



Applicant Guidance Notes - 2017 – Enterprise Fellowships

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Introduction

The Royal Academy of Engineering’s Enterprise Hub is a national resource for the UK’s most promising engineering entrepreneurs. 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.

Our Enterprise Fellowships are awards to individuals to reward innovation and stimulate creativity and innovation in engineering in the UK. We use 'Enterprise Fellowships' to refer to two different funding schemes which pursue broadly similar aims, but support different target groups – one targets university-based researchers wishing to spin out a company, the other targets recent graduates wishing to create a company. The same application and assessment process applies to both groups, with some minor variations, all the details of which are given below. In addition, we have partners who are keen to support Enterprise Fellowships that contribute to economic vitality in particular places within the UK. Applications to either scheme that have a commitment to a particular place should make that clear in the application.

University Enterprise Fellowships

These awards support outstanding entrepreneurial engineers, working at a UK university, to spin out a business by providing the host University with up to £35,000 in funding for a year of salary support of the Fellow, and providing an additional £25,000 for continued development of the innovation and associated spin-out company by the Fellow. The Fellowships are awarded to individuals who have demonstrated an exceptional innovation in engineering to at least Technology Readiness Level four (see further below), together with considerable entrepreneurial potential. The Fellowship will focus on encouraging the development of their innovation, developing their skills through training and implementation, and passing on the skills they have learned by acting as role models to inspire the next generation of engineering entrepreneurs. In addition, Awardees are invited to become members of the Enterprise Hub where they receive a package of bespoke support.

Career stage: University Fellowships are for all levels of academic, from third year PhD student all the way through to Professor.

Note: These Fellowships are not appropriate for academics wishing to set up a consultancy style business. There must be a scalable business proposition.

Graduate Enterprise Fellowships

The Graduate Enterprise Fellowships scheme encourages and promotes creativity and innovation amongst recent engineering graduates based in the UK. The scheme is generously supported by the Royal Commission for the Exhibition of 1851 and those supported through the UK-wide competition receive the title RAEng 1851 Royal Commission Graduate Enterprise Fellowships, and have access to additional support and networking activities through participation in events and access to their extensive alumni networks. The ERA Foundation partners to support an additional award within the broad field of electro-technology.

The Fellowships are awarded to individuals who have demonstrated an exceptional innovation in engineering to at least Technology Readiness Level four (see further below), together with considerable entrepreneurial potential but who lack the relevant experience, skills and support structure offered by employment with a university or well-established company. The Fellowship will focus on encouraging the development of their innovation, developing their skills through training and implementation, and on passing on the skills they have learned by acting as role models to inspire the next generation of engineering entrepreneurs.

The Fellowships provide the awardee with the time, support, training and skills necessary to develop the utility of the innovation. The Hub supports the awardee through a £50,000 grant to cover equipment, travel, and subsistence for a twelve-month period. Awardees are invited to become members of the Enterprise Hub where they receive a package of bespoke support.

Strengthening Places Enterprise Fellowships

The Academy has many partners who are committed to supporting engineering innovation in particular places across the UK. The Reece Foundation have pioneered this approach, generously supporting at least one extra Fellowship committed to establishing a new business in the North East region of England, and will provide additional support and networking. The Academy is strengthening Enterprise Hub activities across the UK and will engage Enterprise Fellows in those developing regional networks.

Strengthen Places Enterprise Fellowships are applied for through the University and Graduate schemes. Applicants who that are committed to establishing their business in a particular place should highlight this in the relevant sections of the application. The Academy will decide what kind of Fellowship you receive and whether it is appropriate to associate it with a particular place-based commitment. We anticipate further commitments to specific places to be made by new partners between now and final funding decisions, so applicants should highlight any commitments they have to specific places, even if not amongst those identified above.

Aims

The core aims of the Enterprise Fellowships are:

1. To bring engineering innovations to market for a wider public benefit
2. To improve the skills of the awardee, through training and application
3. To develop role models of entrepreneurship; and
4. To develop a wider alumni network to further the aims of the Hub.

The Academy believes 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.

Eligibility Criteria

- **University Enterprise Fellowships only** - Applicants must be working in research at a UK Higher Education Institute, in an engineering department (or engineering focussed research area), and must have a PhD or equivalent experience. PhD students are eligible to apply, but must receive their PhD before they start the Fellowship or the offer will be withdrawn. Note, all levels of academic are eligible, from third-year PhD students all the way through to Professor.
- **University Enterprise Fellowships only** - The Host Institution must be committed to transferring and exploiting the particular technology via a spin-out, in which the Enterprise Fellow will be playing a leading role (CEO/COO). If at the time of application, the Host Institution has not yet decided whether to exploit the technology by licensing to an industrial partner or to exploit via the spin-out route, the decision will need to be made to pursue the spin-out route before an applicant can be invited for interview.

- **Graduate Enterprise Fellowships only** - Applicants must be based in the UK and be currently studying for, or have been awarded their **very first** degree, no earlier than **1 January 2012**. Additionally, the degree must be in engineering, design, IT, or a related discipline. Undergraduate students are eligible to apply, but must receive their degree before they start the Fellowship or the offer will be withdrawn.
- **Graduate Enterprise Fellowships only** - The Fellowship is intended for applicants who lack the support structure provided by well-established employers. Awardees cannot be employed by a university or well-established company during the period of the award. 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 start-up business to which the application relates, although it must still be in the start-up phase. You may have been through an accelerator programme, but should not be on one during the award.

All applicants:

- Applicants must show commitment to the objectives of the scheme and may only use the award to establish a business that develops an innovative product or service emerging from past research or projects.
- The proposed innovation must be an innovation or invention in engineering and/or technology. Engineering is defined in its broadest sense, encompassing a wide range of diverse fields.
- To make the most of the training and support provided by the Hub, the proposed innovation must be at 'Technology Readiness Level' four¹ or above (see further guidance below), and must expect to be able to produce a minimum viable product within the next two years.
- To maximise the potential benefit of the training and mentoring on offer, the innovation should still be in the early stages of development and not currently widely available to the market other than as a prototype/minimum viable product with limited initial sales.
- The applicant must have appropriate intellectual property rights to utilise the innovation as envisaged, be it through a patent, licence, trade secret etc.
- Awardees are expected to spend the vast majority of their time pursuing the objectives of the award, as this is a full-time award.
- Applicants should have a viable proposition with a large market opportunity and ambition to grow significantly to ensure that the engineering innovation becomes available to the public where it can be of societal benefit.
- The awardee will be expected to play the leading role in the development of the business, as the CEO or COO for at least the duration of the Fellowship. Training is more beneficial and effective when there is a clear opportunity to put it into practice in the immediate future, which can only be achieved if you are in a leading role.
- The innovation should not need further fundamental research work to be undertaken, irrespective of how closely it aligns with the aims of the Fellowship. You may engage in limited product development, however your primary role will be to develop the business.
- Prior experience of commercialisation activities is not essential, the desire and capability to succeed is more important and we will equip you with the necessary skills through a programme of training and mentoring.
- Only one application is allowed per applicant.

¹ As defined by the European Commission as part of Commission Decision C(2014)4995, available [here](#).

- Only one application is allowed per start-up/innovation, please select an appropriate lead applicant.
- Industrial researchers and establishments are not eligible.
- Applications must be for a project or company which has not previously been in receipt of a Hub Fellowship, i.e. other staff associated with the project must not be former recipients of a Hub Enterprise Fellowship.
- Any applications that are incomplete or do not adhere to the guidelines may be rejected.
- Applicants must be able to attend the interview in person to be considered for award. The interviews will be held in central London in November 2017.
- As a charity we will accept applications for Social Enterprises, note however that this is not a requirement, or even a preference – both commercial and social enterprises are treated equally. Remember that a financially viable and self-sustaining social enterprise will have greater impact than one which fails for lack of funding.
- The project under the Award must start on 1 March 2018 and formally end 28 February 2019. Naturally, you will likely continue with the project after this.
- Assessment of an application will be at the Academy's absolute discretion.

If you are unsure of your eligibility, please contact the Programme Manager to discuss.

The Academy is committed to diversity and welcomes applications from women and other groups who are currently underrepresented across engineering.

	University Enterprise Fellowship	Graduate Enterprise Fellowship
Applicant must have a PhD, or be a PhD student	Yes, or equivalent experience	Not required, but this is allowed
Must graduate with their first degree between 1.1.12 and 31.3.18	Not required, but this is allowed	Yes
Applicant will be employed by a university during the grant	Yes	No
One or more parent organisation has an equity interest in the project.	Allowed – this is a university spin-out	No – only founders and investors have any equity in the proposal
Location specific	Awards available across whole of UK, and additional awards from partners in some places in the UK.	
Funding received	£60,000	£50,000
Receives a Hub Mentor	Yes	Yes
Receives Hub training	Yes	Yes
Receives general Hub support	Yes	Yes

Submission Deadline

There is one round of applications held each year. The submission deadline for this round of applications is **4pm on Monday 2 October 2017**.

Mentoring and training

- 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.
- The role of the Academy Mentor is to monitor the awardee to ensure that the Academy's funds are well spent while also providing advice and guidance to ensure a viable business is in operation at the end of the Fellowship. The Academy Mentor will not make or take business decisions, perform the functions of a consultant, or take the role of an executive or non-executive director of the company.
- Approximately 12 training days will be provided by the Academy over the course of the Fellowship, through a combination of one-week residential courses and full day training events. Awardees are required to attend all training days. Topics covered may include business modelling, pitching, negotiations, investment readiness, how to mentor, leadership, marketing, etc.

The Enterprise Hub team will also be on-hand throughout the award period and beyond to assist by:

- Providing networking opportunities with and through the Academy's Fellowship and events programme.
- Signposting opportunities for additional support.
- Providing opportunities to pitch to potential investors at Academy hosted events, and some external events.
- Making introductions to Angel and venture capitalist groups.
- Building a public/media profile.

Reporting

Awardees are expected to submit quarterly reports on their progress. Reports should follow the reporting guidelines, which will be provided post-Award by the Programme Manager. Reports are sent to the Selection Panel for evaluation and serve as a measure of the success of the award and scheme.

Awardees may also be required to present their work to the Selection Panel and an invited audience at the beginning and/or end of the year of support, for example, at the annual Enterprise Hub Showcase event.

How to Apply

All applications must be submitted via the online system, available here: <https://grants.raeng.org.uk>. If you have not already done so, all Applicants must first register with the system and provide some basic log-in details to create a profile.

The application form has four sections and typically takes two working days to complete, but please allow two weeks from start to finish so you have sufficient time to consider your responses and to obtain suitable references. The following guidance gives recommendations as to what to include in answering each question, so we recommend you keep this document to hand.

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

You will have the option to download a pdf of your application after submission, which may be useful for future reference and for passing on to your colleagues.

Some questions are initially hidden from view and will only become available once you have selected the type of award you are applying for. This is to ensure you only answer questions that are relevant to you. These notes also include guidance that is specific to the application type. Where appropriate this will be indicated with a '[University Enterprise Fellowships only](#)' or '[Graduate Enterprise Fellowships only](#)' accordingly.

If you have any question concerning the application or the online system, please contact the Programme Manager.

[University Enterprise Fellowships only](#) - The university's Technology Transfer Office will be required to submit a statement in support of the application, so it is essential for applicants to consult with them as soon as possible as this may require extensive discussions. The Head of Department at the university must also complete a statement in support of the application. For more details of what to include in the statements of support please see the relevant section below.

Completing the Application Form

After logging in via the Academy website and selecting the Enterprise Fellowships application you should be presented with the "Instructions" screen. Here you will see some general instructions on how to use the system as well as the below list of the four sections of the application form:

1. Abstract
2. The Applicant
3. The Project
4. Support

At any stage in the application process you can save your work and return to it at a later time. You can answer the questions in any order you like so you may freely skip some sections to return to later if you so wish. It is therefore worth viewing the application early on for an indication of what is required, and you should also ensure that you have all the necessary documentation when you start completing the application, such as CV/s and the details of any co-applicants.

1. Abstract

Q - Select the type of Enterprise award are you applying for?

Please answer this question before all others, as it will dictate what other questions you are presented with. The two options are:

- [University Enterprise Fellowship](#) – Select this option if you work for a university and intend to spin-out a company.

- **Graduate Enterprise Fellowship** – Select this option if you are a recent graduate and wish to start a company with no formal connections to a parent organisation.

Q - Project title

The title can be the name of your technology, product or service or the name of the proposed business. Make sure the project title is in terms that can be understood by a non-specialist reader. You have 6 words for this section.

Q – Project duration

For clarity only - this question is fully automated and you cannot see or answer it. You must start on 1 March 2018 and end on 28 February 2019, and all Fellowships last for twelve months. Requests for a shorter Fellowship will not be accepted.

Q- What is the broad subject area of the proposal?

Please choose the below option which most closely fits with your proposal. This helps us identify suitable reviewers. Note that applications in the biomedical field will also be asked an additional question on clinical trials and certification.

- Biomedical and biotechnology
- Energy and cleantech
- ICT
- Materials

Q - Executive summary

Describe your project by summarising the technology, its status, its innovative nature, opportunity in the market place, and potential benefits. The summary should be understandable by, and compelling to, a non-technical person. You have 200 words for this question.

Q - 'Elevator Pitch' video

Please provide a link to your YouTube (or similar) 'Elevator Pitch' video produced in support of your application. The video should last 60 to 90 seconds and give an overview of your business proposition, the value proposition, your background, and why you want the award. This is a good opportunity to demonstrate your enthusiasm and pitching skills, which are essential to gain additional support for any venture.

Try explaining your value proposition to someone who knows nothing about your area, preferably not an engineer. If they don't understand it, and can't repeat it back to you in their own words, you need to make your explanation clearer.

Please ensure that the link starts with <http://www> and use the full address. Please format it as a hyperlink, so it is easier for the reviewers to access.

The quality of the recording itself is not being judged here, just the content. You may use any recording technology available to you, including handheld video cameras, webcams, mobile phones, etc. Name the video in the following format: "Elevator Pitch – Your Name – 2017/18 – EF Application" so that it is easy for reviewers to identify it.

You do not need to be visible in the video; you may choose to narrate a video composed of a set of video clips or images. If you are going to be in the video, try to have minimal visual and audible distractions in the background, as you want

the reviewer to focus entirely on you, not what else is going on in your office.

If you wish to restrict viewing of your video, feel free to designate it as "Unlisted" in settings, however DO NOT designate it as "Private" as that will make it inaccessible to reviewers. Also in 'settings', check the box to allow the video to be embedded in an external site.

Q – Summary of the status of the business

The aim of this table is to give the reviewer a snapshot of the current status of your project, and so set the scene for the rest of the information provided. You also have an optional opportunity to provide 200 words of clarification.

What is the current Technology Readiness Level of the product/service

Technology Readiness Level (TRL) refers to how well developed the innovation is, so how close it is to being a finished product that can be bought and sold. To be eligible for this scheme the proposed innovation must be at Technology Readiness Level four or above, as defined by the European Commission. This is because we believe that the innovation needs to be sufficiently advanced to enable the awardee to fully benefit from the support on offer by the Hub. For more information on TRL see [here](#).

Grant funding raised to date

This excludes grants for conducting basic research, and is aimed purely at grants aimed at bringing the technology to market.

Equity funding raised to date

How much funding have you received, in return for providing equity in the business.

How much funding do you estimate is required to get the product/service to market

Please provide the amount of investment you estimate is required for the business to become fully functional. If you do not think your business requires any investment you may enter £0. This is **not** how much funding you are requesting from the Academy, rather we are asking for your assessment of how much capital you realistically need and will be pitching to investors for, if awarded. Many applicants underestimate this figure, seek advice and research other start-ups in your sector.

How long will it take to get the product/service to market

Estimate when you believe the product/service will be ready for the market. Applicants must intend to get the initial product/service to market within three years of starting the Fellowship. This is because we believe that the innovation needs to be sufficiently advanced to enable the awardee to fully benefit from the support on offer by the Hub. Many applicants underestimate this figure, seek advice and research other start-ups in your sector.

Has the business been incorporated?

Select the appropriate option. If the answer is yes, provide the name of the company and the date of incorporation. If no, give the status of any negotiations in this regard.

How long have you been working on the commercialisation of this technology for?

This helps provide context, in terms of the scale of the project, your dedication to it, the complexity of the issues involved, and pace of advancement. There is no 'right' answer, as circumstances vary greatly.

2. The Applicant

This section requests additional details about yourself and your suitability for the Fellowship. You will need to answer some questions and upload your CV. The information provided will be used to determine your suitability for the award.

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

Note: You may wish to add details of any co-founders here too, or you may include them under the 'Team, Partnerships, Connections' question. Although this is primarily an award to an individual we acknowledge that most start-ups involve a team and subject to capacity we do extend aspects of the support package to co-founders as well, such as invites to networking events and substituting for you when you cannot attend a training session.

University Enterprise Fellowships only - provide the central contact details of their host university.

Graduate Enterprise Fellowships only – provide details for the organisation which will be hosting you, being your (prospective) business, accelerator, incubator or often a university.

Q - What was/will be your graduation date of your first Engineering (or related) undergraduate degree?

(**Graduate Enterprise Fellowships only**) Applicants must **not** have received a degree in any subject prior to 1 January 2012, and must have graduated by 31 March 2018. Students are eligible to apply but must receive their degree before they start their Fellowship, and should provide an estimate of when it will be awarded. If you are unsure as to the exact date use the first of the month.

Q – Collaborations

List any external organisations who you will be collaborating with as part of the project. As well as demonstrating collaborative intentions this will help us avoid any conflicts of interest during the assessment process. Clearly indicate whether the collaboration is confirmed, or merely sought. You have 500 characters for this section – use may use limited rich text functions.

Q – Your Motivation and Entrepreneurial potential

What has motivated you to apply for this Fellowship? What difference will the Fellowship make to you personally? What knowledge, experience, skills and qualities do you possess which will help ensure you can create and lead a successful business? What relevant training have you received? Successfully establishing a business is hard - what have you done that demonstrates your determination and passion to succeed? How do you think your work-life will change when you become a full-time entrepreneur? What will be your role in the business in the long term? You have 400 words for this section.

Q - The Team, Partnerships, Connections

Please give an outline of the people who will be involved in the business and any others who will provide support. Establishing a business is a collaborative effort,

who else will be involved, why them, and in what capacity. What skills and experience do they bring? What leadership experience do you have to make this work? You have 300 words for this section.

Q – Commitment to place

If you are committed to establishing your business in a particular place or region, then please explain that here. This will be used to determine the appropriateness of your being funded under the Strengthening Places Enterprise Fellowships. If appropriate, please describe how your business contributes to local innovation priorities or benefits from local capabilities, such as those described in Science and Innovation Audits. Where do you intend to establish your business, and why. Consider what resources are available in the area and the ways in which you and your business can contribute. You have 200 words for this section.

Q - Hub support

Why do you want to secure an Academy Fellowship? Why are you pursuing Hub support rather than other methods? Outline how you would use the support offered by Hub Membership. How would you contribute to the Hub community and your fellow awardees? Identify those areas in which you believe you would most benefit from training, Hub support, and the input of a Mentor. This will not be perceived as a weakness but rather demonstrate your awareness of any current limitations and areas for improvement, and should you be successful be a guide to the Hub and your Mentor of what areas to focus on. You have 200 words for this section.

Q - CV

The format and content of your CV is left to your discretion, but please ensure it is readable when printed in black and white. Your CV should not exceed two (2) pages, and should be submitted as a PDF. You do not need to include contact details as these are included earlier in the application. Note that the reviewers mostly print in black and white – don't give your cv a strong background colour 'to help it stand out.' It's a nice idea but in practice it may just become unreadable.

3. The Project

Please address each of the sections given below. The bullet points may provide some guidance on the type of things for which reviewers may assess. You do not have to provide details for every bullet point if it is not applicable to your project.

Q – The innovation

Please describe the following, you have 300 words for this section.

- The particular engineering technology or innovation that will underpin the proposed business.
- The value proposition. Try explaining it to someone who knows nothing about your area, preferably not an engineer. If they don't understand it, and can't repeat it back to you in their own words, you need to make your explanation clearer.
- The current status of the technology or innovation
- Discuss to what extent the technology or innovation has been developed to address a customer need and/or the problem it solves
- Discuss the required development of the innovation for the markets you have identified, and provide an analysis between the current and future market requirements

- Risks and mitigations – not just for the technology or innovation but also in terms of team, funding etc. (Note, intellectual property is covered separately)

Q - Bioengineering application – Regulatory approval

If you selected the 'biomedical and biotechnology' subject area at the start of the application form then this question will be shown. For such innovations it is often essential to obtain regulatory approval before the product/service can be used, and securing such approval can be a very long (years) and difficult process, costing millions, hence a specific question to address it.

Please detail the current status, plan, funding and timeline regarding clinical trials and obtaining the necessary certification approvals. How far into the process are you, where will the funding come from, what professional advice have you sought, have you secured the funding. Cite a comparable technology which has been recently brought to market successfully - how long did that process take and how much did it cost. If applicable, state why you believe your product/service is exempt from certification requirements. You have 200 words for this section.

Q – The market

Describe the following in less than 300 words:

- The markets/market segments for this technology and technology benefits for them
- Any market data and trends, including market size, and addressable market
- Customer validation – discussions, feedback and surveys with potential customers. How many have you approached.
- Route to market, customer acquisition strategy, necessary partners
- Market readiness - Technology push or market pull, any relevant legislation or government policy
- Existing and/or competing technologies
- The competitive advantage(s) of this technology – any unique selling point
- Market risks

Q – Business model and finance

Describe your business model (rather than a full business plan), including financial cost projections and what investment/funding will you need. Who will make the product, why. Who will pay whom, and why. How will the business scale effectively.

You may want to add a 'business model canvas' and/or a supply chain diagram in the additional pictures question, as these are effective methods to illustrate your business plan and your understanding of all the parties involved. You have 400 words for this question.

Q - Project plan

Outline or list the planned activities for the project, so what you will actually do and achieve, covering primarily the period of the Fellowship and in brief the next steps after the Fellowship. Cover key milestones by which your progress can be measured. The intention of the programme is that you will be ready to raise funding by the end of the 12 month Fellowship.

Effective milestones are ones which indicate progress towards an end goal, not merely completion of a task. I.e. 'Proto-type available' is not an effective milestone, as you could fulfil such a milestone by creating a poor prototype, and so have not made actual progress. Instead use quantitative and qualitative milestones - e.g. 'Prototype created which is 50% smaller than competitor.'

You may choose to make reference to the project timeline in the next question. You have 900 characters for this section – use may use limited rich text functions.

Q - Project timeline

Upload a timeline to show the broad schedule of activities for the duration of the Fellowship, and for the 12 months following the award completion. Any activities listed after the award completion date are expected to be less detailed, but should give an indication of your longer-term plan. Do not overcomplicate it, this is not a project management question, we want to see the big picture.

Ensure that all major milestones and their respective timelines are clearly illustrated.

Some suggested topics for milestones are; Technology Readiness Levels, equity assigned, company established, crowdfunding campaign / Series A / Series B launched, minimum viable product available, clinical trials start, CE mark received.

Q - Costs table

Funding is for 12 months of financial support to enable the Enterprise Fellow to develop their innovation. Recipients of the Post-doctoral Enterprise Fellowships will be awarded £60,000 in total. Of this, £35,000 will go towards the Enterprise Fellow's salary costs. Recipients of the Graduate Enterprise Fellowships will be awarded £50,000 in total. Of this, £25,000 funding will be awarded as a cash prize in recognition of the Awardee's activities in achieving innovation in engineering, and their potential to further develop their innovation. Neither of these two costs are included in the below table, and neither require explanation in the Costs Details question.

For both Fellowship types the remaining £25,000 is to be used in pursuit of the projects aims. Please complete the table to indicate how the £25,000 of funding will be used.

Allowable costs must all relate to the costs of developing the applicant's innovation and the business, and include:

- Travel, equipment, consultancy, project specific consumables, legal costs, accountancy costs, prototyping, product testing, marketing, advertising, trademarks, copyright, website, training, mentoring costs, attending conferences, seminars and mentoring activities directly related to the Enterprise Fellowship.
- 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.
- The Academy will meet the travel and accommodation costs associated with attending Academy-run training days, so you do not need to include such costs in your figures.

Ineligible costs include:

- Salary, pension, manufacturing, rent, utilities.

University Enterprise Fellowships only

- £35,000 of funding will be used for salary support of the Enterprise Fellow. Please note that the funding **does** cover income tax, national insurance, pensions, or maternity/paternity/sick pay. If your net salary costs exceeds this

amount the remainder should be covered by other means, normally the host institution. Funding cannot be used to cover salary costs of anyone other than the Enterprise Fellow.

- Full economic costs (FEC) are not payable under this scheme.
- Research costs, administration costs or running costs of the Host Institution are not allowable.

Graduate Enterprise Fellowships only

- The Award will be for £50,000 in total. The first £25,000 is a cash prize paid on award, and the remaining £25,000 will be provided over the course of the award period and upon receipt of reports evidencing your continued activity.

Q - Costs details

Provide details on how you derived the above costs. Include any key assumptions and research. You have 300 words for this section.

Q - Additional funding table

Please complete the table with details of any additional funding which will be provided by other partners and external sources in support of the project, e.g. Research Councils, host university, investment, crowdfunding. Note, this is confirmed funding only, not speculative.

Q - Additional funding table

Complete the table with any relevant funding you have confirmed. The system will let you insert extra rows.

Q - Additional funding details

Explain the nature and purpose of the additional funding to be received, as given in the above table. Include details of who is providing the funding, why it is required, and how it will be used. This demonstrates the level of commitment of others, and your success in attracting further funding. You have 300 words for this section.

Q - Additional pictures and/or diagrams

This question is optional. Upload a single pdf, with the pages in a logical order corresponding to the questions above, containing any supplementary information to assist your case. Suggestions are given below, visuals can be an effective method to make your case, but bear in mind reviewers do not want to excessive amounts of information to consider – keep it concise.

Schematics, patents, freedom to operate / examiners report (try <https://octimine.com> or equivalent for a free patent search), proofs, diagrams and pictures relating to the innovation

- Business model canvas
- Supply chain / ecosystem diagram
- Competitor analysis table / graph / spider diagram / Venn diagram
- Market analysis (size, segments, addressable)

Ensure all pages and annotations are readable when printed at A4 size.

4. Support

This section seeks confirmation that the Applicant has provided accurate information and will update the Academy of any material changes which may affect the award. You must also upload one or two letters of support as per the details below, and then tick the box confirming the information provided is correct.

Please note: The application deadline will not be extended if your support letters are not ready before the deadline; therefore please ensure you contact the author well in advance.

Q – Intellectual Property Rights (IPR)

Describe any existing IPR required for the innovation, and its ownership and status – for example, what patents have been filed, when, or are pending. What professional advice have you sought. If you believe no IPR is required state your reasoning and explain how you will protect the innovation. If no agreement is yet in place detail any discussions which are underway, the expected outcome, and anticipated timeline. How will the ownership of future IPR be attributed? You have 300 words for this section.

Q – Licencing and royalties

Has the IPR required been licensed to any other organisation or person? Will you have to pay any royalties, or receive any royalties. If so, provide details and comment on how this will affect your proposition. You have 200 words for this section.

Q - Equity distribution

Summarise the (anticipated) equity distribution, the level of working time to be contributed by each party, and the status of any contract negotiations. If it is not already the case, assume all necessary IPR has been transferred to the company, and so the equity will not be altered by a future assignment of IPR.

The purpose of this table is to provide clarity regarding the positions of all parties with an interest in the innovation, including who they are, what proportion of their working week they will dedicate to the project, and what equity stake they will receive.

There are no pre-defined expectations as to the equity split or involvement of the any interested parties. Our only concern is that the allocations are conducive of a successful project and are commensurate with the role they are expected to play in the business. You are reminded that this is a competitive application process, both to receive our funding, and to be successful in future investment rounds. Investors will want to ensure key personnel are appropriately rewarded and motivated, and will avoid businesses where this is not the case.

Consider how much time, money, expertise each party has already contributed and will contribute to the proposition in future. What value will their continued involvement bring, to them and to the business. What level of risk is each party incurring. What is the ultimate source of any funding. How will their equity stake change over time as more investment is received. What level of equity will be necessary to keep essential personal appropriately motivated.

Note: this is a negotiation, you do not have to accept standard terms.

Equity stake

State what percentage each party will own of the business. The table is split into broad categories, there may be more than one person in a category, but an individual should only ever be counted in one category. If an individual could be in two or more categories include their share in the category which is nearest to the top of the table. The total equity value must add up to 100%. You may wish to list the individuals in the notes section.

Should existing IPR be necessary for the business to function, the figures provided here must be those which are expected at the point of assignment of the IPR. Until a business has all the necessary rights it is essentially worthless as it cannot act, so equity stakes prior to this point are of little value to the assessment process.

Applicant – This is just you, the one who will be leading the proposal.

Other Founders – Anyone else, other than the applicant, who is considered to be a founder i.e. owner of the business, heavily involved and key to its success.

Inventors / Academics – Other parties who were involved in the research/idea generation, but are not taking a significant role in the development of the company. They are likely not going to be employed by the spin-out, or dedicate much of their working week to it, and will mostly serve in an advisory or technical capacity.

University/TTO – ([University Enterprise Fellowships only](#)) The university/Tech Transfer Office which will host the Fellowship. This should always be 0% for Graduate Enterprise Fellowships.

Investors – Those who have put money towards the proposition in return for equity.

Options – Shares which remain unallocated, to be purchased at future funding rounds, often reserved for existing parties.

Full Time Equivalent (FTE)

This will assess how much of their working week each party is dedicating to the project. The answer should be given as a percentage, whereby one person working full time is 100% FTE, two people working full time is 200% FTE, and so on. The Applicant is expected to be working full time on the proposition. As with equity split, the results are cumulative, so three people each working at 10% FTE will produce an answer of 30%.

Note, by definition an individual can never work more than 100%, no matter the hours they work.

Contract status

Provide details of the status of any contract negotiations regarding ownership of the business. Such deals can take many months to negotiate, and create a lot of uncertainty, so we want to know how far along the process you are.

If agreement has not yet been reached, that is perfectly fine, just provide estimates and briefly state your reasoning for the estimates. You should also state when negotiations first began and the anticipated completion date. If negotiations have not yet begun, we recommend you should start before submitting the application as the equity split and level of commitment are important indicators to

all parties of the likelihood of success.

Q - Head of Department / Line Manager Letter of Support

(University Enterprise Fellowships only) The letter of support should be written by the applicant's Head of Department (or their Head of Faculty if the applicant is the Head of Department). The letter performs two functions, firstly to confirm the university approval for the application, and secondly to explain why they support the application.

University approval:

The letter must contain the four standard terms listed below – please ask your line manager to copy and paste the following into their Letter of Support:

1. If not already fully compliant and covering the entire period of the Award then the Applicant's contract of employment will be amended and/or extended as necessary to enable the successful completion of the Fellowship.
2. The Applicant will be given full access to the facilities, equipment and personnel as required by the application.
3. The costs of the application are correct and sufficient to complete the Award as envisaged. Where there is an anticipated shortfall of funding the necessary additional funds will be sourced by the university, potentially through other grants or university funds as required.
4. I am authorised to approve the submission of applications for funding and this Application has successfully met all of our internal approval procedures.

If the Head of Department is not authorised to agree to these terms, then they should be either included in the Technology Transfer Office letter below, or an additional letter from a suitable signatory should be inserted after this one to form one PDF.

University support:

The letter also provides the university an opportunity to explain why they believe the innovation should be brought to market, how this fits within the departments wider strategic aims, and more importantly, why the applicant is the right person to lead this activity.

As a minimum the author should include:

- Why they support the applicant
- Why they support the project
- what support they will offer

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

Q - Letter of support from Technology Transfer Office

(University Enterprise Fellowships only) The letter of support should be written by an appropriate authority in the Technology Transfer Office (TTO). We recommend you speak to them as soon as you decide you may apply for the award as they will be able to advise on completing the application, which is distinct from a typical research grant in terms of content, and also their prior approval will be essential for you to submit to and carry out the activities involved.

The letter must include:

- How the TTO has supported the applicant to date
- How the TTO will continue to support the applicant (training, advice, funding, facilities, staff time)
- Why the TTO wants to pursue this enterprise as a spin-out, rather than through a licensing model
- Why they believe this applicant is suitable to lead a spin-out
- Why they are seeking support through this scheme
- Commentary on the business model chosen
- Details of any agreement relating to the ownership and status of any foreground and resulting IPR
- Comment on the likelihood of the applicant spinning out a company within the year of the Fellowship, with all necessary IPR assigned, and any barriers associated with this expectation
- Comment on the anticipated equity distribution of the proposed spin-out company, any royalty arrangements, and how this will ensure all parties are appropriately motivated and rewarded. At this early stage this may well be limited to stating your standard terms.
- Confirmation of their acceptance in principle of the Academy's standard contract. The latest version is available on the website, [here](#).

The letter should be on headed paper, a maximum of three pages long, signed by the author, and uploaded by the applicant as a pdf.

Q - Letter of support

([Graduate Enterprise Fellowships only](#)) The Letter of Support should be written by an external reference who knows you, your business proposition, and the innovation well enough to provide suitable commentary.

The letter should contain:

- An explanation of how they know the applicant,
- Confirmation that they have no personal interest in the application or proposal,
- Why they believe the applicant is suitable to lead a start-up, motivation, skills, experience, determination
- Comment on the innovation, its commercial potential, and expected benefits to the wider public,
- Comment on the credibility of the business plan/model.

This is effectively a traditional job reference. One person may not be able to comment on all of the above, which is fine. If so you can submit two letters which combined can cover all areas. In which case you should still submit a single PDF.

Assessment of Applications

A Selection Panel composed of Fellows of the Royal Academy of Engineering will review the applications in November. Selected candidates will then be invited to present to the panel in **November 2017** (exact date to be confirmed). [University Enterprise Fellowships only](#) - A representative from the university may be invited to attend the interview to provide additional input on their role.

In judging and ranking the applications, the panel will take into account a number of factors. These include the extent to which the application complies with the aims and objectives of the award, including:

- Quality and potential of the innovation;
- Commercial credibility of the business model
- Expected benefits to UK economy and/or expected benefits to wider public
- Quality and potential of the Applicant including: entrepreneurial potential, business awareness, market awareness, potential to act as a role model
- Nature and extent of the benefits the Fellowship would provide the Applicant
- Level of commitment to and fit with the aims of the Fellowship
- The overall likelihood of success

Applicants will be notified of the outcome of the assessment by the Programme Manager.

Successful applicants will be required to sign a contract with the Academy recording the terms and conditions of the award. Agreement to the terms and conditions is a pre-condition to receiving the award.

Contact

If you have any queries, please contact Angus Baker, Programme Manager – Enterprise, on enterprise@raeng.org.uk or 020 7766 0650.

The Funders

The Royal Commission for the Exhibition of 1851

The Graduate Enterprise Fellowships scheme 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 on the Commission and its history is given below.

The Royal Commission for the Exhibition of 1851 gives fellowships and grants for top level science and industrial research, as well as industrial design. Some 25 awards are made each year which, together with a number of special grants, approach £2m in value.

The Royal Commission was originally established in 1850 under the chairmanship of Prince Albert, to organise and stage the Great Exhibition. Held in the spectacular Crystal Palace, constructed in Hyde Park, it was the first ever World Fair, and the most successful. With over 6 million visitors, it also made a substantial profit, and the Royal Commission was kept in being to invest the Exhibition's substantial profit.

It first acquired the site in South Kensington on which the three great museums, the Royal Albert Hall, Imperial College and other Colleges now stand, and it continues to

own and manage the freehold of most of this estate. When the development of the estate was largely complete, in 1891, the Commission then set up the education and research awards programme which runs to this day, to which these fellowships are the latest new addition.

Further information can be found here: www.enterprisehub.raeng.org.uk

The ERA Foundation

One of the Graduate Enterprise Fellowships will be supported by the ERA Foundation. The award will be made to an applicant with an innovation in the broad field of electro-technology. The ERA Foundation contributes to the economic vitality of the UK by supporting activities that help bridge the gap between research and commercialisation in engineering, with a particular focus on the broad field of electro-technology.

The Directors of the Foundation all have established backgrounds in industry and academia; they are united by a firm belief in the importance of engineering to the nation's prosperity and well-being.

Alongside its commercial activities, the Foundation provides charitable donations to trusts and professional bodies promoting the importance of UK engineering and supporting young engineers at formative stages of their careers.

The ERA Foundation:

- Invests in the early stages of start-up and young technology companies in the UK.
- Raises the profile of UK engineering and supports young people at formative stages of their careers.
- Promotes within government, industry and academia the importance of engineering and productive industry.
- To deliver its objectives the Board of the ERA Foundation seeks, where possible, to work in partnership with others whose objectives overlap with those of the ERA Foundation.

Details of the ERA Foundation are on its website: <http://www.erafoundation.org/>

The Reece Foundation

At least one additional Graduate Enterprise Fellowship will be made possible by the support of the Reece Foundation. The award will be made to an applicant based in the Northeast of England.

The Reece Foundation was established in 2007. Our main objective is to increase the long term and sustainable prosperity of the North East of England primarily through the promotion of engineering and manufacturing. In particular we will focus on the improvement of education in engineering and related scientific and mathematical subjects, training in engineering skills and the development of employment opportunities. Other projects and causes which, in the opinion of the trustees, are beneficial to the wellbeing of the area or the country as a whole may also be supported from time to time.

Details of the Reece Foundation are on its website: <http://www.reece-foundation.org>

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 contact international@raeng.org.uk

FAQs

A set of frequently asked questions are provided on the Academy [website](#).

Previous Awardees

For details on who we are currently supporting, see our Hub Members page of the [website](#). You may want to approach previous awardees from your institution for advice.

Application and assessment process

Well done for making it this far! It's a long set of guidance but hopefully its useful.

