

Training and Skills Hubs in Quantum Systems Engineering

Call type: Invitation for proposals

Closing date: 16:00 on 02 June 2015

Information Day: 29 April 2015

Related themes: Engineering, Global uncertainties, ICT, Manufacturing the future, Mathematical sciences, Physical sciences, Quantum technologies

Summary

Quantum technologies are those that enable the creation, control and manipulation of sensitive and fragile quantum effects within single systems. In recognition of the transformative potential of these new technologies, the multi-stakeholder UK National Quantum Technologies Programme was established in 2013 following a £270 million investment by government.

The Programme's investments include the establishment of a national network of Quantum Technology Hubs by EPSRC and funding for EPSRC Centres for Doctoral Training (CDTs) in quantum technologies. EPSRC intends to augment the UK's existing research, innovations and skills investments by inviting institutions, or consortia of institutions, to submit proposals for Training and Skills Hubs in Quantum Systems Engineering. Hubs will contribute to the development of quantum technologies by delivering a coherent package of skills training, co-working and mobility, and career development initiatives to develop high-level skills in quantum engineering.

Training and Skills Hubs will act as nodes within the national network of Quantum Technology Hubs, whose aim is to harness and exploit the research and training strengths that exist across the UK academic landscape, facilitate partnering with industry, and tackle the key technological challenges that need to be overcome to realise the promise of quantum technologies. The vision for Training and Skills Hub is that they will both provide high level quantum engineering skills provision, and act as catalysts to draw in a broader range of skills from other training routes to focus on quantum technologies by encouraging the free flow of people into and across the UK National Quantum Technologies Programme. Accordingly, Training and Skills Hub proposals will be required to explain their plans for working with the existing network of Quantum Technology Hubs and other large investments, to develop an integrated network of research, innovation and skills capability.

Up to £15 million in funding is available to support three to five Hubs for a five year period. Assessment will be through a two stage process involving peer review, prioritisation and interview panels.

Background

The diverse range of quantum technologies that are currently under development will enable the creation, control and manipulation of sensitive and fragile quantum effects within single systems. This provides powerful and useful effects that are not possible with current electronics or materials based systems. The new components, devices and systems resulting from these technologies offer enormous potential to build new products, services, processes and industries that will enhance the quality of life of citizens and generate employment and wealth.

In recognition of this opportunity, and the UK's vibrant and internationally competitive research base, the government announced a £270 million investment in its 2013 Autumn Statement to establish the UK National Quantum Technology Programme. This is a collaborative effort between the Department for Business, Innovation and Skills (BIS), EPSRC, Innovate UK and the National Physical Laboratory (NPL), in partnership with the Defence Science and Technology Laboratory (DSTL) and the Government Communications Headquarters (GCHQ).

The UK National Quantum Technology Programme has already had a significant impact on the UK's quantum technologies landscape through a range of investments. Notable developments include the establishment of a national network of Quantum Technology Hubs, EPSRC investment in Centres for Doctoral Training (CDTs), and initiatives by Innovate UK to enable businesses to explore the commercial opportunities that quantum technologies may bring to the UK.

The development of new and improved products, services and processes based on quantum technologies is a non-linear process reliant upon effective transfer of knowledge through iterative interactions between a community of individuals and teams working towards shared and clear goals. These communities of practice require a diverse set of skills and exist across academic, industrial, governmental and civil society organisations. The aim of this call is to contribute to their development by growing capacity in quantum engineering skills. Quantum engineers are multi-disciplinary individuals who combine practical engineering skills and specialist technical knowledge in fields such as electronic engineering, systems engineering, computer science, mathematics, and physical sciences with broader communication skills, commercial awareness and engineering skills.

We therefore invite proposals from eligible institutions, or consortia of institutions, for Training and Skills Hubs in Quantum Systems Engineering. The objectives of this call are for Hubs to:

- Augment the UK's existing landscape of quantum technologies skills, research and innovation capability. In particular, by working with the existing national network of Quantum Technology Hubs and other large investments to develop an integrated network of research, innovation and skills capability.
- Engage with stakeholders to co-create and deliver a coherent package of activities to grow capacity in high-level quantum engineering skills.
- Support the development of quantum engineers through taught courses, research project-based training and networking activities aimed at new and existing research students.
- Integrate training within the wider UK quantum technologies community by creating opportunities for co-working and mobility between academia,

industry, government and civil society organisations; and cohort-based approaches.

- Develop initiatives to enhance the career development of quantum engineers through training and skills interventions and provide support for retaining the most promising doctoral quantum engineers.

Applicants should note that a separate competition for quantum technologies strategic capital investment is being conducted in parallel with this call. The two calls are being conducted through synchronised but separate assessment processes.

Information Day

An information day for this call and the concurrent quantum technologies strategic capital investment call will be held for prospective applicants on 29 April 2015 in Manchester. Further details will be published on the EPSRC website. We encourage potential applicants to attend this meeting, or send a suitable representative from their institution. If you wish to attend then please register your interest by email to events@epsrc.ac.uk by **16 April 2015**.

Please note that EPSRC will limit the number of attendees per institution in the event of high demand for places.

Scope of the Call

This call aims to enhance the development of quantum technologies by growing capacity in high-level quantum engineering skills.

Training Ethos

For the purpose of this call, we make a deliberate distinction between **quantum scientists** and **quantum engineers**. Quantum engineers can be broadly defined as individuals who combine practical engineering skills and specialist technical knowledge in fields such as electrical and electronic engineering, systems engineering, computer science, mathematics, materials science and physical sciences with broader communication skills, commercial awareness and engineering skills.

Quantum engineering is primarily motivated by the prospect of applying knowledge to create new or improved products, processes or services for the marketplace; rather than developing the quantum sciences *per se*. We wish to make it clear that this distinction is made to clarify the requirements of the call rather than to delineate a fixed separation between quantum science and quantum engineering.

To encourage further reflection on the scope of this call, we define quantum engineers by their ability to:

- Recognise components within systems, their interdependencies, and the possibility of unanticipated effects within systems.
- Bring a high degree of creativity to identify challenging problems; investigate and clarify requirements; and design and develop practical solutions with real applications.

- Continuously improve through an iterative process of reviewing, rethinking and reframing problems and solutions.
- Proactively and effectively instigate collaborations to address challenges, leveraging knowledge and perspectives from other fields.
- Communicate effectively with a variety of stakeholders to understand problems, clarify requirements and justify proposed solutions, particularly for market needs and opportunities.

Technological Scope

Training and Skills Hubs must focus on activities relating to quantum technologies. Quantum technologies are those that involve the creation, control and manipulation of sensitive and fragile quantum effects within single systems. Although many current and future technologies are described by quantum theory, the focus of this call is on skills and training activities focussed on the direct exploitation of quantum phenomena such as superposition or entanglement to enable disruptive impacts in security, precision, sensitivity, accuracy or speed of sensing.

Contribution to the National Landscape

The UK National Quantum Technology Programme has already made significant research, innovation and skills investments. Notably, the establishment of a £120 million national network of Quantum Technology Hubs involving 17 universities and 132 companies (see: <http://www.epsrc.ac.uk/newsevents/news/quantumtechhubs/>).

Training and Skills Hubs proposals must articulate how the proposed Hub will augment existing investments. In particular, proposals must include clear plans for working with the existing national network of quantum technologies capability, notably the Quantum Technology Hubs.

Key Features of Training and Skills Hubs

Hubs should deliver a coherent package of activities to grow capacity in high-level quantum engineering skills.

The Hubs' package of activities should incorporate the following features:

- Training of quantum engineers through taught courses, research project-based doctoral training and networking activities. We envisage that this will be achieved through a mixture of new research students and additional training for existing research students in related fields (*e.g.* those supported through Centres for Doctoral Training or Doctoral Training Partnership funding) to develop quantum engineering skills. Again, a mixed approach is envisaged where doctoral students in engineering, computer science, mathematics and physical sciences receive training focussed on exploiting quantum effects, and, conversely, doctoral students in quantum science receive training focussed on developing engineering skills.
- The development of a cohort-based training approach that facilitates inter-disciplinarity, multi-disciplinarity and systems-focussed approaches through peer-to-peer contact within and across Hubs.

- Co-working and mobility initiatives to integrate training within the wider UK quantum technologies community in academia, industry, government and civil society. Training should be designed and delivered in partnership with user organisations and provide exposure to complementary specialisms and application areas. Exemplary approaches include inward and outward secondments; access to specialist technical and/or commercialisation facilities; intensive short courses and workshops; buddying, coaching and mentoring arrangements; challenge-based approaches; creativity@home training (see Annex 1) and other suitable mechanisms.
- A dedicated “Career Accelerator Fund”: flexible resource to support the retention of the most promising doctoral quantum engineers to enhance the impact of their research, be entrepreneurial and develop their careers.
- Initiatives to enhance the career development of quantum engineers through exposure to user organisations and training and resources to build understanding of innovation practices; commercial awareness; knowledge of intellectual asset protection; entrepreneurial skills; awareness of standards, regulation and export control; public engagement; Responsible Research and Innovation (RRI) activities; and Continuing Professional Development (CPD) activities.
- Although EPSRC directly supports the development of doctoral level skills, the need to develop broader training and support the practically-based quantum engineering skills that will enable the development of quantum technologies industries in the UK is recognised by the UK National Quantum Technologies Programme. Therefore, Training and Skills Hubs should consider how the funding requested from EPSRC can be used to catalyse skills training that is inclusive to the wider quantum technologies community in industry, government and civil society organisations.

Support for Doctoral Students

Applicants should provide detail on their approaches to supporting doctoral students. RCUK has developed a Statement of Expectations (<http://www.rcuk.ac.uk/RCUK-prod/assets/documents/skills/statementofexpectation.pdf>) for doctoral students that sets out expectation for student support.

Equality and Diversity

In line with legislation in the Equality Act 2010, higher education institutions must have policies in place to address equality and diversity issues. RCUK has developed a statement (<http://www.rcuk.ac.uk/RCUK-prod/assets/documents/skills/EqualityStatement.pdf>) to assess whether these policies are working in practice, embedded at all levels in institutions, and take account of the whole spectrum of equality and diversity issues. Applicants should provide detail on their approaches supporting a diverse population of people in their Skills and Training Hub.

Responsible Research and Innovation (RRI)

EPSRC is fully committed to develop and promote responsible research and innovation (RRI). It is expected that Skills and Training Hubs will undertake an active programme of education, stakeholder engagement, public engagement and two-way dialogue with wider social groups. The work should be carried out

alongside other already active groups in this area (e.g. the Research Councils, Royal Academy of Engineering and others).

The EPSRC framework for RRI is available here:

<http://www.epsrc.ac.uk/index.cfm/research/framework/>

Funding available

Up to £15M in funding is available to support three to five Training and Skills Hubs over a five year period starting from 01 April 2016.

Hubs will be required to participate in a mid-term review after two years of operation, which will assess their performance at that stage. Further funding beyond the mid-term review point will be dependent on evidence of acceptable performance.

Funding is available to support the following activities:

- **High-level skills training in quantum engineering.** Eligible costs include stipends, fees, consumables and other incidental costs relating to doctoral students. For further details please refer to the RCUK Funding for Research Training guidance: <http://www.rcuk.ac.uk/skills/training/> and EPSRC guidance on flexibility of doctoral training funds: <http://www.epsrc.ac.uk/skills/students/dta/flexibility/>
- The development and delivery of **specific initiatives to support co-working and mobility and career development** (see “Key Features of Training and Skills Hubs” section for further details):
 - Course development and delivery costs.
 - Travel and subsistence costs.
 - Workshops and other event.
- Hubs are required to devote an appropriate level of resource to a dedicated “**Career Accelerator Fund**” for retaining the most promising student quantum engineers to enhance the impact of their research, be entrepreneurial and develop their careers. The Fund should be used strategically to strengthen links between the Hub and its stakeholders, and encourage the development of new collaborative activities and knowledge transfer. Accordingly, a significant degree of user engagement is expected in activities funded through this mechanism. Exemplary Career Accelerator Fund activities include:
 - EPSRC Doctoral Prize funding. For further guidance see: <http://www.epsrc.ac.uk/skills/students/dta/doctoralprize/>
 - Proof-of-concept and/or challenge-based funding competitions.
 - Networking activities.
 - Specialist skills training.
- **Operational funding** to support:

- The development of cohorts of quantum engineers.
- Course development and delivery costs.
- Staff costs relating to the co-ordination and management of the Hub.
- RRI, public engagement, and equality and diversity initiatives.
- creativity@home training (see Annex 1).

No capital equipment should be requested (*i.e.* equipment at or greater than £10k). Where possible, researchers are asked to make use of existing facilities and equipment, including those hosted at other universities.

Eligibility

For information on the eligibility of organisations and individuals to receive EPSRC funding, see the EPSRC Funding Guide:

<http://www.epsrc.ac.uk/funding/howtoapply/fundingguide/>

As this call is a targeted funding opportunity provided by EPSRC, higher education institutions, and some research council institutes and independent research organisations are eligible to apply. A list of eligible organisations to apply to EPSRC is provided at: <http://www.rcuk.ac.uk/funding/eligibilityforrcs/>

Eligible institutions are only permitted to lead a single Hub proposal.

How to apply

Submitting application

You should prepare and submit your proposal using the Research Councils' Joint electronic Submission (Je-S) System (<https://je-s.rcuk.ac.uk/>).

When adding a new proposal, you should select:

- Council 'EPSRC'
- Document type 'Standard Proposal'
- Scheme 'Standard'
- On the Project Details page you should select the 'Quantum Technologies Skills Call 2015' call.

Note that clicking 'submit document' on your proposal form in Je-S initially submits the proposal to your host organisation's administration, not to EPSRC. Please allow sufficient time for your organisation's submission process between submitting your proposal to them and the call closing date. EPSRC must receive your application by 16:00 on 02 June 2015.

Guidance on writing application

For general advice on writing proposals see:

<http://www.epsrc.ac.uk/funding/howtoapply/preparing/>

Please note that on submission to council all non-PDF documents are converted to PDF. The use of non-standard fonts may result in errors or font conversion,

which may result in changes to the layout of the document and could affect the overall length of the document. For this reason we recommend that the documents are converted to PDF files before uploading.

Only one application should be submitted by the lead institution.

Proposals must comprise the following documents:

1. Je-S application form
2. Case for Support
3. Track Record of Applicant Team and Overview of Research and Innovation Environment
4. Justification of Resources
5. Pathways to Impact
6. Institutional Statement(s) of Support
7. Project Partner Statement(s) of Support

1. Je-S application form

- The title should be prefixed with “Training and Skills Hub in Quantum Systems Engineering”.
- All sections of the form should be completed.
- The duration of the grant should be no more than 60 months.
- Please nominate five potential reviewers, including at least two that are based outside of the UK.
- Only the senior team that will be involved in the management and operation of the Hub (e.g. Director and Deputy Director) should be named on the form. Details of project supervisors should not be included on the application form, but should be included in the Case for Support.
- All costs must be listed under the “Exceptions” heading. A detailed description of these costs should be provided in the separate Justification of Resources document.
 - Where costs relate to student training then please provide a single value using the following descriptions:
 - “Stipend” – this should not be below the current Research Councils UK minimum level for 2015/16 of £14,057/year.
 - “Fees” – The Research Councils UK indicative level for 2015/16 is £4,052/year. Please note that EPSRC does not provide additional funds for College fees.
 - “Other Costs” – this includes the allocation of funds for the incidental costs of postgraduate training with regard for the nature and the need for fieldwork, conferences and project specific industrial or international placements.

- Please include the value per student and number of full time equivalent students relating to the “Stipend”, “Fees” and “Other Costs” items.
- Costs relating to the delivery of training, workshops, co-working and mobility and career development activities should be appropriately itemised to aid reviewers.
- Costs relating to the co-ordination and management of the Hub may include applicant’s time and/or administrative staff support specifically devoted to the direction of the Hub.
- Estates and indirect costs cannot be claimed for students or supervisors, but may be claimed for the applicant team.
- A single value should be included for the Career Accelerator Fund.

2. Case for Support

- Must not exceed eight A4 pages and **must clearly and explicitly address all of the assessment criteria** (these should be used as sub-heading to structure the document). It must include details of the Hub’s training and skills activities, the training environment and the staff that will be involved.

3. Track Record of Applicant Team and Overview of Research and Innovation Environment

- Must not exceed two A4 pages and should include details of the applicant team, the potential pool of supervisors and an overview of the breadth and balance of technical and non-technical expertise within the Hub. In Je-S this should be added as “additional document attachment”.

4. Justification of Resources

- Must not exceed two A4 pages. This document should explain why the resources being requested are required, in order to aid peer reviewers in making an informed judgement as to whether this is appropriate to deliver the proposed training and skills activities. This should include a break-down of the number of full time equivalent students that will be trained and the associated costs.

5. Pathways to Impact

- Must not exceed two A4 pages. This document should explain the Hub’s approach to maximising potential social and economic impact. Further guidance on preparing your Pathways to Impact document can be found here: <http://www.epsrc.ac.uk/innovation/fundingforimpact/pathwaystoimpact/>

6. Institutional Statement(s) of Support

All institutions involved in the Hub must provide a signed and dated letter of support that explains how the Hub aligns to institutional strategy. The letter should describe relevant institutional investment and planned investment, and describe the institutional support that will be offered to the Hub.

7. Project Partner Statement(s) of Support

User organisations that are contributing to the Hub (“Project Partners”) should each provide a statement of support detailing their contribution

(financial or in-kind) and their involvement in the development of the proposal. Statements should describe how the contribution will enhance the Hub and the benefits that will result from involvement.

Please note that Project Partners cannot be beneficiaries of the proposal.

Assessment

Assessment process

Applicants should note that this initiative is funded through the UK National Quantum Technologies Programme. Therefore, funding decisions will be influenced by the strategic aims of the UK National Quantum Technologies Programme, as set out in the assessment criteria below. EPSRC reserves the right to fully or partially award successful applications to ensure appropriate balance of skills and training activities across the UK National Quantum Technologies Programme. However, unless strongly advised otherwise by the panel, proposals will be funded in their entirety or not at all. The decision of EPSRC will be final.

There are two stages in the assessment of proposals:

1. Full Proposal Assessment

Full proposals will be sent to independent national and international peer reviewers provided that they fall within the scope of this call. Proposals falling outside the scope of the call will be rejected by EPSRC prior to peer review.

The prioritisation panel, consisting of independent assessors, will consider and rank the proposals against the full assessment criteria. Given the strategic nature of this initiative, strategic vision and contribution to national landscape will be considered as a major criterion. The panel will then make a recommendation to EPSRC on whether the proposal should be invited to the interview stage.

2. Interview Stage

The PI and up to two others identified on proposals that are successful during the first stage will be invited to attend an interview. It is up to the applicants which members of the senior team attend the interview; however it will be mandatory, if the PI is not the Director, that the Director attends the interview. Applicants will not be asked to make formal presentations during the interview.

The interview panel will be provided with any specific feedback provided by the prioritisation panel, and will expect an appropriate response from the applicants. The interview panel will rank the proposal against the full assessment criteria.

Assessment criteria

The assessment criteria for both stages are described below:

1. Strategic vision and contribution to the UK National Quantum Technologies Programme

- The Hub's contribution to the strategic objectives of the UK National Quantum Technologies Programme by growing high level quantum engineering skills.

- The strategic vision for the Hub: its transformative nature, coherence and ambition.
- Justification of how the Hub will augment the UK's existing landscape of quantum technologies skills, research and innovation capability.
- The appropriateness and strength of plans for working with the existing national network of Quantum Technology Hubs.
- The Hub's contribution to current or future UK economic success and/or enabling future development of quantum technologies industries and societal challenges.
- Evidence that the nature and balance of the proposed training activities has been informed by the requirements of stakeholders.

2. Quality of the applicant team and research and innovation environment

- Evidence of:
 - the applicant team's excellent track record in research and innovation, their international standing, and experience in providing a high-quality training environment;
 - the appropriateness of the breadth and balance of technical and non-technical expertise within the Hub; and
 - the leadership attributes of the Hub Director and her/his senior team.

3. Quality of the training environment

- The quality, coherence and relevance of the proposed package of cohort-based training and skills activities.
- The appropriateness and strength of plans for:
 - mobility and co-working activities;
 - building and sustaining cohorts: within the Hub and incentivising links across the UK National Quantum Technologies Programme's activities to create a national cohort of quantum engineers;
 - providing broad exposure to complementary specialisms and application areas;
 - career development activities; and
 - the Career Acceleration Fund.

4. Outcomes and potential impact

- The appropriateness and strength of plans for:
 - Identifying those that might benefit from the activities of the Hub, building collaborations and knowledge exchange;

- Accelerating the development of quantum technologies industries in the UK;
- responsible Research and Innovation (RRI) and public engagement activities; and
- raising the awareness of career paths in quantum technologies and enabling quantum engineers to take advantage of career development opportunities.

5. Partnership and engagement

The appropriateness and strength of the Hub's strategy for stakeholder engagement, managing partnerships and co-creation of activities.

6. Management and delivery

- The appropriateness and strength of plans for:
 - management and delivery of the Hub to ensure that resources are deployed effectively;
 - ensuring a high quality student experience, including plans for monitoring progress and recruiting and supporting a diverse student population; and
 - governance and advisory structures relating to the Hub's activities.

7. Institutional commitment and value for money

- Demonstration of strong institutional commitment from the institution/all institutions in the consortium, including demonstration of alignment with institutional strategies and other relevant investments at the institution/institutions involved.
- The appropriateness and strength of plans for those not directly funded by the Hub to benefit from the training and skills activities of the Hub.

Guidance

Guidance for reviewers

Peer reviewers will be directed to this call for proposals when contacted to review the proposals. In addition, specific guidance will also be available to them based on the information in this call.

Prioritisation and interview panel members will also be given specific guidance based on the information in this call document.

Additional grant conditions

In addition to the standard terms and conditions for training grants, there will be specific grant conditions for successful proposal that will cover:

- Successful Hubs will have a fixed start date of 01 April 2016 for five years.
- Hubs will have a mid-term review after two years of operation, which will assess their performance to date. Funding beyond this point will be

commensurate on a demonstration of high performance and potential for further progress towards technology application.

- The terms of reference and membership of any steering or advisory bodies of the Hubs must be approved by EPSRC, and these bodies must meet at least twice per year. EPSRC must be represented at steering or advisory board meetings.
- Mandatory reporting to EPSRC and EPSRC involvement throughout the duration of the grant
- Expectations on the Hub in relation to engagement with the UK National Quantum Technologies Programme
- Requirement for all institutions involved in any given Hub must have in place a signed collaboration agreement that includes provision for flexible use of funding, between them before funding is released by EPSRC.
- The abundance of publicity/branding guidelines, which include agreed terminology in relation to the UK National Quantum Technologies Programme.

Key dates

Activity	Date
Call opens	17 March 2015
Information day for prospective applicants in Manchester	29 April 2015
Call closes	16:00 on 02 June 2015
Prioritisation panel	Late October 2015
Interviews	Late November 2015
Announcement of awards	January 2016
Award starts	01 April 2016

Contacts

Wendy Carr, Portfolio Manager, Quantum Technologies

Tel: 01793 444526; email: wendy.carr@epsrc.ac.uk

Richard Gunn, Senior Portfolio Manager, Quantum Technologies

Tel: 01793 444304; email: richard.gunn@epsrc.ac.uk

Your Research Administration should be able to offer advice about costing your proposal and the Je-S system.

If there are any queries related to Je-S, please contact the Je-S Helpdesk: JeSHelp@rcuk.ac.uk or 01793 444164.

Change log

Name	Date	Version	Change
Richard Gunn	26/02/15	1	N/A
Richard Gunn	24/03/15	2	Added clarification on potential for partial awards and vision of Training and Skills Hubs.

Annex

1. Creativity@home

Training and Skills Hubs have a key role to play in ensuring that EPSRC sponsored students are encouraged to cultivate and develop their creative thinking skills that will benefit their future, ambitious research endeavours.

EPSRC, working with professional facilitators have set up an initiative to support students and their supervisors, to help generate and nurture creative thinking and galvanise team dynamics that paves the way for individuals and teams to take creativity and radical idea generation to a higher level – the initiative is known as creativity@home.

Objectives for creativity@home include:

- learning a range of creative problem solving tools and techniques and how this might aid creativity in research;
- engaging student researchers in blue skies idea generation;
- learning how to work effectively in teams, understanding different styles of approaching problems and how to influence others;
- exploring the future research vision and cross-disciplinary opportunities in the Hub using new facilitation tools and techniques;
- developing a cohort of trained people that have learnt and are applying creative problem solving techniques so that the approaches and culture become embedded within the Hub;

Activities that have taken place previously have included:

- training and subsequent support for project managers and students in creative facilitation techniques enabling them to run mini sandpits and cross-disciplinary idea generation workshops;
- away days for multidisciplinary teams exploring how they might work better/more effectively together;
- Creative Problem Solving training for groups of students that enhances their approach to problem solving in their research;
- professionally facilitated idea generation workshops creating new research directions and people connections.

For creativity@home, you and the students are the key resource. Your group will be given access to professional facilitators and the aims and objectives are left up to you and your group to decide. The professional facilitators will work in partnership with you throughout the initiative - the timescale and all facilitation activities will be planned in consultation with you. The facilitators will focus on the process enabling your group to think freely and explore new tools and exciting research directions.

Funding for creativity@home will be accessible via your award and is to pay for facilitator time, travel & subsistence and basic facilitator materials.

How do I cost for creativity@home?

Creativity@home will typically cost circa £20,000 for 4 days FTE for professional facilitators. Creativity@home is a flexible resource. For example, 4 days FTE maybe split into eight 0.5 days or four 0.5 days plus a two day ideas generation workshop. There is no minimum or maximum value that you may apply for. You will need to justify the resource that you request. How best to use the resource is up to you to decide when exploring options with your chosen facilitators.

If your application is successful EPSRC will provide you with a list of facilitation companies that you may contact. Of course, you may already work with a facilitator; in this case, EPSRC is pleased for you to continue your engagement.

How do I apply for creativity@home?

If you are interested in working with professional facilitators to enhance the student experience then you should request resource to cover this in your proposal. As part of their overall considerations, reviewers will assess the benefit of the creativity@home activity to maximising the potential of your Training and Skills Hub.