



ROYAL
ACADEMY OF
ENGINEERING

ENTERPRISE **HUB**



Enterprise Fellowships

Guidance notes 2019-20

Stage one submission deadline: 19 August 2019

Stage two submission deadline: 16 September 2019

Awards start: 1 January 2020

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Introduction

The core aims of the Enterprise Fellowships are:

To bring engineering innovations to market for wider public benefit

To improve the skills of the awardee, through training and application

To develop role models of entrepreneurship

To develop a wider alumni network to further the aims of the Hub

Enterprise Fellowships

Our Enterprise Fellowships support innovative, creative entrepreneurial engineers who have demonstrated an exceptional innovation in engineering that they want to develop further.

The programme focuses on equipping the awardee with the confidence, skills, experience and network of expert advisors necessary to enable them to develop themselves and their innovation.

The most successful awardees will then serve as role models to inspire the next generation of aspiring entrepreneurs, passing on the skills they have gained and fostering a more entrepreneurial culture in the UK.

To date the Enterprise Hub has supported 94 entrepreneurs with £4.5million of seed funding. They have since raised over £83 million in further funding, and now employ over 400 staff.

Full details on how you can access this support and become part of the Hub are given below.

We provide Fellowships to:

1

Researchers

Wishing to spin out a company from a university or research institute

2

Recent graduates

Wishing to create a company

3

International final-year PhD students

Wishing to spin-out or startup in the UK

Overview

Enterprise Fellowships

The Academy believes that training is most effective when there is ample opportunity to deploy the new learning. Awardees are therefore expected to establish and lead a business based on their innovation and will be required to spend the vast majority of their working hours pursuing the objectives of the award.

Applicants must show commitment to the objectives of the programme and may only use the award to establish a business that develops an innovative product or service emerging from their past research, projects or ideas. Applicants must have appropriate intellectual property rights to utilise the innovation as envisaged.

Our support – all awardees

- Equity-free funding of up to £60,000.
- A bespoke training programme and one-to-one mentoring from a Royal Academy of Engineering Fellow – one of the nation's leading engineers.
- PR, marketing and promotion.
- Access to the Taylor Centre, our drop-in workspace and meeting facilities in central London.
- A cohort of entrepreneurs to learn from and share best practice with.
- Access to our network of investors, experts and advisors.

Hub Membership

If you successfully complete the Enterprise Fellowship Programme you will be invited to become a Hub Member, and you will continue to receive an exceptional package of lifetime support, including:

- Lifetime membership of the Enterprise Hub, granting continued access to our facilities, training programme, PR and media support, network of investors, experts, advisors and Academy Fellows.

Co-applicants and diversity

Co-applicants

New to this year we are also supporting co-applicants where there is a clearly identified lead applicant.

- The lead applicant must not be less than 50% full time equivalent (FTE). They cannot hold any other paid role except the Enterprise Fellowship, so it must be their sole employment-related commitment.
- Academics in the lead role may continue to perform some PhD supervision so that existing students are not negatively impacted, but all remaining time and effort must be committed solely to the project - academics cannot undertake teaching commitments during the award.
- Other team members being supported by the Fellowship may contribute any level of FTE, and may have other paid roles and duties, but we expect their time to be carefully monitored.
- The lead applicant will be the primary point of contact for the award, and they will receive the support on offer.
- Contribution may be made to the salary costs of co-applicants. See page 8 for more details.

For more common questions, please see the [FAQs](#) on the website.

Diversity

The Royal Academy of Engineering is committed to diversity and inclusion and welcomes applications from all under-represented groups across engineering. It is the Academy's policy to ensure that no applicant is disadvantaged or receives less favourable treatment because of age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, gender and sexual orientation.

If you are successful, we would like to support you to achieve a balance between your personal and work demands. We are happy to discuss individual requirements and consider part-time and other flexible working arrangements. Please let us know if there is any support that we can offer during your time at the Academy (such as access, assistance, alternative formats, interpreters or disabled parking). Contact details are on [page 18](#).

Researchers

We support outstanding entrepreneurial engineers, working at a UK university or research intensive institute (such as a Research Council Institute or National Laboratory), to spin out a business based upon their research, or the research of their team.

Eligibility criteria

- Open to **all levels** of academic/researcher are eligible, from PhD student through to professor/director.
- Must be **working in research** at a UK higher education institute (HEI) or research intensive institute (RI). Non-HEIs should see the [eligibility](#) and [FAQ](#) on our website, and then get in touch with the Academy to confirm their eligibility.
- All Enterprise Fellows must be employed directly by the HEI or the RI for the full duration of the award.
- Applicants must have a **PhD or equivalent experience**. PhD students are eligible to apply, but must receive their PhD before 1 December 2019 or the offer will be withdrawn
- Must be an engineering or technology invention or innovation that the applicant helped develop.
- Technology must be **Technology Readiness Level 4** or above – i.e. it has been shown to work under test conditions, and is not just a theory.
- The host institution must be committed to transferring and exploiting the technology via a spin-out, in which the Enterprise Fellow will be playing a leading role (CEO/COO).
- The host institution should not expect to have an equity stake in the company that is greater than 50% unless they can demonstrate some form of additional private investment into the spin-out, beyond what is normally expected of a host (i.e. grant funding and performing the standard TTO support function do not count as additional investment).

**£60,000
funding
+
support
package**

Funding includes:

- £45,000 in salary support
- £15,000 support costs for the continued development of the innovation and associated spin-out company



Recent graduates

In partnership with the 1851 Royal Commission and the ERA Foundation we support recent engineering and design graduates to learn how to start a business and make it a success. Awardees will focus on developing their innovation, developing their skills through training and implementation, and passing on the skills they have learned by acting as a role model.

Eligibility criteria

- Must be an engineering or technology invention or innovation that the applicant helped develop.
- Must be based in the UK.
- Must be currently studying for, or have been awarded their **first undergraduate degree**, no earlier than **1 January 2014**. The degree must be in engineering, design, IT, or a related discipline, and current students must receive their degree before they start the Fellowship or the offer will be withdrawn.
- Technology must be **Technology Readiness Level 4** or above – i.e. it has been shown to work under test conditions, and is not just a theory.
- The Fellowship is intended for applicants who lack the support structure provided by well-established employers. You may apply while employed by such an established organisation, but must leave the organisation prior to commencing the award. You may be employed by the startup business to which the application relates, although it must still be in the startup phase.
- You may have previously been through an accelerator programme, but cannot be on one during the period of the award.

**£50,000
funding
+
support
package**

Funding includes:

- £25,000 cash prize in recognition of outstanding achievement
- £25,000 support costs for the continued development of the innovation and associated startup company

The Fellowships are generously funded by the Royal Commission for the Exhibition of 1851 and by the ERA Foundation.

Awardees shall be known as '1851 Royal Commission Enterprise Fellows' and 'ERA Enterprise Fellows.' Additionally Awardees will have access to further support and networking activities from their respective funder, through participation in events and access to their extensive alumni networks.

International PhD students

We support international PhD students who are in their final year and currently studying at a UK university, and who wish to either spin out from the university or to start up a company in the UK. If you are in this category, you can choose from either the researcher route or the graduate route.

Application route

Applicants should choose the application route that is most appropriate to their situation. Applicants through both routes will receive up to £60,000.

- If you will be employed by a UK university during the Fellowship and will make use of intellectual property owned by the university to create a spin-out, part owned by the university, then you must apply as a **university-based researcher**, and follow all such related guidance.
- If you will not be employed by a university and the university will not have any stake in the business or intellectual property rights, and you wish to start a company in the UK, then you should apply as a **recent graduate**, and follow all such related guidance.

Eligibility criteria

The eligibility criteria given on pages [5](#) and [6](#) will continue to apply, except for the criteria relating to date of graduation, which is not applicable here. Additional criteria are given below.

- Must not be a UK citizen.
- Must be eligible to work in the UK for the entire period of the Fellowship – we cannot assist with visa applications.
- Must be studying for a PhD at a UK higher education institute or research intensive institute, in an engineering department, or related research area.
- Must complete their **PhD viva between 1 January 2019 and 1 December 2019**. If you do not complete your viva before this date any offer will be withdrawn.

**£60,000
funding
+
support
package**

(Graduate route) Funding includes:

- £35,000 personal award towards living costs
- £25,000 support costs for the continued development of the innovation and associated startup company

(Researcher route) Funding includes:

- £45,000 in salary support
- £15,000 support costs for the continued development of the innovation and associated spin-out company

Eligible costs for all Fellowships

Salary costs – research route only:

- The salary support element **does** cover income tax, national insurance, pensions, or maternity/paternity/sick pay, up to the £45,000 limit.
- You may allocate the budget between any number of co-applicants, but they must be in academic positions and working on the award. Support staff and tech transfer officers are not eligible.
- If the net salary costs exceed £45,000 the remainder must be covered by other means, normally the host institution.
- Full economic costs (FEC) are not payable under this programme.
- Research costs, administration costs or running costs of the host institution are not allowable.

Personal Award – graduate route only:

- The cash prize is in recognition of your potential as a leading entrepreneur. It can be spent in any way you choose and does not need to be justified in the application or progress reports.

Personal Award – graduate route only (international PhD students):

- The personal award is to support your living costs while working on the Fellowship programme. It must be spent for this purpose and be reported in full.

Support costs:

- Travel, equipment, consultancy fees, project specific consumables, legal costs, accountancy costs, prototyping, product testing, marketing, advertising, trademarks, website, training, conferences.
- If funds are to be spent on patents, detail how/if this will affect the ownership of related IPR.
- Any individual piece of equipment must have a value of less than £10,000.

Disallowed costs:

- Salary costs of anyone other than the applicant and eligible co-applicants.
- Manufacturing costs, other than prototypes.
- Rent and utilities.

Training costs:

- We will cover reasonable travel and accommodation costs incurred attending our compulsory training days, so do not include such costs.

What to expect

Training and mentoring

- Awardees will be provided with a mentor, usually a Fellow of the Academy, with extensive business and technical experience. They will provide support and guidance throughout the Fellowship.
- You will receive approximately 12 days mandatory training over the course of the Fellowship.
- The training programme will be interactive, involving individual and group work and role plays with your fellow entrepreneurs. It will provide you with the skills necessary to put business tools and techniques into practice.
- We will also provide a reading list to cover the more theoretical side.
- Awardees are required to attend all training days.

Reporting

We use the reports to identify what support you need, and the report will form the basis of your business plan. We expect the following regular updates on progress:

- Weekly progress update email.
- Monthly catch up call.
- Quarterly progress report.
- Six month panel review.
- Annual follow-up report following completion.

Signposting

We will be on-hand throughout the award period and beyond to signpost additional opportunities available through the Academy and our network, such as:

- Grant/funding programmes.
- Networking events.
- Pitching opportunities.
- Building a public/media profile.
- Introductions to expert advisors.

Your commitment

- The Fellowship is a full-time award in which awardees are expected to be fully engaged and committed. The lead applicant cannot hold any other form of employment during the award.
- All mandatory training days must be attended and prioritised.
- Awardees are expected to keep in regular contact with the Enterprise Hub team and their mentor, strive to be a role model to others and seek to engage with their peers in the rest of the cohort.
- All awards run from 1 January 2020 – 31 December 2020.

How to apply

Online application system

All applications must be submitted by the lead applicant via the online system, available here: <https://grants.raeng.org.uk>. All applicants must first register with the system and provide some basic log-in details to create a profile.

Once logged in, select **My Applications** in the top left corner, and choose an application form from the list of currently open programmes.

The application process has two stages, as detailed on the next page. Applicants based at a university or research institute will require their official approval to submit, so please allow sufficient time to comply with their internal processes.

All the questions are listed in the next few pages. Hints and tips on what to include in your application is available on the website and in the application form itself. At any stage in the application process you can save your work, log-off and return to it at a later time.

If you have any questions about the application process or the online system, please contact the Enterprise Hub team at enterprise@raeng.org.uk.

Please ensure you answer the multiple choice questions at the beginning on the application first, because your response to these questions changes the content of the application form.

Researcher Enterprise Fellowships only

The university's technology transfer office and your head of department will be required to submit information in support of the application, so contacting them as early as possible is advised. The below guidance also covers their sections, so please pass this document on to them.

Graduate Enterprise Fellowships only

Applicants can ignore sections four and five, and are instead expected to obtain up to two letters of reference, akin to a job reference. The letters must be written by someone who is independent to the applicant, and should comment on the applicant's entrepreneurial potential, the business model, and the innovation.

Application process

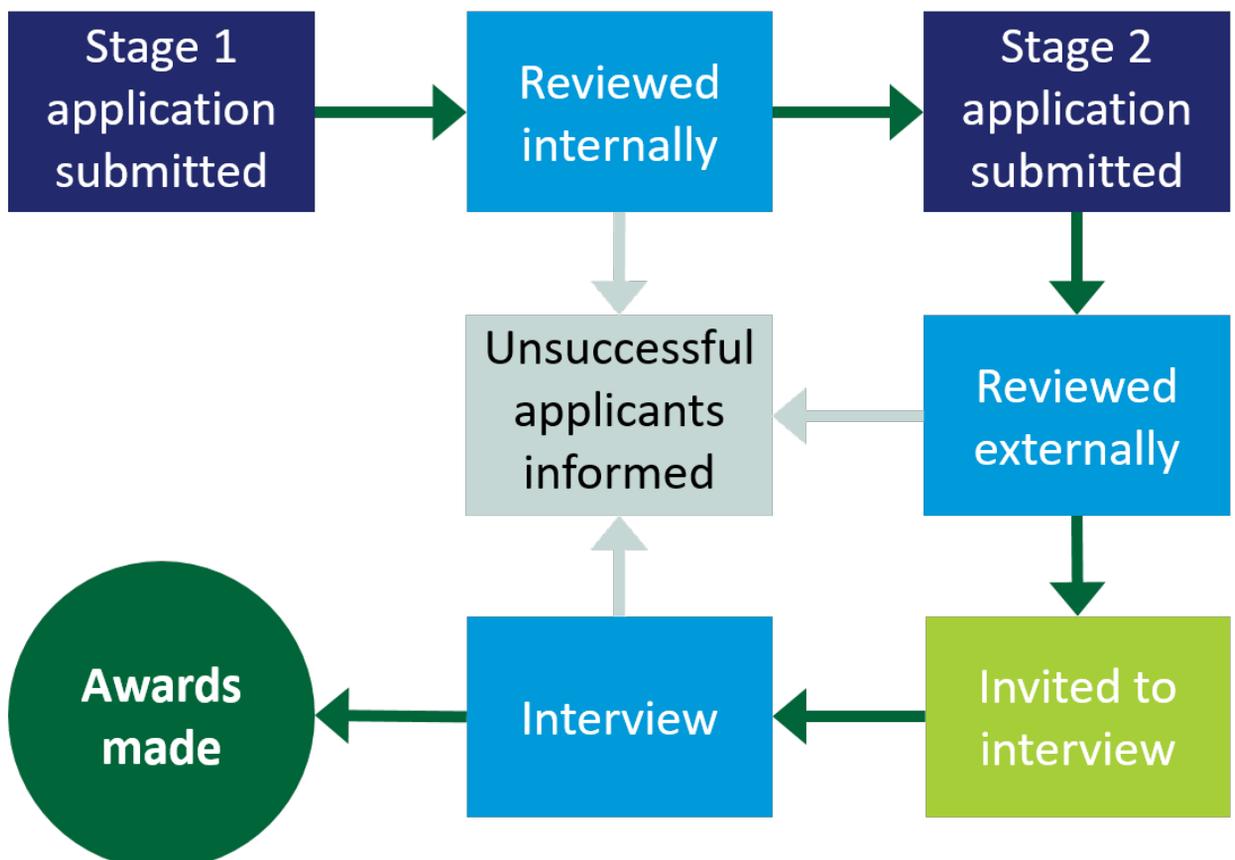
Stage one

This short application gives you the chance to briefly tell us about you and your business. If the idea is suitable for the type of the support we offer and you are a good fit for the programme, we will invite you to complete a stage two application.

This stage does not assess how good the idea is, but whether it is suitable for our programme.

Stage two

This part of the application is more detailed and will consider how good the idea is, and your potential to lead a start-up. You will need to provide more information about yourself, the technology and the business model. This part of the application will be reviewed by a panel of experts and, if successful, you will be invited to interview.



Questions: stage one

The questions on the stage one application form are listed below. Additional information and tips on how to answer them can be found on the application form itself. Stage one applications are reviewed internally to determine your eligibility and suitability for the programme.

1. Summary

| | Question | Type |
|-----------|--|-------------------------|
| 1 | What is your education status? | Pick from a list |
| 2 | What is your employment status? | Pick from a list |
| 3 | Are you a permanent resident in the UK? | Pick from a list |
| 4 | What is your big idea? | Text box (15 words) |
| 5 | What problem are you solving? | Text box (100 words) |
| 6 | What is your solution to this problem? | Text box (100 words) |
| 7 | How is your solution better than current methods? | Text box (100 words) |
| 8 | Tell us about the market size and competition | Text box (100 words) |
| 9 | How well developed is your business strategy? | Check box |
| 10 | How many customers have you spoken to? | Pick from a list |
| 11 | How well developed is the technology? | Check box |
| 12 | Protection of the technology? | Pick from several lists |
| 13 | For medical technologies – what have you completed so far? | Check box |
| 14 | How soon could you start selling the product? | Pick from a list |
| 15 | Where did you first hear about the programme? | Check box |

You can submit your stage one application at any time, do not wait until the deadline. The earlier you submit your application the more time you will have to complete stage two.

Questions: stage two

Those applying for Graduate Enterprise Fellowships do not need to complete sections four and five.

We recommend you answer question one first as different questions will be shown according to the answer given. Additional information and tips on how to answer can be found on the application form itself.

Some of your answers from stage one will be copied over into stage two. You are free to edit them if you so wish.

1. Abstract

| | Question | Type |
|-----------|---|---------------------|
| 1 | Eligibility questions | Dropdown menu |
| 2 | Project title | Text box (20 words) |
| 3 | What is your big idea | Text box (15 words) |
| 4 | Subject area | Table |
| 5 | Summary of the status of the business <ul style="list-style-type: none">• How long have you worked on this idea for• Has the business been incorporated• Current Technology Readiness Level• Grant funding raised to date• Equity funding raised to date• Estimated funding required to get to market• Estimated time to market | Table |
| 6 | Status of business – further information (optional) | Textbox (100 words) |
| 7 | Justification of Technology Readiness Level | Textbox (100 words) |
| 8 | What problem are you solving? | Textbox (100 words) |
| 9 | What is your solution to this problem? | Textbox (100 words) |
| 10 | Pitch deck | File upload (pdf) |
| 11 | 'Elevator pitch' video (2 mins) | Video link |

2. The applicant

| | Question | Type |
|-----------|---|----------------------|
| 12 | Applicant and institution/company details | |
| 13 | Why do you want to become an entrepreneur? | Text box (200 words) |
| 14 | Collaborations | Table |
| 15 | Team | Table |
| 16 | Commitment to place | Text box (200 words) |
| 17 | CV (two pages maximum) | File upload (pdf) |
| 18 | External reference - Graduate Enterprise Fellowships only | File upload (pdf) |

3. The project

| | Question | Type |
|-----------|--|----------------------|
| 19 | Summary of the offer | Table |
| 20 | The engineering behind the innovation | Text box (300 words) |
| 21 | Regulatory approval - bioengineering applications only | Text box (200 words) |
| 22 | The market | Text box (200 words) |
| 23 | Market validation / traction | Text box (200 words) |
| 24 | Business model | Text box (200 words) |
| 25 | Business model canvas | File upload (pdf) |
| 26 | Financial model | Text box (200 words) |
| 27 | Confirmed additional funding | Table |
| 28 | Project plan | Table |
| 29 | Costs table | Table |
| 30 | Costs details (see page 8 for eligible costs) | Text box (200 words) |
| 31 | Equity distribution - Graduate Enterprise Fellowships only | Table |

Note: These last two sections are for the Researcher route only.

Sections four and five are to be completed by the technology transfer office and head of department of the applicant respectively (or equivalent roles for non-HEI applications – see FAQ for guidance).

The applicant has read-only access to these sections, and both sections must be completed before the applicant can be submitted.

4. Support – technology transfer office

The questions below must be completed by the **technology transfer office**.

| | Question | Type |
|----|--|----------------------|
| 32 | Why the TTO supports the application | Text box (200 words) |
| 33 | Past support the TTO has provided | Text box (100 words) |
| 34 | Ongoing and future support the TTO will provide | Text box (100 words) |
| 35 | Existing Intellectual Property Rights (IPR) | Text box (100 words) |
| 36 | Licencing and royalties | Text box (100 words) |
| 37 | Confirmation of applicant's role | Dropdown menu |
| 38 | Stakeholder summary | Table |
| 39 | How the TTO decided upon this equity distribution | Text box (100 words) |
| 40 | What milestones must be met for the company to spin out? | Text box (100 words) |

5. Support – head of department

The questions below must be completed by the **head of department**.

| | Question | Type |
|----|--|----------------------|
| 41 | The applicant | Text box (200 words) |
| 42 | The project | Text box (200 words) |
| 43 | Past support the department has provided | Text box (100 words) |
| 44 | Ongoing and future support the department will provide | Text box (100 words) |

Assessment Criteria

The Selection Panel is composed primarily of Fellows of the Academy, plus additional investors and knowledge transfer experts. Each application will be reviewed by at least two panel members, who will lead the panel through a discussion of the merits of the application. All Panel Members will have access to the application and can contribute to the discussion, before a score is agreed. Candidates with the highest scores will then be invited to interview.

1 – The Applicant

- Their ambition
- Fit with the aims of the programme
- Nature and level of past achievements
- The expected benefits of the Fellowship to the awardee
- Their potential to be mentored, awareness of weaknesses
- Evidence of their entrepreneurial potential, desire to learn, business awareness, potential to act as a role model, vision, and commitment.

2 - The Technology

- Evidence of a market need
- Quality and potential of the innovation
- Potential to be delivered at scale
- The potential for benefits to UK economy and expected benefits to the wider public.

3 – The Team

- The role of the applicant
- The fit of the team with their assigned roles
- The level of commitment and reward of the parties
- Expertise / positions that are noticeably absent, and plans to address this
- *Level of support from the university / technology transfer office or other organisation.*

4 – The resources required

- Protection of and access to Intellectual Property Rights
- Additional funding already secured, and suitability of plans for funding sought
- Non-financial resources already secured, and plans for additional resources
- Access to / identification of necessary facilities, supply chains and expertise.

5 – Commercial credibility

- Commercial credibility of the business model
- Potential for a self-sustaining and scalable business
- Expected benefits to UK economy and/or expected benefits to wider public
- The overall likelihood of success.

About us

The Enterprise Hub

At the Royal Academy of Engineering Enterprise Hub, we believe the brightest people have the power to change our world for the better.

We transform engineering entrepreneurs with high-potential ideas into the business leaders of tomorrow, empowering them to build bold and disruptive enterprises that have a positive impact on society.

The Hub forms part of the Academy's commitment to stimulate excellence and encourage creativity and innovation in engineering by identifying and supporting the founders and leaders of tomorrow's high-tech companies. It provides money-can't-buy bespoke support and one-to-one mentoring from its Fellowship, which is composed of some of the country's most successful engineers from across academia and industry. The Enterprise Hub receives funding from the Department of Business, Energy and Industrial Strategy to support these goals.

Further information can be found here:

www.enterprisehub.raeng.org.uk

The Royal Commission for the Exhibition of 1851

The Graduate Enterprise Fellowships programme is funded through the generous support of the 1851 Royal Commission as part of their wider programme of promoting excellence in science and innovation. The Commission's aim is to 'make a difference' through supporting pure research in science and engineering, applied research in industry, industrial design and many other projects. The Commission is particularly interested in supporting projects involving disruptive innovations from early career entrepreneurs, and welcomes high-risk high reward applications. A representative of the Commission will be involved in the assessment process and interview panel.

Further information can be found here:

<https://www.royalcommission1851.org/>

Information

Key dates

The **stage one submission deadline** is 4pm (GMT) Monday 19 August 2019. Note that the earlier you submit the sooner you will be granted access to the stage two application form if eligible.

The **stage two submission deadline** is 4pm (GMT) Monday 16 September 2019.

All Fellows will start on **1 January 2020**. The Fellowships will formally end on 31 December 2020.

Applicants must be able to attend the interview in person (or by Skype if abroad) to be considered for an award. The interviews will be held in central London in late October / early November 2019.

Contact

If you have any questions about your eligibility, the programme, or problems with your application, please contact one of the team:

Angus Baker +44 (0) 20 7766 0650 | angus.baker@raeng.org.uk

Sarah Gummer +44 (0) 20 7766 0624 | sarah.gummer@raeng.org.uk

Guidance and FAQs

More information is available on the website: Hints and tips, [eligibility](#), [past awardees](#), [blog](#), and [Frequently Asked Questions](#).

Visa Requirements

The Academy cannot take any responsibility for applying for the visas/work permits required and cannot provide advice. Applicants must be able to remain and work legally in the UK for the duration of the Fellowship but there is no restriction on applicant nationality.

Successful applicants will be eligible for the 'accelerated endorsement process' in Stage 1 of the Tier 1 (Exceptional Talent) visa, if they choose the Academy as the Designated Competent Body to assess for endorsement prior to the Home Office assessment. For more information please see the [guidance document](#) for eligibility criteria or contact the Academy's International team at international@raeng.org.uk