulatory regime or outside the UK.

If your research is going to be conducted outside of the UK, you must speak to an Academy staff member to assess whether we would be able to fund this type of research before beginning your application. If we are able to fund it, we will also ask you where it will take place and provide details of the local legislation and ethical review procedures.

Q. Please explain below why animal use is necessary within this proposal; are there any other possible approaches?

We require sufficient details to enable us to ensure that you have aligned your research with the [NC3Rs guidelines](https://nc3rs.org.uk/3rs-resources) (<https://nc3rs.org.uk/3rs-resources> and our Academy policy, particularly that you are able to explain why there is no alternative to using animals in the research and the ethical implications of the planned experiments.

200 words maximum

Q. Do your experiments involve the use of non-human primates (NHPs), cats, dogs or equines, which are specially protected species under the Animals (Scientific Procedures) Act 1986?

This is a yes or no question. If your experiment does involve the use of non-human primates we may send your application to additional independent experts for review.

Q. Please provide details of the animal species and number(s) to be used?

This and the following question require you to justify the number, species and sex of animals you are planning to use, clearly describing how the planned experimental design is appropriate to give robust results.

30 words maximum

Q. Why is the species/model to be used the most appropriate?

Please discuss the relevance of your model(s) along with any limitations and how you have accounted for this within your study design.

200 words maximum

Q. Please explain how you have considered the NC3Rs in your research design? You may also upload any supporting documents (ie the Experimental Design Assistant or power calculations) however this is not required at this stage.

This question allows us to assess if your research complies with the principles of Replacement, Reduction and Refinement and that you will ensure distress and pain are minimized and the severity level for all procedures is the lowest possible.

300 words maximum

Q. Please provide information on your plan and the timeline to acquire all relevant ethical approval and licenses.

200 words maximum

Q. Please upload any supporting documentation below (optional)

We recommend the use of the [Experimental Design Assistant](https://nc3rs.org.uk/our-portfolio/experimental-design-assistant-eda) (https://nc3rs.org.uk/our-portfolio/experimental-design-assistant-eda) to help with the design of your proposal which you can upload here. You may also use this space to upload power calculations, if applicable.

Human Participants, materials and personal data in Research, Development, and Innovation

Q. Does your proposal involve human participants, as according to the WHO definition?

Q. Does your proposal involve the use of human tissue or other human material?

Q. Does your proposal involve the use of personal data?

These three questions require you to declare if your proposal involves the use of human participants, human tissue and/or other human material or personal data. The questions are all multiple-choice, and depending on your responses, you will be asked further questions providing details on the location, regulatory regime and research plan.

(For any work to be conducted outside of the UK)

Q Please confirm the country where the work will be conducted.

This and the following two questions provide us sufficient details to ensure that you have aligned your proposed work with the Academy's policy, particularly our requirement that research complies with relevant legislation and the governing principles of the Declaration of Helsinki, the Nuremberg Code, and the Council for International Organizations of Medical Sciences (CIOMS) guidelines, all of which set out requirements with regard to the rights and safety of research participants and standards for research design and conduct.

(For any work to be conducted outside of the UK)

Q Please provide details of the local legislation and ethical review procedures if the work is to be conducted outside the UK.

(For proposals involving human participants or human tissue)

Q Please provide information on your plan and the timeline to acquire all relevant ethical approval and licenses.

Q Please confirm the country where the work will be conducted.

This question assesses whether your proposed work protects the dignity, rights, safety and wellbeing of all participants, particularly when involving vulnerable groups and avoids exploitation and undue inducement of participants.

Q. For proposals involving human tissue and/or other human material, please explain how you will safeguard the collection and/or storage of human tissue/ other material and comply with all relevant legislation.

This question seeks to ensure that your proposed work involves the suitable safeguarding or the collection, storage and access of human tissue in compliance with the appropriate legislation (the Human Tissue Act 2004 for England, Wales and Northern Ireland and the Human Tissue (Scotland Act 2006 for Scotland).

Q. For proposals involving personal data, please explain how you will safeguard the collection and/or storage of personal data and comply with all relevant legislation.

This question seeks to ensure that your proposed work involves the suitable safeguarding of personal data and compliance with all relevant legislation, including UK General Data Protection Regulations (UK GDPR) for research conducted in the UK, and the duty of confidentiality and informed consent.

Q. Is the information contained within this application subject to export control rules

Please refer to the [Government Export Control Joint Unit \(ECJU\)](https://www.gov.uk/government/organisations/export-control-joint-unit) (<https://www.gov.uk/government/organisations/export-control-joint-unit>) who administers the UK's system of export controls and licensing for military and dual-use items for further information where needed. Please note that a response of 'don't know' may mean we need to delay processing your application until such a time as we have clarified this position.

5. Case for support

This is the main part of your application. Here you must demonstrate that your proposal contains an original and independent research project within the remit of the ten broad engineering categories given in the previous section. Proposals that are simply an extension of your PhD project or are closely aligned to the work of your PhD supervisor are unlikely to be viewed favourably.

Q. Goals and objectives

Please state the goals and objectives for your research project. You should include details on how novel, realistic, and ambitious the project is. Please note that if awarded your performance will be assessed against these objectives.

200 words maximum

Q. Timeliness and novelty

Describe why this research is important and why it should be conducted now.

250 words maximum

Q. Methodology

Please provide a detailed description of the exact work to be completed.

Describe the programme of work, indicating the research to be undertaken and the milestones that can be used to measure progress. Detail the methodology to be used and justify this choice. What similar research is being/ has been undertaken nationally and internationally and how does your project differ?

1,500 words maximum

Q. Images and diagrams

Upload any images and/or diagrams related to your project that add value to your application. Any images/diagrams uploaded must be referenced in the application form. **The images/diagrams must be collated and uploaded as a single PDF** in the order you wish them to be viewed.

Q. Reference list

List the reference material referred to in your application. Where possible include web links to any open access articles to help reviewers locate the articles. You may want to highlight the most relevant ones. **Upload the list as a single PDF of two pages maximum.**

Q. Project timeline

You must upload a Gantt chart or equivalent to show the schedule of activities for the duration of the Research Fellowship. Please ensure major milestones are clearly plotted. You may wish to include a diagram showing how the work packages and your collaborations will interact. **The chart/diagram must be collated and uploaded as a single PDF.**

Q. Project management

Describe how your research proposal will be managed. You may wish to refer to the Gantt chart. You should include suitable milestones and identifiable deliverables. Your progress will be reviewed against this plan.
200 words maximum

Q. Risks: identify and assess any risks that may jeopardise the project's success

Risks will not necessarily be perceived as weaknesses. You should use this opportunity to demonstrate your management skills and awareness of potential problems.
200 words maximum

Q. Collaborations

Provide details of any collaborations you intend to create and/ or maintain during the Research Fellowship. Use this opportunity to show how you are connected to a wider network than just the host institution, to access appropriate skills and expertise to enhance your research and its impact. Explain who you will/ want to work with and why.

Collaborations can take many forms, including financial contributions, access to facilities and equipment, provision of equipment/ materials/ supplies/ services, access to data and results, provision of staff (e.g. a secondment), advice, mentoring, participation in a steering group, expertise, networking/ introductions. This covers both internal and external collaborations.
500 words maximum

Q. Letters of support (optional section, but this is your opportunity to demonstrate wider support for you and your project)

Each letter of support must:

- Be on headed paper and clearly state who they are from.
- Be from external collaborators i.e., people and organisations NOT working at the host institution and its affiliates.
- Be signed.
- Confirm that the author knows the applicant.
- Explain why they are interested in the project.
- Provide details on what form the collaboration will take.
- Clearly demonstrate the nature of the collaboration and how it will be beneficial to the applicant and the project.
- **Be no more than two pages.**

Aim for quality over quantity. Shorter, more concise letters better enable the reviewers to identify the salient information. A bullet-point list of contributions can be an effective way to present the information. **The letters of support must be collated and uploaded as a single PDF.**

Q. Beneficiaries and impact

Identify the groups in society that will benefit from the research, as well as any positive societal and economic impacts it will have. What are the benefits of this research and for who? Can you quantify the extent of the benefits/ number of likely or potential beneficiaries? Can you identify specific groups in society? If the benefits do not directly relate to wealth creation and/ or to improving the quality of life, give details of other beneficiaries and explain their importance.
200 words maximum

Q. Academy's strategic goals (This question is not visible to reviewers)

How do you align with the Academy's strategic priorities? Note this is not an assessment criterion and is for staff use only. We want to understand the extent to which our programmes meet our strategic aims, but your answer will not influence the decision and applications are judged purely on merit.

The strategic plan is available on the [Academy's website](https://raeng.org.uk/about-us/our-strategy). (<https://raeng.org.uk/about-us/our-strategy>).

Select the answer that best describes the strategic aims your research will address:

- Sustainable society
- Inclusive economy
- Both
- Neither

Please give a short explanation for the answer you have selected.

100 words maximum

Q. Diversity and inclusion

The Academy strives to create cultures in which everyone can thrive, and we believe that diverse perspectives enrich our collective performance. What does diversity and inclusion mean to you, and what are you and your team doing to address it? Consider your team, collaborators and universities, the implications on your research design and topic and the overall contribution this will have on your success.

250 words maximum

Q. Exploitation

Describe the ways you plan to exploit your research, including the industry/ public sector partners that you will collaborate with to achieve this. Here you should explain how you will ensure the benefits and impacts will be delivered. You should also indicate when these routes to exploitation are likely to be implemented, including if this will be after the Research Fellowship has ended.

200 words maximum

Q. Dissemination and public engagement

Indicate the proposed methods of dissemination and public engagement. How will the results and outputs be shared? How will you engage with audiences beyond the research and engineering communities? Participation in public outreach activities is an important element of a Research Fellowship.

200 words maximum

Q. Choice of host institution

Explain your choice of host institution. You may wish to comment on the facilities and expertise that will be available to you. You should also cover what experience you have had and/ or plan to gain from other institutions and alternative working practices. For example, any time spent on secondment or on extended visits.

If you are applying for a part-time fellowship, please explain why you wish to work part-time and what percentage of your time will be committed to the research fellowship. In addition, please confirm that your other source of employment will be outside the host institution.

Note: The Research Fellow should be based at the host institution for at least 50% of the Research Fellowship. The other source of employment should be external to the host organisation, such as industry, government, or other stakeholders. If the Research Fellow needs to work more than 50% of the Research Fellowship outside the host institution, justification must be provided in the application form.

400 words maximum

Q. Ambitions and future plans

Describe your future career plans and ambitions, including the anticipated size of your team, your reputation and employment status. How will you progress through the Research Fellowship? How are your future career plans and ambitions associated with the proposed research goals and objectives?

200 words maximum

6. Resources requested

Applicants must consult with the host institution for support in completing the costs table. Please ensure that you allow plenty of time for the host institution to prepare the costings. The below categories explain what costs should be included in your application. You must be able to demonstrate that the resources requested are justified and appropriate for delivering the proposed research. **Each application is capped at a maximum contribution from the Academy of £625,000 over the five-year period, at 80% full economic costs (fEC).** The host institution is expected to provide any shortfall from its own funds or other grants.

Directly incurred costs

Staff

The Research Fellowship's aim is to support researchers at an early stage of their research career. Salary should be at a level commensurate with skills, responsibilities, expertise, and experience. It is expected that requested salary will be comparable to postdoctoral researcher or early-stage lecturer salary scale points. The Academy reserves the right to provide support at a different level if it is considered appropriate.

The Research Fellow's salary can be requested for a period of five years full-time equivalent. Salary increments over the period of the Research Fellowship should be considered in the costs, but possible future pay awards should not be anticipated. **Please note that the Academy does not pay inflation, and inflation should not be applied to the costs.** In addition, the Academy is not able to cover the costs of the apprenticeship levy on research grants. Salary costs do not need to be justified in the 'Justification of costs' section.

Research Fellowships may be held on a part-time basis if the applicant is employed part time (minimum 50%). Applicants wishing to hold the award on a part-time basis must state the % time in the 'Justification of costs' section. The costs table should be completed as if for a full-time fellowship and costs will be adjusted accordingly if the award is offered.

PLEASE NOTE:

- No other staff salaries can be requested as part of a Research Fellowship.
- Research Fellows are encouraged to apply for further funding. However, any additional funding must not result in a reduction in the Research Fellow's time working on the Research Fellowship and cause a delay in the completion of the Research Fellowship.

Travel and subsistence

Travel and subsistence costs can only be requested for the Research Fellow and must be for activities directly related to the research project. Travel costs should be based on the most suitable, cost-effective, and environmentally friendly form of travel. Subsistence costs should reflect the normal rates that apply in the host institution. Commuting costs for working at the host institution cannot be requested.

Costs for attending national and international conferences may also be included where such attendance will directly benefit the research project. Conferences should, as far as possible, be individually identified in the proposal with attendance costs and fees fully justified in the 'Justification of costs' section.

Other costs

Other costs should be specified and justified in the 'Justification of costs' with details provided in terms of their requirement for the research project. Examples include purchase or hire of small items of equipment, computer software licences, cloud computing/ computing time at external facilities, laboratory consumables, purchase of specialist publications, open access costs, publication/ printing costs, professional membership subscription fees or training costs.

Unless the need for significant computing power can be justified, the costs requested from the Academy for the purchase of a computer should not exceed £3,000 (including VAT), and no more than two computers should be requested over the duration of the Research Fellowship.

The cost of any single item of equipment, software, cloud computing/ computing time fees, database subscription or upgrade to existing equipment requested from the Academy should not exceed £10,000 (including VAT). Should any piece of equipment include multiple separate items that are purchased individually and then combined to make a single functioning system, the cost of the entire system requested from the Academy should not exceed the £10,000 limit.

Costs for major facilities not owned by the host institution, such as those supported by STFC, cannot be requested. If such facilities are required for the project, the applicant should contact the specific facility to determine access requirements. If access to a facility is essential to the research project, both access to and external funding for the cost of the facility must be secured within one year of the proposed start date of the Research Fellowship.

Research Fellows are expected to make full use of any equipment that is available at the host institution and should therefore only request funding for equipment that is necessary and not currently available.

Directly allocated costs

Estates

Research Fellows may apply for estates costs for the duration of the Research Fellowship. Estates costs do not require justification in the 'Justification of costs' section. Where the Research Fellow will be away from the host institution for six months or more in total, estates costs should not be requested for that period. In such situations, this should be confirmed in the 'Justification of costs' section.

Other directly allocated

Other directly allocated costs can be requested, calculated based on estimates and should be justified in the 'Justification of costs' section. Potential costs include the host institution's research/ technical staff whose time is shared across several projects and charge out costs for existing equipment owned by the host institution, for example access to departmental SEMs and analytical facilities. Salary costs for specific technicians cannot be requested, but costs for pool technician time for the use of facilities/equipment at the host institution can be requested.

Indirect costs

Indirect

Please consult with the host institution for guidance on these costs. Research Fellows may apply for indirect costs for the duration of the Research Fellowship. Indirect costs do not require justification in the 'Justification of costs' section. Please refer to the [efficiency savings published by RCUK in March 2011](https://webarchive.nationalarchives.gov.uk/ukgwa/20180322124032/http://www.rcuk.ac.uk/research/efficiency/efficiency2011/) (<https://webarchive.nationalarchives.gov.uk/ukgwa/20180322124032/http://www.rcuk.ac.uk/research/efficiency/efficiency2011/>) when submitting figures for indirect costs.

Q. Total funding requested

Please state the total value of the funding you are requesting from the Academy. This is the value of the five years at 80% FEC, up to a maximum of £625,000.

Q. Justification of costs

Please provide a narrative description of what resources are being requested and why. Ensure you have adhered to the guidance provided for allowable costs as detailed above. The justification should include:

- All necessary justifications for costs included in the costs table.
- To what extent the equipment requested will be used by other researchers and what equipment you are not requesting funding for (or for which you are requesting funding at a reduced rate) because suitable equipment is already available to you.
- What costs will be covered by other sources, for example industry or existing grants, so are not being requested as part of the application.
- If relevant, confirm at what rate you wish to work part-time.

400 words maximum

7. Statement of support and declaration

This section seeks confirmation that the applicant has provided accurate information and will update the Academy of any material changes that may affect the award. It should also confirm that the host institution will support the Research Fellowship. You must upload your host institution's letter of support, as explained below, and tick the box confirming the information provided is correct.

The submission deadline will not be extended due to an individual's unavailability.

Q. Host institution letter of support

The Head of Department or School, Pro-Vice-Chancellor, Dean or Director at the host institution must provide a statement in support of the application.

The statement must be on headed paper, signed, and should clearly state the date, applicant's name, and host institution name. The statement should be **a maximum of two pages, pdf format**, and address the following areas:

Suitability of the applicant:

- Quality of the applicant's research track record.
- Potential of the applicant to become a future leader in their chosen field.
- Potential to act as an ambassador and advocate for engineering research.
- Details of the host institution's mechanisms to ensure only the highest calibre of candidates are submitted to this scheme.

Support and commitment from the host institution:

- Alignment of the proposed Research Fellowship with the host institution's research strategy and priorities.
- Details of mentoring, resources and support that will be provided to the applicant should the application be successful.
- Other activities the applicant will be expected to undertake.
- Details of the career development support that the applicant will be offered.
- Details of how the host institution adopts a proactive approach in encouraging researchers from underrepresented groups to apply.
- Evidence of the host institution's commitment to equality and diversity.

Impact of COVID-19 on the host institution's support

The host institution can use this letter of support to highlight the impact of the coronavirus pandemic on their support for the Research Fellowship if they wish. Reviewers and panel members will be advised to take into consideration the unequal impacts that COVID-19 related disruptions might have on the host institution's support for the Research Fellowship.

The Academy expects the host institutions to be committed to, and provide support that aligns with, principles set out in The Concordat to Support the Career Development of Researchers, The Concordat for Engaging the Public with Research, and DORA.

Q. Host institution declaration letter

The host institution's declaration letter must be completed by an appropriate individual from the institution's research support office or equivalent. **The letter must be on headed paper and should carry the signatory's name, position, contact details**, date, scheme name, applicant's name, and the institution's official stamp (if available). **Must be in PDF format.** The purpose is to check that the host institution is in principle willing to host a Research Fellow, subject to contract. The letter must confirm the application has been approved by the institution and **must contain the wording given in the box below**, as well as any further remarks the host institution wishes to make. **Please note that the wording provided in the box below is specific to the Research Fellowships scheme, and the wording is updated and different to previous rounds.**

On behalf of the host institution, I can confirm that I have read and accept the application guidance and other information regarding this award scheme, which is provided on the Royal Academy of Engineering's website. I also confirm that:

- The costs submitted in the application are correct and sufficient to complete the project as envisaged. Any shortfall in funding discovered after the award has been made will be covered by the institution, potentially through other grants.
- The applicant will be employed by the institution for the duration of the award.
- If awarded, the applicant will be given full access to the facilities, equipment, personnel, and funding as required by the application.
- The applicant's teaching, administrative, and non-research duties will be restricted to enable them to dedicate their time to research.
- The applicant will be provided with all the support normal for a permanent employee.
- I am authorised to approve the submission of applications for funding and confirm this application has successfully met the eligibility criteria, including adherence to the application limit and all our internal approval procedures.

Please delete the following statement if not applicable:

- I agree that the Academy may share this application with UK-based medical charities for the purposes of assessing the suitability of the research project for co-funding.

Q. Acknowledgment of use of generative AI tools (optional question)

Please provide a clear acknowledgment if you have used generative AI tools in the process of writing your grant application. This includes disclosing the name of the tool used and describing how it was utilised.

The following style should be employed for referencing:

I acknowledge the use of [insert AI system(s), version number and link] to generate materials for background research, styling, proofreading, etc.

Or,

I acknowledge the use of [insert AI system(s), version number and link] to generate materials that were included within my final assessment in modified form.

200 words max

Q. Applicant declaration

Please tick the checkbox once you have read and understood the declaration included in the application form.

8. Marketing

Q. How did you hear about the scheme?

This question is optional but helps the Academy to understand which marketing materials are most successful at reaching the academic community to improve future communications work.

A grey **'submit application'** button will become available once the application form is completed.

Please note that once submitted the application cannot be edited and updated, but you may view it from your GMS account.

Assessment process

Stage one: general review

Each eligible application will be assessed by general reviewers (Academy Fellows or former Research Fellows). The application therefore should be written to help non-expert reviewers understand the research content. Based on the reviewers' comments and scores, the sift panel (consisting of Academy Fellows) will conduct moderation reviews and select the applications to proceed to stage two: expert review. Applicants will be informed of the stage one outcome after **Mid-December 2025**.

Stage two: expert review

Each application selected for stage two will be assessed by three expert reviewers. The expert reviewers will be asked to provide comments, score, and key technical questions (if any) that the applicant should clarify. Applicants will be given the opportunity to respond to the technical questions in late March 2025. The shortlist panel will then moderate the expert reviewers' comments and scores along with the applicants' response to the technical questions to select strong candidates for stage three: interview. Applicants will be informed of the stage two outcome in early May 2026.

Stage three: interview

Interviews will take place either online or at the Academy in London between **13-15 May 2026**. Each interview will be conducted by a panel of four Academy Fellows and will last 30 minutes. This includes a five-minute presentation from the candidate. All shortlisted applicants must be available to attend, as alternative dates cannot be arranged. Please reserve these dates at the time of application.

The ranking of candidates at the preceding shortlist panel will have no bearing at the interview stage. All interview candidates are considered to have equal standing. Following the interviews, the panel will rank the applications and select the top ranked candidates for awards.

Associate Research Fellowships

During the assessment process, if an applicant accepts a Research Fellowship with another institution, they are no longer eligible to receive the financial support associated with a Research Fellowship. However, they are eligible to be considered for an Associate Research Fellowship. To be eligible for an Associate Research Fellowship, the applicant must be shortlisted for, and be successful at, interview. An Associate Research Fellowship is provided in-kind support, such as mentoring by an Academy Fellow, being part of the Awardee Excellence Community, training, additional funding, and networking opportunities.

Assessment criteria

At the assessment stage 1 (general review) and stage 2 (expert review), each reviewer will be asked to provide comments against the following assessment criteria, a score of the overall quality of the application, and a recommendation on whether the application should proceed to the next assessment stage. The panel will moderate the reviewers' comments and scores and select the applications that will proceed to the next assessment stage.

The assessment criteria at stage 1 include:

1. Candidate

- Quality of the applicant's research track record.
- Potential of the applicant to become a future leader in their chosen field.
- Potential to act as an ambassador and advocate for engineering research.

2. Research vision

- Quality of the applicant's research vision and their ability to articulate their near, mid, and long-term goals
- Applicant's potential to establish an independent research career for themselves, in their chosen field

3. Beneficiaries and impact

- The extent to which stakeholders and partners will benefit from the proposed research and the candidate's planned pathways to translate their research outcomes into societal and economic impact.

The assessment criteria at stage 2 include:

1. Candidate

- Quality of the applicant's research track record
- Potential of the applicant to become a future leader in their chosen field
- Potential of the applicant to be an advocate for engineering research.

2. Research vision

- Quality of the applicant's research vision and their ability to articulate their near, mid, and long-term goals
- Potential to establish an independent research career in their chosen field
- Please comment on the quality of the proposed research project including timeliness, novelty and appropriateness of research methods and ethical and inclusive experimental design (including, if relevant, alignment with the Academy's Animal Use and Human Participants in Research, Innovation and Development Policies). Please indicate whether you believe that the ambitions and outcomes are achievable within the five-year timeframe.

- Mechanisms and ambition for how the candidate will develop their team. Please included in this answer, a comment on the candidate's articulation of the importance of equality, diversity and inclusion and how well this aligns to the proposed developmental pathways for their team.
- Candidate's consideration of equality, diversity and inclusion in their research.

3. Research environment

- Quality of the research environment and resources provided by the host institution
- Quality of the support and commitment of the host institution to the career development of the Research Fellow
- Quality and the level of support and commitment from the collaborators

4. Project and risk management

- Quality and effectiveness of the proposed planning and management and whether the resources requested are appropriate and fully justified.
- Applicant's ability to articulate the project plan to demonstrate that their vision is achievable (including for example appropriate milestones and deliverables)
- Applicant's ability to identify the main risks and how they will be mitigated (including for example both technical as well as managerial, logistical and collaborative considerations)

5. Beneficiaries and impact

- Please comment on the extent to which beneficiaries will benefit from the proposed research and the candidate's planned pathways to translate research outcomes into societal and economic impact.

Declaration on Research Assessment (DORA)

The Academy's research programmes are aligned with [DORA](https://sfdora.org/read/) (<https://sfdora.org/read/>), which is a set of principles aiming to improve the ways in which the output of research is evaluated by funding agencies, academic institutions, and other parties. The outputs from research are many and varied, and as a funder of engineering research the Academy needs to assess the quality and impact of these outputs to make awards. It is imperative that research output is measured accurately and evaluated wisely.

In the assessment of research output, we would like to emphasise that all outputs are welcome and considered valuable to the Academy. Outputs can include open data sets, software, publications, commercial, entrepreneurial, or industrial products, clinical practice developments, educational products, policy publications, evidence synthesis pieces, and conference publications. With regard to research articles published in peer-reviewed journals, the scientific content of a paper is much more important than publication metrics or the identity of the journal in which it was published.

We value and appreciate the time and effort that reviewers give to support our research programmes. A good, helpful review for the Academy is one that assesses research on its own merits rather than by surrogate measures, such as based on the journal in which research is published.

Why applications are unsuccessful

The most common reasons applications are unsuccessful:

- Lack of novelty in research.
- Lack of independence in research.
- Poor communication skills, both written and verbal.
- Unrealistic research proposal (for example, overstating the potential for impact of the research and the applicant's reputation).
- Lack of ambition and vision that shows great potential to become future research leaders.
- Weak letters of support from the host institution or important collaborators
- No industrial/clinical collaborations planned.
- Inconsistent information provided in the application form.

For all queries, please contact the Royal Academy of Engineering's research programmes team at research@raeng.org.uk

Grant agreement

If you are successful, your funding will be awarded under the RD&I Terms and Conditions found on the [Academy's website](https://raeng.org.uk/grants-policies) (<https://raeng.org.uk/grants-policies>).

This agreement has been developed to ensure funding aligns with our Academy values, is used for the purposes for which it was awarded, and is managed in compliance with our own funders' agreements, UK legislation and funding best practice.

If you have any questions, please refer to our [Research Fellowships FAQs](https://raeng.org.uk/programmes-and-prizes/programmes/uk-grants-and-prizes/support-for-research/research-fellowships/faq) (<https://raeng.org.uk/programmes-and-prizes/programmes/uk-grants-and-prizes/support-for-research/research-fellowships/faq>) or contact the Royal Academy of Engineering's research programmes team at research@raeng.org.uk

Appendix A: Engineering categories

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.