

## Request for Proposal: Evaluation of the Lord Bhattacharyya Engineering Education Programme

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### Summary of invitation

*Annex 1 at the end of this document provides background information on the Lord Bhattacharyya Engineering Education Programme along with its aims, objectives, and outcomes, and should be read in conjunction with this request for proposals.*

The Lord Bhattacharyya Engineering Education Programme (LBEEP) was launched in spring 2020 as a tribute to Professor Lord Kumar Bhattacharyya CBE FEng FRS, who founded WMG at the University of Warwick and led it for nearly 40 years until his death in March 2019. The Academy has secured funding to deliver the programme for five years.

As LBEEP approaches its final delivery year, the Academy would like to undertake an evaluation to assess the extent to which the programme is working towards achieving the long-term outcomes set out in Annex 1.

The evaluation should take the form of the collection and analysis of qualitative data from programme beneficiaries (in-school coordinators (teachers) and learners) as well as qualitative data such as improved pupil attainment and progression in STEM post-16, to identify any emerging impact and assess progress towards the programme's outcomes, as well as making recommendations for any improvements to programme delivery.

We are seeking an individual or organisation to undertake the evaluation and we request an evaluation plan and timeline to be submitted along with costings. We would expect the evaluation to include interviews (virtual or in-person) with in-school coordinators (teachers) and, potentially, some small focus groups with secondary school students (if deemed appropriate).

As part of the Academy's in-built monitoring and evaluation processes, we collate the following information and will share this with the evaluation team to compliment and add value to the team's own analysis:

- Funding applications and end of year reports from schools and colleges outlining what activities have been delivered using programme grant funding, how many students have been involved, learning outcomes, and impact. These are collected annually, in July.
- Funding applications and end of placement reports from teachers and lecturers who have undertaken funded industrial secondments through the programme, outlining details of their placements, activities undertaken, and the immediate and anticipated impact on their classroom practice.
- The results of student questionnaires completed by learners who have benefitted from the programme this academic year. Amongst other things, the questionnaires will measure perceptions of engineering and understanding of engineering careers. The survey will be carried out in May-July 2024 and results shared in August 2024. The results will be compared against the Engineering UKs Engineering and Engineers Brand Monitor.



Please contact Rebecca Sanderson at the Academy for templates of the above if required. A separate piece of evaluation work is being undertaken by WMG to assess the impact of the post-16 and higher education bursaries.

We would expect the evaluation work to be undertaken throughout summer and autumn 2024. At the time of requesting an evaluation proposal, there are 20 secondary schools and 5 further education colleges participating in some strands of the programme, who over the years, have engaged to a greater or lesser extent, with some being new to the programme in years three and four. A list of the programme's network will be provided to the successful bidder and the programme manager can support to provide necessary introductions and schedule appointments.

An evaluation report, with recommendations, should be delivered to the Academy by 28<sup>th</sup> February 2025.

## About our organisation

The Royal Academy of Engineering harnesses the power of engineering to build a sustainable society and an inclusive economy that works for everyone.

In collaboration with our Fellows and partners, we're growing talent and developing skills for the future, driving innovation and building global partnerships, and influencing policy and engaging the public.

- As a charity, we deliver public benefit from engineering excellence and technology innovation.
- As a national academy, we provide progressive leadership for engineering and technology, and independent expert advice to government in the UK and beyond.
- As a Fellowship, we bring together an unrivalled community of leading business people, entrepreneurs, innovators and academics from every part of engineering and technology.

In everything we do, we are guided by our five values: progressive leadership, diversity and inclusion, excellence everywhere, collaboration first and creativity and innovation.

The Academy's strategy can be [viewed here](#).

As an Academy we proactively seek to procure services from diverse teams and diverse suppliers. We expect the project to be delivered in line with our values of inclusion and diversity and to the highest ethical standards. Diverse perspectives should be considered in the development of proposals and outputs should be inclusive.

## Statement of requirements

1. Summary: we require an evaluation of the Lord Bhattacharyya Engineering Education Programme to take place with the delivery of a report that identifies emerging impact and assesses progress towards the outcomes of the programme, as well as making recommendations for any improvements to programme delivery.
2. Timing: please provide an anticipated timeline of activity in relation to the final report submission date given below.

3. Content: as set out in summary of invitation above.
4. Location: the programme is based in the West Midlands – evaluators from other parts of the UK can bid but would need to demonstrate a knowledge of the education and STEM employment landscape in the West Midlands.
5. Delivery: a final report and recommendations to be received by 28<sup>th</sup> February 2025
6. Experience: an understanding of the environment in which the programme operates, including an understanding of the barriers to participation in STEM education and of the skills shortages faced by engineering and STEM employers.

Deadline for proposals:

Schedule

Date	Activity Number	Activity
17 <sup>th</sup> May 2024	1	Issue of RFP (this document) to potential suppliers
31 <sup>st</sup> May 2024	2	Deadline for submission of RFP clarification questions to RAE
7 <sup>th</sup> June 2024	3	Deadline for RAE to respond to all clarification questions
5pm, 17 <sup>th</sup> June 2024	4	Deadline for submission of RFP
26 <sup>th</sup> June 2024	5	Deadline for initial evaluation of RFP
w/c 1 <sup>st</sup> July 2024	6	Interviews (if required)
5 <sup>th</sup> July 2024	7	Notification of preferred supplier
22 <sup>nd</sup> July 2024	8	Evaluation commences

Please send your clarification questions and submissions to:

Rebecca Sanderson, Senior Programme Manager for Schools

[rebecca.sanderson@raeng.org.uk](mailto:rebecca.sanderson@raeng.org.uk)

Your response

Please include the following in your proposal:

- Content: set out how you will approach the evaluation and what methodologies will be adopted to ensure the approach taken, and the questions asked, will allow any emerging impact to be identified as well as an assessment of progress towards the outcomes. What sorts of questions will be asked?
- Schedule: set out the schedule for June and July – who will you interview and when? How will the interview be conducted? Realistically, how many interviews will be able to be carried out in the time available? Will this provide enough of a sample to be representative?
- Track record: demonstrate successful delivery of similar pieces of evaluation, including any links to published reports.
- Cost: please provide a clear breakdown of the budget that accounts for all costs that will be incurred.

- Organisation: please provide a biography that sets out the qualifications and experience of those involved in the evaluation.
- References: please provide the details of any referees and/or links to testimonials and/or links to previous work.

### Scoring matrix

0	No Answer/Unacceptable Response
1	Very Poor Response
2	Poor Response
3	Acceptable Response
4	Good Response
5	Excellent Response

To score well (i.e., 3 and above) the evaluation panel will look for clear evidence. The scores will be weighted to give an overall score. The tables below indicate the weightings which will be applied to each section. If required, the two highest scoring proposals will be invited to the Academy to present their proposal.

At interview, we will consider all criteria. The scores given before the interview may be amended following new information provided at the interview.

### Selection criteria

Your response will be evaluated using the following:

Section: <i>Programme Content</i>			
Description of criteria	Score	Weighting	Max Points
Proposal is of good quality and appropriate	0-5	4	20
Proposal sets out a clear methodology to ensure any emerging impact and progress towards outcomes can be assessed.	0-5	3	15
All key areas covered	Yes / No	Pass / Fail	
<b>Total</b>			<b>35</b>

Section: <i>Schedule</i>			
Description of criteria	Score	Weighting	Max Points
The timescale to successfully deliver is realistic	0-5	2	10

Delivery process is clear and realistic	0-5	2	10
Total		20	

<b>Section:</b> <i>Track Record</i>			
Description of criteria	Score	Weighting	Max Points
Expertise of the evaluators	0-5	2	10
Experience of successful delivery of similar programmes	0-5	2	10
Total		20	

<b>Section:</b> <i>Cost</i>			
Description of criteria	Score	Weighting	Max Points
Is competitively priced	Yes / No	Pass / Fail	
Has accounted for all cost to deliver proposal	0-5	1	5
Expenditure broken down and pricing clear	0-5	1	5
Risk of budget overspend	0-5	1	5
Total		15	

<b>Section:</b> <i>Organisation</i>			
Description of criteria	Score	Weighting	Max Points
Suitability of the organisation	0-5	2	10
Is a diverse supplier	Yes / No	Pass / Fail	
Collects recruitment and staff D&I data	Yes / No	Pass / Fail	
Reasonable Adjust Policies / Inclusive Outputs	Yes / No	Pass / Fail	
Client References - suitability of nominated references	Yes / No	Pass / Fail	
Client References - quality of reference received back	Yes / No	Pass / Fail	
Total		10	

*If you wish to receive any additional or updated information, please ensure that you register interest prior to submitting the proposal. All proposals\* must remain valid for a period of **90 days** from the date of submission by the vendor. This RFP and the information contained within it are deemed to be confidential information. Proposals must include information about costs and state whether these do or do not include VAT or any other levies. By submission of a proposal, the vendor warrants that the prices in the proposal have been arrived at independently, without consultation or agreement with any other potential vendor.*

## **Annex 1: The Lord Bhattacharyya Engineering Education Programme**

### **Introduction**

The Lord Bhattacharyya Engineering Education Programme is a five-year programme launched by the Academy in March 2020, in partnership with WMG at the University of Warwick. The Department for Science, Innovation and Technology (DSIT) is funding the programme in memory of the late Professor Lord Kumar Bhattacharyya CBE FEng FRS, who founded WMG and led the department for nearly 40 years until his death in March 2019. Lord Bhattacharyya was a leader in industry-academia collaboration and was extremely passionate about inspiring the next generation of engineers and technicians.

The Academy has worked closely with WMG to bring together a network of 25 secondary schools and colleges located in areas of socio-economic disadvantage across Birmingham, Solihull, Coventry, Rugby and Nuneaton, linked to employers, universities and other stakeholders in order to create a sustainable programme. LBEEP aims to enhance and enrich the STEM curriculum, and raise students' skill levels by providing links to real-world engineering. This raises their aspirations and develops their knowledge of engineering careers and the pathways into them. The West Midlands has a long and proud heritage of engineering, and LBEEP is providing engineering STEM-focussed education support for both students and their teachers.

### **Each year the programme provides:**

- £2,500 of yearly in-house grant funding per school/college to enhance the E in STEM (purchasing resources and providing experiences for students), activities to mark Tomorrow's Engineers Week and British Science Week, and to establish and/or resource existing STEM clubs.
- One STEM Challenge Day/Workshop for each of the secondary schools participating, to excite, inspire and stimulate interest.
- Up to 30 bursaries annually, worth £2000, paid over two years, to incentivise post-16 STEM study among students from low-income households/under-represented groups
- Up to 10 bursaries annually, worth £15,000, paid over three years, awarded to students from low-income households/under-represented groups studying engineering (or related subjects) at university.
- Up to 5 funded industrial placements for teachers and lecturers to develop skills to enhance their classroom practice
- Access to a peer-to-peer network for our STEM teachers, providing the opportunity to collaborate and share best practice
- Teacher CPD and Academy educational resources to introduce students to real-world engineering
- An annual celebration event designed to showcase programme activity and inspire learners about engineering careers

### **Outcomes**

The following outcomes are sought for the programme:

- A coordinated approach for STEM and engineering learning across participating schools and colleges.
- Increased level of engagement from students in engineering enriched STEM activities within school leading to a positive perception of engineering.
- Increased confidence in teachers to deliver engineering enriched STEM content to students.
- The facilitation of new resources and activities for teachers to present to their students and enrich their understanding of engineering and STEM.
- An increase in the knowledge of STEM engineering careers and pathways amongst the participating students through practical activities, industry links and teacher upskilling
- An increase in aspiration to progress with STEM subjects at post-16 and pursue STEM engineering careers from the students in participating schools.
- An increase in the rates of attainment and progression into STEM subjects in post-16 education, including progression to STEM A levels, technical qualifications, and apprenticeships

### **Overall Objectives of the Lord Bhattacharyya Engineering Education Programme**

- To create centres of excellence in STEM teaching and learning and opportunities for social mobility through progression into STEM careers.
- To develop secondary, further education and employer networks that inspire and encourage greater numbers of young people and support their progression to study STEM subjects in post-16 education, offering a continuum of STEM interventions for pupils throughout their educational journey.
- To provide in-house grants that enhance the “E” in STEM, lead on employer engagement and support the embedding of a long-term STEM culture within the network of schools.
- To provide students with an opportunity to improve core employability skills such as team-working, presentation, and communication skills.
- To provide financial support for pupils from low-income households and under-represented groups to progress with STEM and engineering in further and higher education.