

Together we inspire young people by igniting their passion for STEM subjects, creating connections with education and industry, and enabling them to fulfil their potential in STEM subjects and careers.



IMPACT REPORT

2022/2023



BRIGHT FUTURES FOR YOUNG PEOPLE



EDT is a UK wide educational charity, delivering and accrediting STEM experiences through the Industrial Cadets Awards, a benchmark accreditation, mapping activities against a skills and competency framework. Inspired by its Patron, His Majesty King Charles III, our vision is to ensure Industrial Cadets is in every school, to reach 250,000 Industrial Cadets Experiences in 2024 and to inspire 1 million young people to embrace jobs in industry by 2035.

Our CEO Julie Feest invites industry and education to join the growing Industrial Cadets community to improve access to STEM education for young people from under-resourced and underrepresented groups. In 2023 only 8% of those working in STEM fields are from ethnic minority groups, while the proportion of women entering STEM apprenticeships fell in 2023, to 14%. Almost a quarter (23%) of young people from under-resourced backgrounds think their life will amount to nothing, no matter how hard they try. We recognise the disparities in representation within the industry, almost half (47%) of the young people participating in our programmes are from ethnic minority backgrounds. Our ongoing efforts seek to improve the social and economic status of all young people.



“The Industrial Cadets community connects young people, schools, colleges, universities, and STEM businesses to help develop a more resilient, knowledgeable, and confident workforce of the future. Together, we strive to promote social mobility by enabling young people from all backgrounds to engage in hands-on STEM activities, workplace experiences, courses, and mentored projects. By providing equal opportunities and access to diverse role models who are thriving in STEM education and careers, we aim to break down barriers and empower individuals to overcome socio-economic challenges. Through our inclusive approach, we aspire to create a level playing field, ensuring that every young person has the chance to unlock their full potential and pursue a successful future in STEM.”- **Julie Feest, Chief Executive EDT**

This year over 55,000 Industrial Cadets experiences have been delivered through EDT and partner programmes, supporting young people to develop core employability and STEM skills and help them fulfil their potential and see themselves in STEM.

48 Industry partners have used Industrial Cadets accreditation as a quality benchmark for their STEM outreach activity, **a 25% increase** from the previous year. Our partners **accredited 81 new education programmes** during the academic year, from half day workshops to more intensive projects, work experiences and internships.

OUR IMPACT AT A GLANCE

The impact report highlights the significant achievements and positive outcomes of our organisation's efforts in supporting young people to access the STEM field. Through our targeted programmes, we have successfully empowered and inspired a diverse group of young people to pursue STEM education and careers. We have enabled young people from underrepresented groups to develop essential skills, knowledge, and confidence in STEM disciplines. As a result, these young people have achieved notable successes pursuing their studies and preparing for the world of work.

55,175

Industrial Cadets experiences

1,319

Schools, universities and colleges supported

45%

Female students supported by our programmes

47%

Students from ethnic minorities

673

Volunteers from the STEM field gave their time to support young people

176

Industry partners across the UK

35%

A combination of students entitled to free school meals and students recognised as having a disability

INDUSTRIAL CADETS

Our Programmes

At EDT we believe every young person should have the chance to embrace STEM opportunities. In collaboration with industry and educational partners we have developed the Industrial Cadets portfolio and pathway of programmes to help students access STEM learning and experience the world of work.

CHALLENGER: ACTIVITIES & EVENTS

Students engaged: **13,531**

Hands-on themed workshops for students aged 7 to 14, supported by STEM role models and industry.



"One thing I've learned is that you can make anything out of anything as long as you put your mind to it."



"I enjoyed making the skateboard the most, it was really fun getting all the recycled supplies together and making it all."

77%

now have a better understanding of STEM

71%

developed communication skills

88%

developed teamworking skills

73%

are more interested in STEM subjects

INDUSTRIAL CADETS

Our Programmes

BRONZE: MENTORED PROJECTS

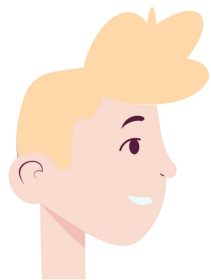
Students engaged: **994**

12 week mentored projects for students aged 11 to 14 to gain key skills whilst collaborating as a team on a set STEM project, supported by industry.

"At first I thought going into STEM would be very difficult for me, however after completing this project, I now have learnt that there are many more doors open for me which I find not so challenging. Due to this, I now see myself in STEM in the future."



"The Industrial Cadets experience has personally inspired me to see my future in STEM by offering hands-on experiences, real-world applications, and invaluable mentorship, igniting my passion and highlighting the incredible opportunities to make a positive impact in these fields."



81%

felt more confident about the future and the opportunities available to them

97%

developed problem-solving skills

88%

are more confident that anyone can have a career in STEM

85%

felt it helped them develop leadership skills

PARTNER TESTIMONIAL

"Having the opportunity to be an assessor for a number of Gold and Bronze projects has been a fantastic experience and has shown me the tremendous knowledge and potential these students have." - Josh Jones, Babcock

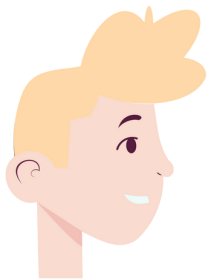
INDUSTRIAL CADETS

Our Programmes

BRONZE: ROUTES INTO STEM

Students engaged: **664**

A three-day face to face or virtual experience that provides young people aged 13 to 17 the different routes into STEM education and career pathways, helping them to decide between university and apprenticeships.



"I enjoyed looking at universities and companies. I enjoyed the team activities most and liked meeting new people."



97% are confident about the STEM career opportunities available to them after completing the course



94% felt the course helped their teamwork skills



96% are more confident that anyone can have a career in STEM



100% felt the course supported their communication skills

"I enjoyed getting insight into engineering companies and how employees work on a day to day basis."



PARTNER TESTIMONIAL

"It was a pleasure to have enthusiastic students ask questions about our different career pathways, about Building Surveying and Planning and to help spark an interest into STEM."

Adam Howarth, Capita

INDUSTRIAL CADETS

Our Programmes

BRONZE & SILVER: WORK EXPERIENCE

Students engaged: **1026**

Virtual Work Experience for students aged 14 to 16, taking place on site over 4 days. Combining live sessions with on-demand learning and engaging with a wide range of STEM professionals.



"I found it to be very informative and believe this is extremely valuable to those looking to go into STEM as it puts you in contact with employers that can offer valuable information."

87%

agreed it helped them learn about different options open to them after they leave school

89%

said it helped improve their presentation skills

93%

felt more connected to employers

78%

said it helped them with education or work related skills such as time management and report writing

"Very informative and insightful experience that I will never forget. This work experience has made me more keen to work in a STEM career."



INDUSTRIAL CADETS

Our Programmes

SILVER: VIRTUAL & RESIDENTIAL INSIGHT INTO UNIVERSITY

Students engaged: **795**

Our Insight into University courses, both virtual and residential allow students who are 16+ to explore STEM studies and the careers they lead to. Across our programmes, **20% of students received bursaries.**

83%

developed problem-solving skills

96%

felt their experience on the course will help them make a better informed decision for their UCAS application

"The Residential Insight into University at the University of Oxford was an incredible experience, and I would definitely recommend it to other students. Experiencing being in such an important facility and learning from the scientists there was amazing."



99%

would recommend the course to younger students in their school/college

70%

said it helped them develop resilience

PARTNER TESTIMONIAL

"We have had the privilege of working with the Insight into University programme over the last two years. The wonderful thing about the programme is seeing the students getting excited about our subject. It allows them to have a taster of University teaching as well as helping them firm up their future choices. The students have been engaged and enthusiastic and it's been a pleasure to share our passion for science with them. This programme has the potential to influence life and career choices."
Sianne Schwikkard, Kingston University

INDUSTRIAL CADETS

Our Programmes

GOLD: MENTORED PROJECTS

Students engaged: **756**

20 week projects for students aged 16 to 18, to undertake real-life STEM challenges, mentored by industry professionals. Students gain a better understanding of STEM while developing core employability skills.



"We all had an amazing time working on our project. Some of us were already interested in becoming engineers, and this not only solidified our interest but also showed us how wide and varied the opportunities were within the field. The project also gave us a real insight into how an engineering project can be carried out in industry, and the skills and qualities that are needed to carry it out."

97%

understand better how people use STEM subjects in their jobs

82%

developed problem solving skills

98%

feel more confident about making future study and career choices

90%

developed teamworking skills

PARTNER TESTIMONIAL

"Working with, and guiding my Engineering Students on their project was stimulating, thought provoking and a personally rewarding experience, reminding me, why I got into Engineering in the beginning of my career!"

INDUSTRIAL CADETS

Our Programmes

PLATINUM: PLACEMENTS

Student Showcase

Our Year in Industry placements are for school leavers and offer a 10 to 12-month paid work placement opportunity within their intended career sector. This year **we supported 2,680 students looking for a placement** and supported **148 students on an industry placement year**.



Alicia completed her placement at **Skelly & Couch**, a building environment and engineering consultancy. Alicia was tasked with creating an instruction manual to condense the company's knowledge of the IES VE* software into one place, making it easy to access, navigate, and understand, thus making the software easier and quicker to use, and more accessible to learn.

The manual has helped train new engineers while supporting existing engineers at the company. It has reduced employees' time, allowing them to work on other outputs and projects, generating substantial additional revenue for the company.

Alicia Neal-Useche

"My placement has helped me to develop immensely in the professional environment, giving me invaluable technical skills and knowledge that I will be able to apply in the future, both at university and in the working environment beyond."



PARTNER TESTIMONIAL

"Alicia's contribution to the business in the last year has been exceptionally highly valued by myself personally, but equally by all of the directors of Skelly and Couch. In her time with us so far, Alicia has become a key member of our sustainability and thermal modelling team and a highly valued member of our team of engineers, regarded as an equal and with her skills being consistently in demand." - Steve White, Skelly & Couch



OUR PARTNERS



With our heritage, knowledge and diverse team that includes ex-teachers and industry professionals, we are able to support all our partners to achieve their objectives for STEM outreach, with a tailored offer to suit all sizes, scales and budgets.

GET INVOLVED

- Support an existing EDT-delivered programme accredited through Industrial Cadets
- Accredite your own outreach activity using the Industrial Cadets framework
- Work with our dedicated content development team to create new bespoke programmes

WORKING CLOSELY WITH BELLING

Belling Funding enabled us to provide unique experiences to Helston Community College in Cornwall. Students engaged with our Challenger, Bronze and Silver level programmes, that enabled the students to think about the routes into STEM that are available to them both locally and nationally whilst having fun and getting stuck in with various projects and activities.

"Students got the opportunity to explore the fundamentals of computer coding. They had to employ both their creativity and problem solving skills to devise a colour coding system which would allow the Ozobots they were using to complete a course autonomously." - Mr Allen, Teacher at Heston Community College

CELEBRATING ACHIEVEMENTS THROUGH INDUSTRIAL CADETS AWARDS



CanSat is a European Space Agency competition, ESERO-UK organise and run the UK CanSat Competition. For the first time in 2022/2023 the competition was accredited at Industrial Cadets Silver level for all regional teams and Industrial Cadets Gold Level for the national finalists, with a total of 556 awards.

"CanSat allows teams to experience what it is like to take part in a real space engineering project. The competition involves electronics, physics, mechanical engineering, coding, project management, report writing, presentations and a whole host of other skills. In addition to the valuable experience gained by the students taking part, the EDT Industrial Cadets accreditation provides recognition for the students, and supports their sense of achievement." - Kate Clark, ESERO-UK Project Officer





OUR PARTNERS

INSPIRING THE NEXT GENERATION

Since 2005, the EDT and Leonardo have worked together to inspire the next generation of STEM professionals. Throughout the partnership, Leonardo has offered Industrial Cadet opportunities at Bronze, Silver and Gold level as well as welcoming students on Industrial Placements. To date, the partnership has reached over 2,500 young people through engagement with more than 50 schools, with 300 Leonardo volunteers supporting the delivery of the programmes.

In 2022/2023 Leonardo supported:

7 Industrial Cadets Bronze Teams, 12 Industrial Cadets Gold Teams, 97 Students receiving an Industrial Cadets Silver Award through their work experience programme and 5 Industrial Placement Students.

“Participating in Industrial Cadets with Leonardo UK was an incredible experience that I will never forget. The journey was challenging yet exciting and working alongside professional engineers was such a unique opportunity that I would never have had otherwise.” - Student

“Leonardo is committed to inspiring young people to undertake STEM studies and increasing awareness of career opportunities in STEM. The Leonardo partnership with the EDT enriches our STEM outreach programme, by ensuring that high quality mentoring, work experience and industry placements are delivered through the Industrial Cadets programme. Through these activities, young people develop their engineering skills and gain awareness of their own potential through valuable work experience, while employees within Leonardo benefit from contributing to their local communities.” - Michelle Strange



OUR PARTNERS



SUPPORTING THE GFG FOUNDATION'S COMMITMENT TO A CARBON NEUTRAL ECONOMY

The GFG Foundation supports young people in communities where they have a business presence to help young people understand more about the local businesses and the opportunities available. Through our partnership, the GFG Foundation have supported over 7,000 students through various levels of the Industrial Cadet programme nationwide. We developed the GFG Foundation student programme with a focus on 'Our sustainable community'. The programme took place over 16 weeks providing opportunities for students in year 9 and 10 from local schools to take part in a mentor project supported by employee from LIBERTY Steel.

As part of the experience, students got the opportunity to attend a launch event, engage with mentors from industry and celebrate their achievements at an event at Sheffield Hallam University. With a project focused on sustainability, the programme helped students navigate the expanding green jobs market, develop STEM skills, and build on their communication and presentation skills, as well as receiving their Industrial Cadets Bronze Award.

"Thank you to the EDT and GFG Foundation for providing a fantastic opportunity to educate and enthuse our pupils in the different STEM careers that are on offer in our local area. The pupils gained a great deal from the process, from collaborating to achieve a common goal and working alongside mentors from industry." - Teacher

The programmes supported by the GFG Foundation in the UK are closely aligned with the commitment to a carbon-neutral economy, form part of the global education programme and aim to inspire the next generation and equip young people for the opportunities ahead.



THANK YOU

The support of our donors, funders, sponsors, and volunteers helps bring us one step closer to a fairer society where all young people can develop the skills, knowledge, and confidence they need to succeed in STEM. Whether you have volunteered at an event or mentored a young person, made a one-off donation, supported us through a corporate partnership or awarded us a grant, we thank you. We are hugely grateful for each and every one of our supporters. Particular thanks to the following organisations for their significant support during the year:

AIRBUS FOUNDATION

ARUP

avantor
foundation

BAE SYSTEMS

Balfour Beatty

DIODES
INCORPORATED

GFG
FOUNDATION

GSK

W
Garfield Weston
FOUNDATION

IET
The Institution of
Engineering and Technology

illumina®

UKRI
Innovate
UK

leidos

LEONARDO

ROLLS
ROYCE

ScottishPower

The David&Elaine Potter
Foundation

Virgin
Media

Viridor

We would also like to thank Belling Charitable Settlement & John Swire 1989 Charitable Trust. As well as all of our local and regional supporters that help to fund our communities nationwide.

GET INVOLVED

Your support will help inspire the next generation of STEM leaders. Donations, corporate support, and gifts of time can enable young people to take part in hands-on STEM activities and projects, work with mentors from diverse backgrounds, and build vital connections with industry and educators.

Talk to our philanthropy & partnerships team about supporting high impact programmes which make a real difference to young people's lives – contact philanthropy@etrust.org.uk or 01707 906549. If you're interested in volunteering, please visit: www.etrust.org.uk

FOLLOW US ON SOCIAL MEDIA

Click on the icons to follow
us on social media



www.etrust.org.uk