The IET

The Institution of Engineering and Technology (the IET) is a professional membership organisation with over 155,000 members in 153 countries and is a registered charity based in the UK. We inspire, inform, and influence the global engineering community to engineer a better world.

Over the past 151 years we have engaged with difference makers in Science, Technology, Engineering, and Maths (STEM) and have developed credibility in the education sector. With a diverse partner portfolio and good financial standing, the support we receive from others goes directly to further advancing STEM activities for children aged 4-19 with a focus on those from disadvantaged backgrounds.

For the 2021/22 academic year, we engaged with over 39,600 students directly through our STEM programmes and will have reached over 176,000 young people, parents/guardians, and teachers through our range of free online teaching resources and public relations/engagement campaigns. The IET has placed education as a core part of its 2030 strategy and with a growing demand for real world projects after two years of disruption to students’ education, the appetite has never been greater for STEM initiatives offered by the IET.
## Why Support STEM Education

### Advance Education

Enable teachers to confidently deliver subjects and topic matters around a real-world theme, giving the learning context and relevance. Give educators the right tools for the job.

### Breakdown Stereotypes

By introducing young students to the world of engineering we are able to breakdown stereotypes, encouraging students from all backgrounds to engage in something that may appear intimidating or unachievable.

### Real-world Role Models

Volunteers from industry can naturally discuss the work they do acting as real-world role models for the students to aspire to. Regular interactions are the most impactful.

### Develop Employability Skills

#### Teamworking

Students work together in teams, sharing turns and the materials they work with, learning from peers, and trusting each other with roles and responsibilities.

#### Communication

Students practise describing in rich detail, with clear instructions, explaining their reasons, all of which helps them to communicate and express ideas.

#### Problem-solving

Students practise staying focused, remembering a task or challenge, setting goals and making plans, producing creative ideas, and reflecting/evaluating their solutions.

#### Resilience

Students practise persevering when ideas fail and staying calm under the pressure of competition. A useful skill to exercise before facing the exam season.
IET Education Activities

**FIRST® LEGO® League**

**Faraday® Challenge**

**STEM Resources**

**Teacher Membership**

**IET Education Officers & Ambassadors**

**Digital Poverty Alliance**

**Grant Schemes**

**Research / Impact Report**
**FIRST® LEGO® League – Discover (Ages 4-6)**

**FIRST® LEGO® League Discover** is a playful introductory STEM programme that ignites young students' natural curiosity and builds their habits of learning with hands-on activities using LEGO® DUPLO® bricks. The delivery of this age division takes place primarily in the classroom during lesson time, however through the Six Bricks activity parents/guardians are encouraged to play an active role in the students learning, helping to influence their perceptions of STEM. In the classroom teams work through the guided sessions discovering mechanical solutions culminating in a internal Celebration Event hosted at their school where the students share their ideas, learning journeys, and final designs. The Celebration Events are non-competitive with all students being celebrated for taking part in the programme.

**Students Journey**

- Learn about the annual theme
- Create fun models
- Record what they have learnt
- Share ideas and final designs
**FIRST® LEGO® League – Explore (Ages 6-9)**

In **FIRST® LEGO® League Explore**, teams of up to six students focus on the fundamentals of engineering as they explore real-world problems, learn to design, code, and create unique solutions made with LEGO® bricks and powered by LEGO® Education SPIKE Essential. The delivery of this age division takes place as either a extra-curricular activity or as part of the curriculum during lesson time. Teams work through the guided sessions culminating at a Festival Event, either held within their school or by attending one of our Regional Festivals. During the Festival a reviewer will discuss their team poster with them looking for the core values – impact, discovery, innovation, teamwork, inclusion and fun. The Festivals are non-competitive with all students being celebrated for taking part in the programme.

**Students Journey**

- Learn about the annual theme
- Create team model
- Design team poster
- Present at Celebration Event
Friendly competition is at the heart of FIRST® LEGO® League Challenge, as teams of up to ten students engage in research, problem-solving, coding, and engineering - building and programming a LEGO® robot that navigates the missions of a robot game autonomously. Teams must also identify a real world problem focused around the annual theme as part of their Innovation Project and come up with a solution that will be presented to a panel of judges. Students are encouraged to reach out to industry and this is where mentors can have a fantastic impact helping young people to understand real world challenges.

Innovation Project

1. Research the annual theme
2. Identify real world challenge
3. Develop solution
4. Present to panel of judges

Robot game roadmap

1. Develop game strategy
2. Design, build, and code robot
3. Test and refine their robot
4. Compete at Regional Events
The IET Faraday® Challenge is held at schools around the UK and is delivered as a full day activity with 36 students divided into 6 teams. Students experience the journey of becoming an engineer, from walking into the classroom, to completing an apprenticeship, and being tasked with their first design brief focused on a real-world annual theme. Students must work together to design and build a prototype solution that incorporates both mechanical and electrical elements, staying within the budget and time constraints of the project. Students are encouraged to be creative and use their own problem-solving skills to explore their capabilities as engineers. To conclude the day, students must present their solution to a panel of judges, typically made up of industry volunteers. At the end of the year the challenge is repurposed into a DIY resource for educators and STEM Ambassadors to use, enabling the delivery of their own Faraday® Challenge Days and keeping the theme alive.

Students Journey

| Introduction to engineering | Complete apprenticeship | Review brief and build prototype | Present idea to the judges |
Educational Resources (Ages 4-19)

We provide free teaching resources, classroom/home school activities and educational podcasts for students aged 4-11 and 11-19 years. Everything an educator could want to deliver high quality STEM lessons.

All of our resources are mapped to the curriculum and we work with experienced resource writers to generate content that is fit for purpose. Whatever ideas you may have we can make it accessible to the classroom.

Our resources are used by educators from around the world, help us diversify our offering and grow the collection.

- 4,610 downloads per month on average from IET Education
- 2,578 downloads per month from partners websites

You will find our resources on social media, TES, STEM Learning, teachingideas.co.uk and greatscienceshare.org

Download statistics for our Educational Resources are captured directly from our website www.education.theiet.org.
Teacher Membership

As the largest professional engineering institution in Europe we have taken our core offering and applied it in a way that will benefit educators through Teacher Membership. For £30 a year, teachers will gain the following benefits:

• Access to life skills and professional development courses to support their CPD with access to our online CPD management system: Career Manager
• Access to networking opportunities with our Academic, Corporate, and Enterprise Partners
• Link up with our industry contacts to help with finding engineers for school visits or to support the provision of student work experience
• Work with universities to support students wishing to study STEM
• Network through our specialist online communities, including a STEM teachers community and discussion forum
• Access thousands of STEM videos on a variety of topics, with searchable content through iet.tv, our extensive video archive
• Access to the digital edition of our award-winning STEM specific Magazine: E&T
Sponsorship of IET Education
Choose A Program – Or A Combination

**FIRST® LEGO® League**
Support the delivery of the programme by:
• Sponsoring core activities
• Sponsoring / hosting regional Events
• Sponsoring team registration
• Mentoring / volunteering

**Faraday® Challenge**
Support the delivery of the programme by:
• Sponsoring the annual theme
• Sponsoring core activities
• Sponsoring / hosting Challenge Days
• Volunteering

**STEM Resources**
Support our archive of STEM resources by:
• Sponsoring core activities
• Sponsoring creation of teaching resources
• Sponsoring creation of podcasts

**Teacher Membership**
Support our teacher membership’s by:
• Sponsoring core activities
• Fund teacher memberships for a target group/region.
• Directly funding a teacher’s membership
Allocate Your Budget – Bespoke Options Available

**FIRST® LEGO® League**
- National Partner - £80,000
- Programme Sponsor - £40,000
- Regional Sponsor - £10,000
- Discover reg (Ages 4-6) - £1,400 per class of 32
- Explore reg (Ages 6-9) - £280 per team of 6
- Challenge reg (Ages 9-16) - £595 per team of 10

**Faraday® Challenge**
- Theme Partner - £35,000
- Programme Sponsor - £24,000
- Regional Sponsor - £12,000
- Pay as you go – £1,200 per challenge day

**STEM Resources**
- STEM Resource Partner - £25,000
- Themed Collection - £10,000 - £15,000
- Teaching Resource - £1,000 - £1,500
- Podcast Series – £10,000
- Podcast episode – £1,200

**Teacher Membership**
- Principal Partner - £15,000
- Regional Funder – £1,500
- Pay as you go – £30 per teacher
Agree Recognition Level - FIRST® LEGO® League

Branding on FIRST® LEGO® League materials:
- Student Notebooks [1]
- Certificates [2]
- Newsletters [3]
- Sticker Set [5]
- Social Media
- Promotional Materials
- Email Signature
- IET Education Website

Branding at FIRST® LEGO® League Regional Events:
- Banners [7]
- PowerPoint Slides [9]
- Medal Lanyards
- Trophy Sticker [4]
- Give-aways [10]
- Bespoke Award

Branding at FIRST® LEGO® League Finals:
- All From Regional Events, Plus:
  - Team Placards [6]
  - Event App [8]
  - Finals Stage
  - Livestream Advert
  - Highlights Video

Direct involvement in the programme:
- Host a Tournament
- Mentor Teams
- Volunteer at Events
- Exhibition at Finals
- VIP Tickets to Finals
- Present Awards to Competitors
Agree Recognition Level – Faraday® Challenge

Branding on Faraday® Challenge materials:
- Student Notebook [1]
- Teacher Handbooks
- How to Guides [2]
- Email Signature
- Social Media [4]
- Promotional Materials
- IET Education Website

Branding at Faraday® Challenge Days:
- Banners [5]
- Certificates [3]
- PowerPoint Slides
- Give-aways
- Bespoke award

Branding at Faraday® Challenge Final:
- All from regional events
- Highlights video

Direct involvement in the programme:
- Bespoke Annual Theme
- Host a Challenge Day
- Volunteer at Events
- Present Awards to Competitors
- VIP Tickets to Finals
Agree Recognition Level - Education Resources

Naming rights to resources theme [1]
Social media exposure [3]

[1] Platinum Jubilee Resources

Jubilee activities in lower and upper school. Please find the attached resources to celebrate the national jubilee party. The main party themes are pizza and homemade baking. All the resources are available on the IET Education website.

Pizza extra
Homemade baking
Maths tea party


Branding on IET Education website [4]

Thank you to our IET Education sponsors

Sage
Bosch
Bechtel
Disney
Siemens Gamesa
Agree Recognition Level - Teacher Membership

Bespoke letter to funded teacher
Social media exposure [2]

Branding on IET Teacher Membership Webpage [1]
Achieve organisations CSR requirements

[1] Thank you to our IET Education sponsors

[2] IET Education #ETFestivities - Dec 20
“Education to work confidence. Confidence to work hope. Hope to work peace.” Confucius, one of the greatest philosophers. Encourage confidence in this year’s schoolkids using our free educational content. www.etf.csem/education 科技与教育 #ConfuciusDay #TeacherDay
Thank you for considering our offering

Join our cohort of supporters and be a part of our mission to engineer a better world