“Girls into Electronics”: A Success based on Partnerships

Tomorrow’s Engineers Live
Lightning Talk
5th Feb 2024

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Founded in 2010, the UKESF is the only STEM organisation in the UK solely focused on Electronics. We are a charity, and our purpose is to promote Electronics and semiconductors to young people and to encourage them to pursue study and careers in the industry.
Why “Girls into Electronics”? 

Electronic and electrical engineering

In 2020/21, there were 12,320 students studying electronic and electrical engineering in higher education, comprised of 6,980 undergraduate students (first degree and other undergraduate) along with 5,340 postgraduate students.

Undergraduate first degree entrants

Electronic and electrical engineering courses were the 2nd most popular choice for undergraduate degrees in engineering and technology in 2020/21, representing 15.8% of all engineering and technology entrants at this level. Of these:

- 13.5% were women
- 35.2% were from minority ethnic groups
- 8.8% had a known disability

- 13.0% were from low HE participation areas (POLAR 4 quintile 1)
- 56.2% were UK domiciled, 6.8% from EU countries and 37.1% from the rest of the World

FIGURE 55:

Characteristics of first year undergraduate degree entrants, 2020/21

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Women</th>
<th>Minority Ethnic Groups</th>
<th>Known Disability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>13.5%</td>
<td>35.2%</td>
<td>8.8%</td>
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<tr>
<td></td>
<td>45.2%</td>
<td>27.9%</td>
<td>15.1%</td>
</tr>
</tbody>
</table>

FIGURE 56:

Background characteristics of first year undergraduate degree entrants on electronic and electrical engineering courses, 2020/21

a) By HE participation quintile (POLAR4)

b) By place of usual residence

<table>
<thead>
<tr>
<th>HE Participation Quintile</th>
<th>% of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>13.0%</td>
</tr>
<tr>
<td>2</td>
<td>15.5%</td>
</tr>
<tr>
<td>3</td>
<td>19.1%</td>
</tr>
<tr>
<td>4</td>
<td>23.5%</td>
</tr>
<tr>
<td>5</td>
<td>28.9%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Place of Usual Residence</th>
<th>% of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>56.2%</td>
</tr>
<tr>
<td>EU</td>
<td>37.1%</td>
</tr>
<tr>
<td>Rest of World</td>
<td>6.8%</td>
</tr>
</tbody>
</table>

Source: HESA student record system (SERS)
Note: Ethnicity is only recorded for non-white students, others are excluded from the analysis.
Girls in Electronics

Event Agenda – single day/non residential

Aim to answer 3 questions:

- What is Electronics?
- What is it like to study Electronics/Engineering at university?
- What is like working as an Engineer in the Electronics sector?

During the day hear from female engineers and interns working at Electronics companies, and from female lecturers, researchers and students at the host university.

Ask questions and find out more about them and their work and studies.

An introduction to microcontrollers with the Grove Beginner Kit for Arduino.
Apple supports scheme to encourage more girls into electronics career

The tech giant is supporting the Girls Into Electronics programme alongside the UK Electronics Skills Foundation.

Martyn Landi  •  Friday 10 February 2023 15:55
“Electronics is a fundamental enabling technology that helps make our lives and societies better.

A strong Electronics and ‘deep tech’ industry is essential to the health of the UK economy but we know that the UK has a skills shortage in this critical sector. That’s why it’s great to see the work that the UKESF is doing encouraging more young people to pursue careers as Electronics Engineers.

In particular, their **Girls into Electronics initiative has the potential to make a real difference and it is something that I strongly support.**

As the only organisation linking schools, universities, students and industry to address Electronics skills, the UKESF is poised to be an important contributor to the long term success of the industry in the UK.”

**Chi Onwurah MP** Shadow Minister for Science, Research & Digital
Participants

- 405 from 116 Schools
  - Teachers = 42
  - POLAR4. 19% schools were in the lowest quintiles 1 & 2
- 25% would be First in Family to undertake HE.
- BAME = 43%

Feedback

“The course was so insightful and made me consider a sector which I hadn’t necessarily thought about before."
"It was amazing talking to so many inspirational women in Electronic Engineering and everyone was so friendly, especially because I didn’t know anyone there.”
Thank You

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