



In²STEM

Impact Report 2024

In²science^{UK}

Foreword



“

Welcome to our impact report for the In2STEM 2024 programme.

We are proud to showcase another successful year, having helped empower more students in a single year of In2STEM than ever before. Working alongside our dedicated partners, funders and as a whole In2scienceUK team, we have supported 851 students through In2STEM 2024 and are deeply encouraged by our data showing that participants feel more confident, motivated and knowledgeable about pathways into STEM education and beyond, after taking part in our programme.

Year upon year, we continually see passionate, talented and ambitious students in need of our support. This year we were presented with unforeseen challenges, with riots across the UK causing worry for many of our participants and, in some cases, this affecting their In2STEM placements. It is more important than ever to showcase the value and strength that diversity brings; I invite you to read through our case studies and learn about the inspiring stories of some of the students we supported this year, and what is hopefully the start of their journeys into successful STEM careers.

In August, the In2STEM team was awarded the Athena Prize by the Royal Society, in recognition of our longstanding commitment and proven impact in supporting young people from low socioeconomic backgrounds to pursue STEM careers. I am extremely proud of the In2STEM team's hard work, ensuring we continue to serve our beneficiaries through high quality programme delivery. I also want to thank all of our In2STEM volunteers who dedicate their time as hosts, mentors, workshop facilitators - without our dedicated volunteers, our work would not be possible.

Applications for In2STEM 2025 are now open and I am excited in the coming months to be welcoming our In2STEM 2025 students. We will continue to empower young people to unlock their full potential, regardless of their background and look forward to building on the successes of this year.”

Anishta Shegobin,
Head of Programmes



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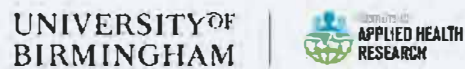
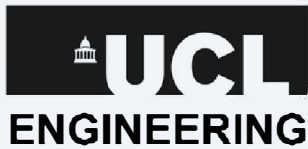
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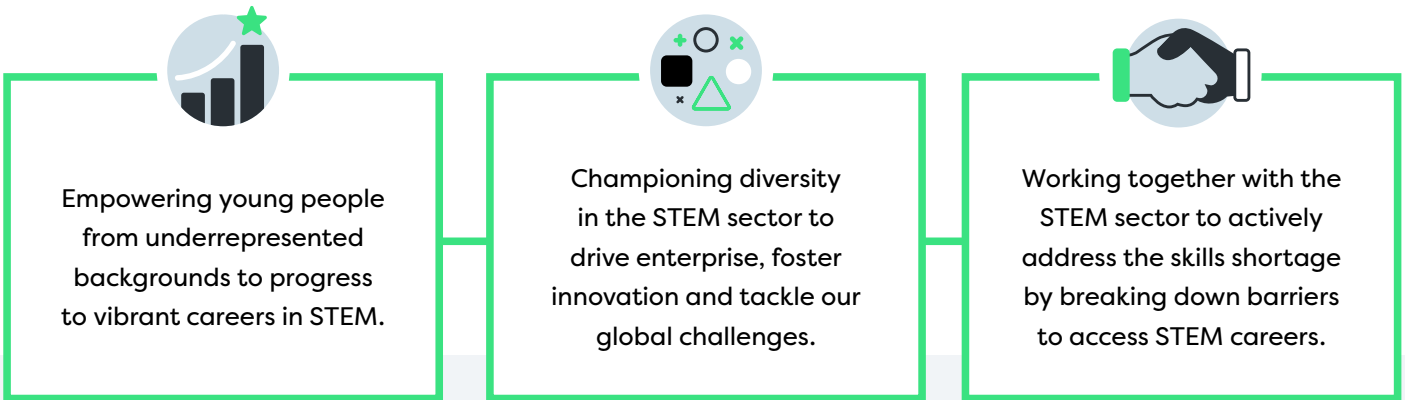
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Our Vision

In2scienceUK exists to unlock the potential of young people from low socioeconomic backgrounds and boost diversity and inclusion in the sector, ensuring the UK remains at the forefront of science, technology, engineering and maths (STEM) industries. We aim to achieve this by:



The latest insights from research into the STEM sector demonstrate how much In2scienceUK's work is needed now more than ever.



Only **6% of doctors, 9% of life science professionals and 19% of IT professionals** were from low socioeconomic backgrounds in 2022.¹



1 in 3 students from low-income households progress to university, compared to 1 in 2 of their peers.²



Only **57% of teachers** say that their school engages with **STEM employers** annually.³



The STEM skills shortage is thought to cost the UK economy an additional **£1.5 billion every year**.⁴



UK STEM graduates can **earn nearly 20% more** than their peers.⁵

¹Office for National Statistics (2023), [VACS02: Vacancies by industry - Office for National Statistics \(ons.gov.uk\)](https://www.ons.gov.uk/vacancies)

³EngineeringUK (2024), [Advancing STEM careers provision in England](#)

⁴STEM Learning (2018), [STEM skills indicator](#)

²Fair Education Alliance (2024), [Fair Education in 2024 - Priorities for a new government](#)

⁵Korn Ferry Hay Group (2017) Press release: [STEM Still Stealing the Show](#)

Programme Overview

The In2STEM programme supports current year 12 and S5/S6 students from low socioeconomic backgrounds and provides the opportunity to gain real-world work experience at the cutting edge of research and innovation.

We support students to develop the skills, knowledge and confidence they need to progress in their STEM journey, through a range of skills, university and employability workshops, as well as an in-person placement within a commutable distance.

Our Young People



2,036 applications

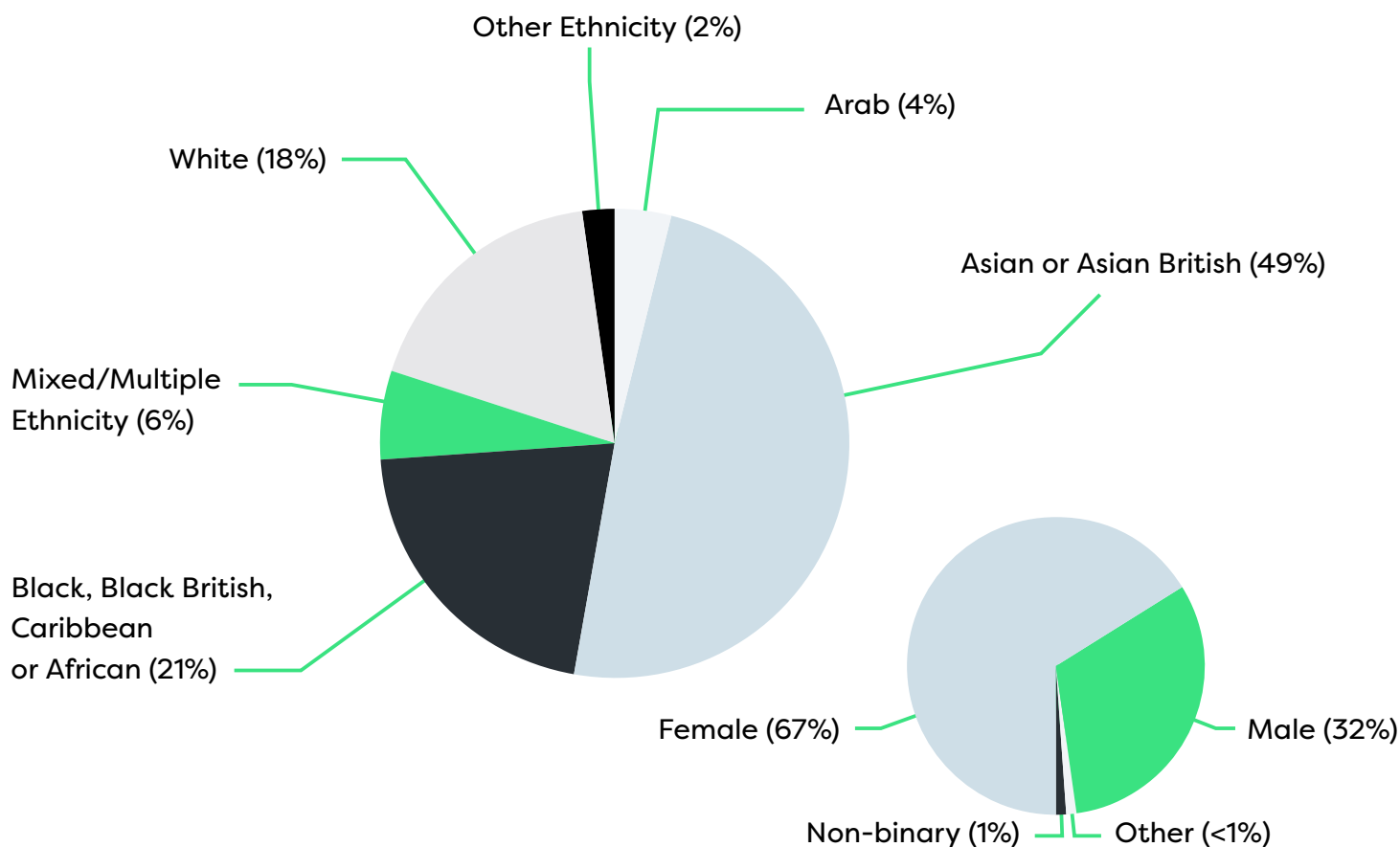
We supported 851 participants in total



95% of our 851 participants took part in 27,447 hours of in-person placement experience



82% of our young people were from ethnic minorities:





55% were eligible for Free School Meals



76% have parents that do not have university degrees



9% have an Education Health and Care Plan

Eligibility



52% of participants at some point received Pupil Premium, Education Maintenance Allowance (EMA) or the 16-19 Bursary



2% are care experienced



7% have caring responsibilities

“

In2STEM was really inspiring and helped me think more clearly about my career path. I'm now more interested in pursuing a career in this field... I would 100% recommend joining the In2STEM programme. It's a fantastic opportunity to learn and gain valuable experience in STEM fields.”

Guarav - In2STEM participant



Ainna's Story

Ainna applied to InSTEM because she is interested in STEM and research. Before the programme, she was unsure whether to continue with STEM for her further education and career, as she didn't want to limit her future career options.

In2STEM helped give Ainna further insight into the diverse options available in STEM, and has given her the confidence in her choices on the path she wants to take for her future.

“

In2STEM has allowed me to obtain an in-person placement at Abcam in Cambridge, where I was able to work in labs and perform different experiments that I've only read about. **This experience has just heightened my passion for science.** Apart from in-person placement, I was also able to attend different workshops online where I learned about people's careers, how they got to where they are now and what makes a good scientist. I was able to ask people who have done their PhD, and they were able to give me advice about this as well as advice about the course I want to take. **These online sessions and my placement have played a great part in my decision to continue with a STEM subject at university.**

This experience has been very important to me because it is my first time being in a lab environment, I have learned so many scientific skills as well as key skills that can be applied in any workplace setting, which will help me in the future.

Before this programme, I was not sure whether to continue a career in STEM because, at that time, I thought that finishing a science degree would restrict me, however, after... **I was reassured that my future choices would not be limited as the world of STEM is big, there are a lot of choices and a lot of different routes to take. In2STEM is such a great programme, and I cannot emphasise this enough.** The in-person placement was the highlight of this whole In2STEM programme for me.”

Ainna - In2STEM participant



Our Impact

To evaluate In2STEM's impact, we analysed 698 participant survey responses before and after the programme.

The programme works to empower young people from low socioeconomic backgrounds to make informed decisions about their careers by providing them with:

Hands-on experience

During the programme, participants widened their exposure to the world of STEM by taking part in activities such as completing an in-person placement, attending workshops, meeting researchers and giving a presentation on what they've learnt.

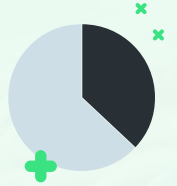
Knowledge about career access and destinations

Our survey results show that participants gain an understanding of the career pathways available and how to access support on their application and from their university.

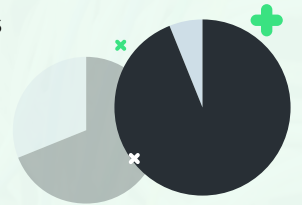
Confidence that they can pursue a career in STEM

From our participants' responses, we saw an increase in confidence across the board in using scientific evidence to make an argument, professional networking and in accessing the STEM job market.

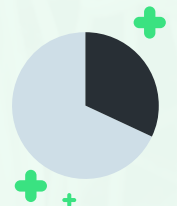
After the programme, there was a **37% increase** in those who participated in research or a science experiment outside of school.



94% of participants know what it means to work in STEM, up from 69% prior to the programme.



32% increase in those who said they understood the content and structure of a range of STEM degrees and apprenticeships.



87% now feel confident introducing themselves to a researcher or STEM professional, which is a 24% increase.



Find in-depth insights into our impact results and analysis [here](#)

Serina's Story

Serina knew she wanted to go into engineering, but struggled to find practical experience to understand if it was right for her. After her In2STEM experience, Serina has a clearer idea of the options available and is confident that engineering is what she wants to do.

Knowing that engineering will still give her flexibility of choice in the future has reassured Serina and she is now planning to apply for engineering programmes.

“

I didn't know how to find engineering experience. (A friend of mine) told me about In2STEM, which is related to science and engineering, and said I could apply for that.

I've learned a lot ... it was a great learning opportunity. I was surprised by how much I learned in a short time. Engaging with engineers and discussing projects has helped me figure out what I want to do. At the start of the week, I knew I wanted to pursue engineering, but I wasn't sure which field. **Now, after talking with engineers, I have a clearer idea of what I want to specialise in.** I felt reassured when my host talked about the flexibility of a career in engineering ... This made me feel less anxious about my career choice. Previously, I thought choosing a field meant committing to it for life, which made me hesitant.

This programme cleared things up for me. I was initially considering applying for a broader range of programmes, but **I've become more certain that I want to focus solely on engineering.** So my plan now is to apply for engineering programmes at both university and through degree apprenticeships.”

Serina - In2STEM participant



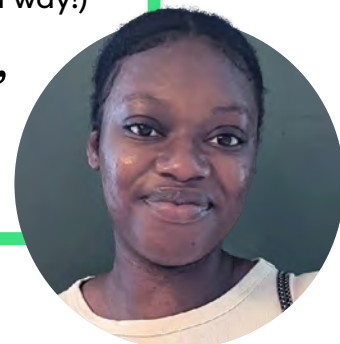
Longer Term Impact

To date, the In2STEM programme has supported **5,350 participants**

“

I did my In2STEM placement at UCL where I shadowed a neuroscience PhD student. I was still trying to figure out what I wanted to do so it was an eye opening experience! It was a very hands-on experience that I don't think I would've got anywhere else - it was only a week but it felt longer (in a good way!) because I did so much and I'm still in touch with my placement host. I'm currently doing Psychology at Kent University and I'm really enjoying it.”

Charish - In2STEM alumnus



Below is the longer term impact on 1,760 alumni from the 2020-22 cohorts based on UCAS data*

Of the 1,760 alumni:



90% applied to universities one year after completing In2STEM



92% of applications were for STEM degrees



91% of applicants applied for higher-tariff universities



77% of those with offers received one from a higher-tariff institution



97% of those who applied were successfully offered a place.



84% accepted university offers, **92%** were for STEM subjects

Find in-depth insights into our impact results and analysis [here](#)

*Data analysed using UCAS Outreach Evaluator (formerly UCAS Strobe) and UCAS EXACT

These are the three most recent cohorts for which UCAS data was available when this report was published.

Our Volunteers

Without the support of our volunteers, our mission would not be possible. We are hugely grateful to each and every volunteer who continues to offer their insight, experience and knowledge across STEM to support and inspire our beneficiaries.

Across our In2STEM and In2STEM online programmes this year, we had...

639

total volunteers*

523

hosts that supported students

These incredible volunteers delivered:

27,447

hours of in-person placement experience provided to participants

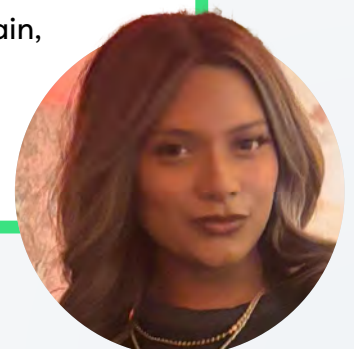
£254,898

worth of in-kind support**

“

This experience has been a highlight in my career journey for sure - this has allowed us to pass on skills and knowledge to the next generation, as well as do something meaningful, impactful and fun! I would love to host again, it has been so fun and the students are so independent and proactive.”

Mahfuza Amin - In2STEM volunteer



*Hosts, mentors, research course leads and workshop leaders

**From volunteers, including hosts, mentors, course leaders and workshops (approx)

In2STEM Online

Following a successful trial last year, we offered an online programme pilot for students living in areas where placements are not currently accessible. In place of the in-person placement, we offered participants STEM lectures and mentoring sessions in their subject of interest as part of the programme alongside online workshops.

Our survey results show that participants' motivation and confidence to pursue a career in STEM increased, as well as their sense of belonging in STEM and confidence preparing their UCAS statement.

Next year, we will focus on analysing the results of our trial and pilot to create a plan for future delivery of our online offer.

206 participants were offered support in 4 different subjects:



Biosciences



Computer Science



Medicine, Healthcare
and Biomedical Science



Engineering

To evaluate the impact of the In2STEM online programme we analysed 158 participant survey responses before and after the programme. After In2STEM, our data shows:

First-hand experience of STEM outside of education:

34% increase

in students participating in research or science experiments outside of school.

59%
↑
25%

Knowledge about career access and destinations:

29% increase

of participants who said they understood the content and structure of a range of STEM degrees and apprenticeships.

81%
↑
52%

Confidence that they can pursue a career in STEM:

80% felt confident after the programme that there are lots of STEM jobs available with a STEM degree or apprenticeship.

“

As the first person in my family who is considering going to university, I feel very anxious, confused and isolated a lot of the time. I don't have anyone I can reach out to for help. When I came across the In2STEM programme, I felt hope that I would learn something. I learned so much, and more than I ever expected; not only did I learn about STEM, but also tips on finances, student life and mental health. Overall, the In2STEM programme is the perfect student guide for anyone that is going to study a STEM course at university. I thoroughly enjoyed this experience and will definitely be recommending it.”

Manira - In2STEM online participant

Our Programmes

In²research

Our year-long programme complements studies or work and helps to pave the way for postgraduate research degrees and academic careers. The programme includes a funded eight-week placement, mentoring and workshops.

In²careers

The In2careers community provides access to exclusive opportunities, including employability workshops, skills clinics and industry networking.

Other ways to get involved to create an impact for the future of STEM

Sponsor

a placement or invest your support across one or all of our programmes to exponentially increase the impact your investment creates in building a brighter future in the STEM sector.

Mentor

one of our beneficiaries to share your experiences and your passion for STEM, and help ensure the next generation of STEM leaders and innovators reach their full potential.

Lead

a workshop to share your expertise, skills, and experience to help individuals from underrepresented backgrounds explore the exciting world of STEM.

Host

a placement opportunity for individuals from underrepresented backgrounds, helping us strengthen diversity in the sector, break down barriers, and nurture innovation for the future of STEM.

Visit in2scienceuk.org or email development@in2scienceuk.org and find out how you can get involved today.

In²STEM



Get in touch:



development@in2scienceuk.org

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Our registered address is 10 Queen Street Place, London, EC4R 1BE.

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