SIEMENS

Siemens Case Study

'Working together to build a better future in engineering careers'



Siemens has been a corporate member of EngineeringUK for over 10 years. We interviewed their UK Education Development Manager, Brenda Yearsley, who shared how Siemens is building enthusiasm, engagement and encouragement to help young people pursue careers in engineering.



Brenda is responsible for the national Siemens Education portfolio, working with stakeholders to attract, encourage and engage young people into choosing STEM and sustainability curriculum options and careers in engineering/

technology. She sits on the EngineeringUK Business and Industry Panel, BiTC Curriculum Taskforce, Northern Powerhouse Education & Skills Committee, MTA Education and Technical Committee and Awarding Body Strategic Advisory Boards.





About Siemens

'Shape the next-generation'

Siemens' vision for this year and beyond is to transform the everyday and inspire the next generation. Our digital equipment and software, renewable energy, network infrastructure and healthcare solutions show young people the possibilities and great things we can achieve in the world through engineering. As an employer we are passionate about encouraging young people to pursue a career across the breadth of technology and engineering with real-life examples, outreach programmes and activities and volunteering in schools. We want to build and provide rewarding careers, skills and experiences in engineering to transform and improve their lives.

www.siemens.co.uk

How does Siemens promote STEM engagement and education outreach?

The skills gap is still a core issue in engineering careers, we believe it's far more beneficial for companies to collaborate on STEM and education outreach to provide quality and sustainable programmes for young people. We are passionate about showcasing the variety of exciting engineering careers that are available and bring engineering to life by demonstrating what engineers do day-to-day. At the heart of our strategy, we build enthusiasm and engagement with young people to encourage them to have a career in engineering. We invest in STEM and education outreach by having a number of programmes and focusing on 4 main areas.

Inspiring future talent and improving skills

Siemens provides a host of resources and initiatives to help young people understand the different types of engineering careers that are available. We also deliver a range of training programmes providing opportunities and experiences to learn - online, on the job and in the classroom. From virtual environments and online games, to projects, challenges and activities that can be completed at home, there is something for everyone. People learn in different ways so it's important that we continue to build and create a variety of content to reach and help others.

Supporting teachers and schools

We are a massive supporter of physical interaction and getting out and about in local schools. We have more than 700 UK STEM Ambassadors and we give staff a minimum of 2 days paid leave to participate in volunteering opportunities. Our employees volunteer in both primary and secondary schools throughout the year helping to show and explain what it is like to have a career in engineering and what engineers do in their jobs. By working with young people on a day-to-day basis and interacting with them we're able to understand how they make decisions about their career, what the key considerations are and what we can do to support them. We also produce engineering resources and content linked to the curriculum for teachers to adapt and use in their classrooms to deliver a richer learning experience.

Promoting equality, diversity and inclusion (EDI)

We want all young people to believe and see that a career in engineering can be for them. All of our projects focus on EDI and are designed to be accessible in a mixture of formats. We are committed to reaching out to underrepresented groups and adapting how we engage with them and providing more opportunities for them. We have made great strides in breaking

down some of the barriers to entry by improving our recruitment process to make it more accessible, using videos to make our programmes more personable and showcasing the many diverse personalities, faces and groups in our organisation.

Growing and adapting to meet future needs

As an organisation it's important that we continue to adapt and grow, to provide high impact and high value throughout everything we do. The level of new and emerging skills that are required to do a job in engineering is changing. We want to be at the forefront of anticipating and understanding these skills and future roles not only to help young people find entry level positions but also to help our employees develop their own careers. It's important that we create equal opportunities across the spectrum of engineering careers regardless of background, age or gender.

How does Siemens deliver inspiring outreach activities?

We offer a range of programmes to inspire and show young people how rewarding a career in engineering can be. Some of our programmes include:

Siemens' online activities – interactive games, magazine and puzzles for young people to learn more about how the digital revolution is providing solutions for the present and paving the way for the future.

SeeMe – an interactive, curriculum-linked show which celebrates cultural, ethnic, sexual, gender and ability diversity within the STEM community. The programme also discusses stereotypes/misconceptions and explores some of the perceived barriers to pursuing a STEM career.

Rollercoaster Challenge – an annual school-based challenge that highlights our engineering and technology expertise in a context familiar to young people - rollercoasters!

SustainaCity – a racer event project for students to work in hybrid teams to design a sustainable transport network through a fictitious smart city.

Solid Edge Student Edition/NX Student Edition – a free, professional 3D CAD software for students to build key skills and prepare for the world of work.

www.siemens.co.uk/education



Why did Siemens decide to become a corporate member?

We started working with EngineeringUK to focus on engineering skills, there was a shortage of traditional skills and issues with quality and quantity. We believed we could have a greater impact on the skills agenda if we partnered with a like-minded organisation. Over the years, we have combined our efforts and influence in shaping key policy and investment that the UK needs to be successful. Our shared mutual application and focus has enabled us to drive the skills agenda and have a direct impact on inspiring the next generation.

A lot of the programmes we have developed and collaborated on together have not only been focused on the skills agenda but also promoting equality, diversity and inclusion in engineering. By being a corporate member, we've been able to discuss key challenges about how to convey what engineering is all about, the variety of engineering careers that exist and how to showcase diverse and positive role models in engineering to young people.

The world of STEM is changing and evolving quite rapidly and we believe the skills agenda is a shared endeavour for all organisations. Through building a cross industry network and partnership with EngineeringUK we're able to work with other organisations from various sectors that we wouldn't typically engage with. Having access to a shared and open knowledge bank through the Business and Industry Panel meetings as well as regional support from our dedicated Business Partnership Manager has strengthened our reach and impact.

'EngineeringUK is the leading national organisation promoting STEM careers to young people in the UK and as such Siemens has supported many of their programmes over the years. EngineeringUK has made great strides in stimulating young peoples' interest in STEM curriculum subjects across all age groups, supporting the increase and quality of Siemens' entry level pipeline.'

How does Siemens work in partnership with EngineeringUK through corporate membership?

Siemens has worked with EngineeringUK on a range of initiatives to inspire the next generation and raise the awareness of engineering careers. These have included face-face to programmes, virtual work experience opportunities and providing volunteers for various activities and careers events. In addition to building strategic alliances, sharing best practice and insights to help us overcome key challenges in engineering.

Providing STEM outreach opportunities to inspire the next generation

The Big Bang

We have supported The Big Bang UK Scientists & Engineers Fair for many years. It highlights the extensive opportunities STEM brings for future careers and is created using a range of industry partners, so the impact is wider compared to other events. Our attendance is noted and complimented on by our supply chain, strengthening customer relationships. The Big Bang is a great opportunity for our staff to volunteer to host the stand or attend with their own families. Practical and interactive, it is a great medium to get our message across about Siemens' innovation and credibility in the field of education business links.

I'm an Engineer, Stay at Home

The recent 'I'm an Engineer, Stay at Home' virtual event gave young people interested in working in engineering and technology an opportunity to hear about the exciting careers and pathways available. A number of our volunteers got involved with the programme to share their expertise and experiences with young people and answer all of their burning questions.

The Tomorrow's Engineers Code

We are a proud signatory of The Code, which is a commitment to work toward common goals to increase the diversity and number of young people entering engineering careers. As a Signatory, we're working with EngineeringUK and other organisations in The Code Community to improve the quality, inclusivity, targeting and reach of activities designed to inspire young people.

Building strategic networks, insights and best practice

Collaboration and support

Through the EngineeringUK Skills Partnership network we are able to collaborate with a range of organisations on a variety of STEM engagement initiatives. By working with EngineeringUK to identify new opportunities from digital events, virtual work experience programmes to online tools, we have been able to build a diverse and inclusive talent pipeline for Siemens. In addition to increasing our interactions with young people and achieving economies of scale.

Insights and impact

Our relationship with EngineeringUK has given us collective impact, enabling us to raise our profile within the engineering community, providing opportunities to network with peers and to speak at events. We sit on the Business and Industry Panel which meets quarterly. The Panel provides access to industry peers and expert speakers, opportunity to engage at a strategic level informing EngineeringUK's research, policy, and practice and to participate in a rolling programme of events.

Good practice sharing

As a corporate member we consistently share best practice, ideas and learnings with other members in the Skills Partnership. It's important to discuss what works, what doesn't and how to make the necessary improvements and adjustments. By being open and transparent we have been able to make a real difference that brings about real change. We all have our part to play in closing the skills gap which is why we work in partnership with other organisations to understand what type of careers content and opportunities will resonate with young people and future employees.





Join the Skills Partnership

As a corporate member you can get exclusive access to:

- Evidence based research, insights and advice on key issues and developments in UK engineering
- Bespoke strategic support to shape and define a diverse STEM outreach programme
- Greater voice and representation in UK engineering to policy makers and education institutions
- Networking opportunities with like-minded organisations to build long-term relationships at member events

Become a member today

Inspire the next generation in STEM like **Siemens by joining the EngineeringUK Skills** Partnership. Get in touch to find out how we can support and work with your business.



