

Request for proposal: Evaluation of the Google DeepMind Research Ready scheme

www.raeng.org.uk

Proposal deadline: 23 October 2024

Contents

1. Summary of invitation	2
1.1. Brief background to Research Ready	2
1.2. Why is the Academy looking for an evaluation partner?	2
2. About the Academy	2
3. Information provided	3
4. Statement of requirements.....	3
5. Deliverables	3
6. Stakeholders Engagement:.....	4
7. Schedule	4
8. Clarification questions	5
9. Your response.....	5
10. Scoring matrix.....	5
11. Selection criteria	6
12. Annex 1: About Google DeepMind Research Ready Scheme	8
12.1. Programme overview.....	8
12.2. Development of the programme	8
12.3. Population and referral process	9
12.4. Programme outcomes and theory of change.....	10
12.5. Monitoring and evaluation	10
12.6. Evaluation aims and objectives	10
12.7. Timeline and budget	11
12.8. Outputs	12

1. Summary of invitation

The Royal Academy of Engineering (Academy) is looking for an evaluation partner to support the evaluation of its Google DeepMind Research Ready summer placement programme. This request for proposals sets out the background to the programme, our aims and objectives for the partnership and how to apply. The evaluation is being funded by the [Hg Foundation](#).

Annex 1 at the end of this document provides background information on the Google DeepMind Research Ready scheme along with its aims, objectives, and outcomes, and should be read in conjunction with this request for proposals.

1.1. Brief background to Research Ready

“To build AI responsibly to benefit humanity, we must ensure that those researching, building, deploying and using AI are truly representative of our wider society.” – Google DeepMind

There is huge growth in opportunities in artificial intelligence (AI) but the sector is not harnessing the talents of all driven in part by inequalities in access to post-graduate education. For example, there has been a 40% growth in AI and Machine Learning jobs in 5 years, yet women make up less than a quarter of AI and data professionals. Less than two thirds of the UK’s leading scientists and scholars are from state-funded schools (despite them educating 93% of the population) and white students are 70% more likely than black students to undertake a higher research degree at a top university.

The Research Ready Programme gives students from underrepresented backgrounds experience in top university AI labs, encouraging more to study at postgraduate level – a gateway to top jobs in AI firms.

The scheme is now in its second year. The first year launched in 2023 the placements for the initial pilot year took place in Summer 2024. This first year was delivered by the Google DeepMind education team (independently of the Academy and the Hg Foundation). The Academy has been brought in as the delivery partner for the second year.

1.2. Why is the Academy looking for an evaluation partner?

We are looking for an evaluation partner to conduct a (primarily) formative evaluation of the second year of programme delivery, as well as supporting the Academy and its university delivery partners to prepare for a (primarily) summative impact evaluation in year three. Please refer to section 12.6 for more information about the aims and objectives of the evaluation.

2. About the Academy

The Academy 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.

3. Information provided

1. A copy of the Academy's strategic framework.
2. Summary findings from the evaluation of the first year (round) of the Research Ready scheme which was delivered by Google DeepMind in 2023. (Please see section 12.5). This is subject to Googles confirmation.

4. Statement of requirements

1. **Summary:** we require an evaluation of the Google DeepMind Research Ready scheme to take place with the delivery of a report that identifies any emerging impact and assesses progress towards the outcomes of the programme, as well as making recommendations for any improvements to programme delivery.
2. **Timing:** we are looking for an evaluation partner to work with us from the Autumn 2024 to prepare for an evaluation of the 2025 and 2026 summer programmes.
3. **Delivery:** a final report and recommendations to be received in Autumn 2025
4. **Experience:** An understanding of the programme's operating environment, including the barriers (faced by students of low socioeconomic background and underrepresented groups in engineering) to participating in AI education, pursuing advanced degrees, and careers in AI and computer science.

5. Deliverables

To be agreed between the Academy and the evaluator but this could include:

Year 1

- A theory of change for the Research Ready programme
- An evaluation report including formative findings on programme delivery and suggestions for improving monitoring and evaluation systems.
- A slide pack or short report setting out a range of study designs and their implications, for an impact evaluation, including the datasets that could be used to evidence impact on outcomes and likely budget.

Year 2 (to be contracted separately, following a full competitive procurement process)

- A full study protocol and statistical analysis plan for the impact evaluation

- A final integrated evaluation report including findings from the impact and implementation and process evaluation.

For more information on the expected evaluation aims and objectives please refer to section 12.6.

6. Stakeholders Engagement:

This table contains details of key stakeholders.

Within the Academy:	Partners:
Jorge Ospina – Senior Programme Manager	James Turner – CEO of the Hg Foundation
Dr Lucy Wheeler – Head of Research Programmes	Camilla Nevill – Consultant for the Hg Foundation
Dr Christina Guindy – Associate Director	Dr Rebecca McKelvey – Education Partnership Lead, Google DeepMind
Wakeel Faizy – Analyst, Monitoring and Evaluation.	
Programme Manager – Under recruitment	

7. Schedule

Deadline for proposals: 23 October 2024

Activity Number	Activity	Date
1	Issue of RFP (this document) to potential suppliers	2 Oct 2024
2	Deadline for submission of RFP clarification questions to the Academy	9 Oct 2024
3	Deadline for the Academy to respond to all clarification questions	16 Oct 2024
4	Deadline for suppliers to submit full RFP	23 Oct 2024
5	Deadline for initial evaluation of RFP	11 Nov 2024
6	Pitches/ interviews (if necessary)	w/c 25 Nov 2024
7	Notification of preferred supplier	w/c 2 Dec 2024
8	Meet with successful bidder	w/c 16 Dec 2024

8. Clarification questions

Please send your clarification questions and submissions to: Jorge Ospina, Senior Programme Manager at research@raeng.org.uk

9. Your response

Please include the following in your proposal:

- **Content:** Please send a short proposal of no more than 4000 words on how you would work with the Academy to achieve its aims and objectives to research@raeng.org.uk by the 16 October 2024. This should cover why you are interested in the partnership, your team's relevant methodological and substantive expertise, plus any relevant thinking about the key challenges of this work and your approach. Please refer to section Annex 1 sections 12.6 to 12.8 for a full breakdown of the aims and objectives.
- **Schedule:** The evaluation should start in the Autumn of 2024 to prepare for an evaluation of the 2025 and 2026 summer programmes. The 2025 programme evaluation will be primarily formative, to understand and learn further lessons on programme deliver as well as to explore the feasibility and start piloting evaluation processes in preparation for an impact evaluation of the 2026 programme. In your proposal, please include details on how you intend to achieve these objectives and outline key milestones throughout the process. Please refer to section Annex 1 sections 12.6 to 12.8 for more details on timelines and expectations.
- **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. For Year 1 evaluation activities the budget available is between £50-80k inclusive of VAT. Please could applicants submit a modular budget that includes a range of options and associated costs.
- **Organisation:** please provide a biography that sets out the qualifications and experience of those involved in the evaluation. As an Academy, we actively strive to engage services from diverse teams and suppliers. Accordingly, please provide information on how diverse and inclusive perspectives will be incorporated into your proposal.
- **References:** please provide the details of any referees and/or links to testimonials and/or links to previous work.

10. 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 suppliers 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 interview.

11. Selection criteria

Your response will be evaluated using the following:

Section: <i>Programme Content</i>			
Description of criteria	Score	Weighting	Max Points
Suitability and quality of the proposed approach in meeting the research objectives and robustness of the methodology.	0-5	5	25
All key areas covered	Yes / No	Pass / Fail	
Total			25

Section: <i>Track Record</i>			
Description of criteria	Score	Weighting	Max Points
Experience of the evaluators	0-5	1	5
Experience of successful delivery of similar programmes	0-5	1	5
Total			10

Section: <i>Schedule</i>			
Description of criteria	Score	Weighting	Max Points
The timescale to successfully deliver is realistic	0-5	1	5
Delivery process is clear and realistic	0-5	1	5
Total			10

Section: <i>Cost</i>			
Description of criteria	Score	Weighting	Max Points
Is competitively priced (<i>Overall value for money and appropriateness of the budget</i>)	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	

Section: Organisation			
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.*

12. Annex 1: About Google DeepMind Research Ready Scheme

12.1. Programme overview

What is the programme?

This programme will fund research placement opportunities for eligible undergraduate students in the summer of 2025, to be hosted at selected universities. It will include employer-led workshops, employability training, and advisory sessions. Students will receive financial support for travel, accommodation, and a stipend to cover living expenses and any lost income from a summer job. The funding will also cover the costs of student events, activities, and the administrative expenses for the universities to plan and implement their programme.

Stage 1: the Academy will open a call for proposals in August 2024. Host university proposals must contain details of an undergraduate research placement programme in AI for the summer of 2025. These proposals will be reviewed by a panel and successful university host applicants will receive funding to deliver their proposed research programme.

Stage 2: once awarded, successful university hosts must organise:

- the outreach and recruitment of research supervisors at their institution that will deliver their proposed research placement programme
- the call for external student applications, review, and selection of students
- issuing of awards to students, drafting appropriate placement agreements with them, and providing training.

Stage 3: Research Ready placements take place in the summer of 2025, concluding with a celebration event in September 2025.

What are the aims?

The programme aims to give participants:

- Knowledge and guidance of different areas of AI research and routes into them.
- Research experience in leading AI labs alongside top academics and experts.
- A career pathway by giving a line of sight to top jobs that AI research can open and how to get there.
- Culture and belonging, through activities to promote a positive research culture and dispel misconceptions.

12.2. Development of the programme

How was the programme first developed?

Google DeepMind (GDM) has fully funded the pilot year of the programme, which is running in summer 2024 at five UK universities (Oxford, Cambridge, Birmingham, Imperial and Queen Mary) plus New York University in the US. The programme was originally developed by the GDM education arm which works with universities on projects around postgraduate research, including scholarships, as well as supporting programmes that inspire and support young people into STEM careers.

What is expected to change between the pilot year and summer 2025?

The Royal Academy of Engineering is the delivery partner for year 2 and beyond of Research Ready, based on its track record of delivering academic and diversity programmes from university contexts. The programme will increase in scale, doubling in size from year 1, extending to 10-12 universities (all UK) and incorporating lessons from the first year of delivery.

12.3. Population and referral process

Targets / expected reach

The summer 2025 programme will aim to reach ~120 students in 10-12 universities. The programme was marketed in the Autumn onwards by the central Research Ready team and through host universities to target students.

Recruitment

Universities select students in Spring based on the most pressing aspects of under-representation in their student bodies, within a centrally determined framework to ensure alignment with the programme's objectives. As a minimum requirement, universities must include the following student eligibility criteria in their student application forms:

Essential criteria (all required)

- A resident in the UK and eligible to pay UK home fees.
- Have, or expect to have and be able to prove right to live and work full time in the UK for the duration of the programme.
- Are within the penultimate year of their undergraduate degree or have already completed an undergraduate degree in computer science, or AI facilitatory-related technical field.
- Is not currently studying or has studied a master's or PhD.

Socioeconomic criteria (at least one required)

- Have been eligible for free school meals.
- Lives in an area in the lowest two deciles according to a postcode measure such as [IMD](#) or [POLAR](#).
- Have at some stage been in local authority care.
- Be in receipt of full state support for maintenance for their course of undergraduate study.

Selection process e.g. assessments or interviews to determine programme entry

The programme explicitly looks to recruit students from less selective undergraduate universities, where there are greater numbers of diverse students, and which have lower overall progression rates to postgraduate study. Proposed selection criteria and overall student profiles for 2025 will be approved by the central Research Ready team. The programme is expected to be over-subscribed (e.g. 60-70 applications / 10 places).

The Hg Foundation and the Academy are particularly interested in understanding how well-targeted the programme is at under-represented groups, and what could be improved about these processes, including how students hear about the opportunity. There is likely to be some variation in approach and targeting between universities. We are particularly interested in evaluator perspectives on relative

advantages and disadvantages / trade-offs between allowing flexibility vs more standardising targeting processes and the implications for a year 3 impact evaluation.

12.4. Programme outcomes and theory of change

What are the short and long-term outcomes or aims of the programme?

The programme has two intended long-term outcomes:

- Postgraduate AI research studies
- Employment in AI, data science and machine learning

The intermediate outcomes include:

- Confidence
- Awareness and ability to navigate postgraduate pathways and career options
- Networks and a sense of belonging
- Research and employability skills

What is the theory of change for the programme?

A full theory of change for Research Ready has not yet been developed.

The Academy would be keen for evaluators support in developing or refining a theory of change for the programme, including what are its core elements, what does 'ideal conditions' look like, and what is adaptable between universities, which can underpin, and be further refined during the second- and third-year evaluations.

12.5. Monitoring and evaluation

What monitoring and evaluation work has been conducted to date?

Google DeepMind have commissioned [Exponential Talent](#) (a US consulting firm specialising in gender and diversity strategy development and 'blending management consulting and academic research experience') to track the trajectories of the pilot cohort. Google DeepMind have used the agency to look at other aspects of their diversity and inclusion work. The pilot evaluation will analyse data from participant surveys, pre-programme, post-programme and one year on. Planned surveys are available upon request.

What data is collected on the Research Ready programme?

Universities will also submit annual reports of their local programme to share any wider impact on the university ecosystem, as well as case studies.

12.6. Evaluation aims and objectives

What does the Academy and the Hg Foundation want to get out of the partnerships?

The Academy is looking for an evaluation partner to work with from the Autumn 2024 to prepare for an evaluation of the 2025 and 2026 summer programmes. The 2025 programme evaluation will be primarily formative, to understand and learn further lessons on programme delivery as well as to explore the feasibility and start piloting evaluation processes in preparation for an impact evaluation of the 2026 programme.

The aims and objectives of the partnership are:

Year 1 of the evaluation (2025 programme delivery):

- **Support the Academy to develop an explicit theory of change for the Research Ready programme**, including its core elements and ‘ideal conditions’ vs what is adaptable by universities, building on lessons learned from the pilot year. This theory of change is intended to underpin and be refined during the 2025 and 2026 evaluations.
- **Review data collection tools and tracking systems**, to ensure optimum quantity and quality of data is collected against the theory of change. This might include review and refinement of the survey tools used in the pilot (e.g. to collect intermediate outcomes), review of approach and systems for tracking students’ and ensuring appropriate GDPR- compliant processes are in place for processing data and linking to administrative datasets such as HESA and LEO.
- **Provide independent formative feedback using a mixture of methods** to further refine and improve the programme. The research questions will be refined with the Academy and will build on lessons learnt from summer 2024 (results in the autumn), but might include:
 - *How well targeted is the programme? What could be improved about processes?*
 - *To what extent are there variations / adaptations in implementation between sites?*
 - *How well are components of the programme being delivered? What strategies support high quality implementation?*
- **To explore the feasibility of a range of potential impact evaluation designs**, to be delivered in 2026. This would aim to evaluate impact on long-term (postgraduate research and employment) outcomes, with some form of comparison group, alongside a mixed-methods implementation evaluation. Given the programme is likely to be over-subscribed with more potential participants meeting the selection criteria than places available, there is an opportunity to deliver a randomised multi-site trial across participating universities, allocating places on a lottery basis. The Academy is also interested in exploring with the evaluator a low-cost matched comparison using the 2025 cohort, to understand better the process and any challenges in modelling the selection process and associated risk of bias.

Year 2 of the evaluation (2026 programme delivery):

The evaluator will be expected to deliver an impact evaluation, using the design agreed autumn 2025, alongside an independent mixed methods implementation and process evaluation. This will be contracted separately, following a full competitive procurement process).

12.7. Timeline and budget

Timeline for the partnership and evaluation activities

The Academy plans to appoint an evaluator by the end of November 2024, with the goal of preparing for the evaluation of the 2025 and 2026 summer programmes. Decisions regarding the impact evaluation will be made in 2025 (year 2), based on the recommendations from the work conducted in year 1.

Budget available

For Year 1 evaluation activities the budget available is between £50-80k inclusive of VAT. Year 2 (to be contracted separately therefore a budget for this second year is still to be confirmed)

12.8. Outputs

What would the evaluator be expected to produce?

To be agreed between the Academy and the evaluator but this could include:

Year 1

- A theory of change for the Research Ready programme
- An evaluation report including formative findings on programme delivery and suggestions for improving monitoring and evaluation systems.
- A slide pack or short report setting out a range of study designs and their implications, for an impact evaluation, including the datasets that could be used to evidence impact on outcomes and likely budget.

Year 2 (to be contracted separately, following a full competitive procurement process)

- A full study protocol and statistical analysis plan for the impact evaluation
- A final integrated evaluation report including findings from the impact and implementation and process evaluation.