Virtual Routes into STEM 2024/2025

BACKGROUND

EDT's vision is a society where all young people can develop the STEM skills, knowledge and experience they need to take control of their futures and change the world around them.

EDT have been running the face to face Routes into STEM programme since 2015, in locations all across the UK. The Virtual programme was developed in 2020 in light of the pandemic to give students opportunities to access from home.

The aim of the programme is to introduce Year 9 and 10/S3/S4 (age 13 to 15) students to the different pathways they can take into a STEM career, inspiring the future generation of STEM professionals to think about their next steps.

Even after the pandemic there was still an appetite for the virtual programme as it allowed students from all areas to access the course and work flexibly around there other commitments.

The course comprises of projects on college, university and apprenticeships pathways, live sessions with educational and industry professionals, workshops on more specific areas of STEM for them to choose from, careers skills and a final project to demonstrate their learnings.

In 2024/25 we ran the course in April 2025 to cover the Easter holidays.

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97 participated in the Virtual Routes into STEM course in 2024/25.

31% Female
69% Male

Ethnicity:
48% Ethnic Minority Group
48% White
4% Prefer not to say

Receiving free school meals - 15%
Declared a disability - 11%
Would be first in family to attend university - 18%
Are a student carer - 3%
Received a funded or bursary place - 21%

24% of participants live in areas with low progression rates of 18 year olds into higher education
13% of students come from the 20% most deprived areas as measured by the Indices of Multiple Deprivation (IMD)

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LIVE SESSIONS

An integral part of the Virtual Routes into STEM course is live sessions with educational and industry professionals, students need to attend at least three to complete the course.

The Sessions included:

- Panel sessions from a variety of STEM industry professionals including talking about their careers paths including dedicated sessions to women in STEM careers and apprentices. As well as a dedicated panel from Avantor, a life sciences company.
- Panels sessions from universities discussing different STEM degree options and admissions processes.
- Interactive workshops from STEM professionals including a bridge building workshop, a live recording of a STEM based podcast and an interactive chemistry experiment.

All the sessions included the opportunity for students to ask questions of the panels making it a very beneficial part of the course.

Student comments:

"I enjoyed watching people talk about a subject they are passionate about and opening my mind to different areas of STEM research."

"I enjoyed the interactive aspect, and the fact that you could ask your own questions and get them answered by professionals in their field. Also, the wide array of jobs that these experts were doing, from work in real estate to the UK Atomic Energy Trust."

"I love the passion and joy that you can clearly see in the people who deliver these presentations as it makes it 100x more engaging to listen to and I am so curious for knowledge and learning the approaches people took to become who they are today."

"I really enjoyed being to hear from actual people in different stages during their STEM career and ask them questions and receive answers directly."

"I enjoyed hearing from many different people. I loved hearing about their unique stories and it really widened my knowledge on different ways I can go into STEM."

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HOW WE MET OUR OBJECTIVES

We aimed to increase students' confidence in their careers choices:
Confidence at the start of the course:

Confidence at the end of the course:

We aimed to increase students awareness in the careers opportunities available to them.
Increased awareness at the end of the course:

We aimed to increase their skills and knowledge.
Felt they had increased their skills and knowledge at the end of the course:

We aimed to create a high value course.
Rated the course as Good or Excellent at the end of the course:

Would recommend the course to a friend or family member

Are likely to study STEM related studies after their GCSEs or Nat 5s

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SKILLS

100% felt more confident about the future and the opportunities available to them
93% felt more confident that anyone can have a career in STEM
93% felt the course helped them feel more confident or optimistic about their future

89% felt the course allowed them to try out lots of different ideas
85% felt more connected to employers
80% felt the course helped them feel more confident

79% felt it helped with with other education or work related skills such as time management, writing reports etc
79% felt the course helped them develop problem-solving skills

76% felt the course helped them develop resilience
76% felt the course helped their communication skills
76% felt the course helped them feel more resilient
70% felt the course helped them develop presentation skills

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STUDENT COMMENTS

“It has encouraged me to actively research future prospects for higher education and apprenticeships, which has affirmed my interest in this topic. It also helped open my mind to different routes you can take, which has made me a lot more hopeful for my future in STEM.”

“I have learnt a lot about industries I knew nothing about and the course made me realise that there are lots of very different careers related to STEM and that if you are interested in the subject there will be a job for you somewhere if you look for it.”

“I have gained a multitude of knowledge regarding the sheer variety of not only STEM careers, but also the journeys to those careers. I previously didn't realise how versatile the STEM field was in regards to degrees and degree-apprenticeships.”

“The program gave me a unique opportunity to explore different areas of STEM through hands-on activities, talks with professionals, and real-world examples of how STEM impacts society. One of the most inspiring moments was meeting employers, apprentices and university panellists. It made me realize how creative and impactful STEM careers can be. I left the experience feeling more confident in my abilities and excited about the possibility of contributing to meaningful innovations in the future.”

“It has really pushed me out of my comfort zone and helped me develop new skills, such as study skills, researching, time management, and even programming in Python.”

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PARENT/GUARDIAN FEEDBACK

"He enjoyed the challenges. It gave him skills he could potentially use in a job in the future as well as highlighting new areas for him that could offer exciting career opportunities for the future."

"It clarified the different training and study routes. It also expanded the range of potential STEM careers and separated some of the main strands of engineering."

"She had carried out a lot of research on courses, universities etc and I think the course really confirmed her choice."

THANK YOU

We would like to thank all our contributing colleges, universities, companies and panellists.

Without your support we wouldn't have been able to inspire so many young people into STEM careers and education