UK Electronics Skills Foundation

Annual Review 2021/22

"The UKESF Scholarship Scheme has quite literally changed my entire life… There could not be a better time to get involved with the Electronics industry than now, and there could not be a better way of doing so than through the UKESF."

Oana Lazar (Southampton/Siemens)
UKESF Scholar of the Year 2021

Contents

UKESF Scholar feedback

"Not only have I gained valuable experience, but the programme has made me feel like I'm a part of the UK Electronics industry and has opened my eyes to what I could achieve in the future"

About the UKESF

The UKESF's mission is to encourage more young people to study Electronics and to pursue careers in the sector.

671

students have received UKESF Scholarships since 2010

In the UK, the Electronics sector is big, valuable and growing; however, the demand for capable, employable graduates is currently outstripping supply. The UKESF is an educational charity, launched in 2010, with both public and private seed-corn funding. We operate collaboratively with major companies, leading universities and other organisations to tackle the skills shortage in the Electronics sector.

We ensure that more schoolchildren are aware of Electronics and the opportunities available, helping them to develop their interest through to university study. At university, we support undergraduates and prepare them for the workplace.

100%

of employers would recommend the UKESF

Registered charity number: SC043940
www.ukesf.org

Introduction

Neil Dickins, Chair

Stew and the entire UKESF team dealt admirably during the difficult 'COVID' times. They maintained a positive outlook, while finding appropriate areas of cost reduction that allowed the organisation to continue to operate. To paraphrase a well-known expression: they had the wisdom to focus on the things that they could change.

This meant that UKESF entered the 2021/22 financial year on a sound footing. As the statistics listed in this Annual Report show, Stew and the team have built on these foundations, growing the organisation's activities throughout a successful year.

Some highlights to note include: an increase of 25% in the number of companies participating in the Scholarship Scheme and a successful adaption of the Girls into Electronics offering.

This was the year that the Government at long, long, last recognised the importance of Electronics (specifically semiconductors) to the economy and our collective security. This affords UKESF the opportunity to raise its profile within Government, as a step toward generating additional funding. The ultimate goal is to offer educational materials to students throughout their secondary schooling journey (as per Electronics Everywhere at present). Helping to achieve this heightened status will be my personal priority in the coming year.

It has been a pleasure working with Stew and Pippa in my first year as the UKESF Chair. In the face of a stubbornly small budget, I have been hugely impressed by the whole team's ability to deliver the multiple meaningful programmes that are enriching students' experience of the world of electronics.

The Year at a Glance

95%
of Scholars who graduated in 2021 are working in the Electronics sector*

68
Scholarships awarded

604
"Insight into Electronics" kits sent out since July launch

10
new companies joined the UKESF Scholarship Scheme

26
leading UK universities for Electronics are UKESF partners

230
Girls into Electronics participants

559
more secondary schools provided with "Electronics Everywhere" resources

53
students applied for the DER Award

3,017
average number of unique website users per month

Scholar Destinations

Since 2010, **671** students have been awarded a UKESF Scholarship and **423** Scholars have graduated, **16%** of whom went on to undertake further study or research (PhD/MSc). Of those who have completed their studies, **92%** work in the Electronics and Technology sectors. **60%** of employed former Scholars work for a UKESF Sponsor Company.

*Number of graduated scholars who have entered employment, not including those in further education.

Executive Statement

Stew Edmondson, CEO

Welcome to our Annual Review for 2021/22. As we have all emerged rather hesitantly from the pandemic, I am very pleased to report that this has been a year of significantly increased activity for the UKESF.

At the political level there has been growing focus on the UK's semiconductor industry. This focus has been very welcome. We have seen increasing appreciation of the skills challenge, and this has resulted in greater awareness of the UKESF and more interest in our work.

Across every sub-discipline of the Electronics sector in the UK the search for engineering talent is intense and the demand for graduates is very high. Consequently, this has meant growing demand for our undergraduate Scholarship Scheme. I am delighted that this year we saw a record number of companies involved. The growth and success of the Scheme depends upon the relationship with our sponsor companies, so it is great to know that more employers are recognising the benefits of connecting with students through our Scheme.

With support from Innovate UK, and in collaboration with the Driving the Electric Revolution (DER) Challenge, we introduced a new award for first-year students to gain experience of Power Electronics, Machines & Drives. It was pleasing to see interest from undergraduates in PEMD was high and we received over 50 applications for the award.

Following a year's break due to the pandemic, in September we were able to hold our residential course for Scholars at York. Spending time with our scholars at the course is always a personal highlight for me and this year was exceptional. This professional skills workshop is a unique part of our UKESF programme. As ever, it was really inspiring to be with so many impressive and highly motivated young Electronics engineers again, full of energy, ideas and intellectual curiosity. The future is bright!

Another highlight was the TechWorks Awards Dinner in December at which we were able to celebrate, in person, with all the students and scholars who had won awards during the pandemic.

As a small charity, we rely heavily on the support of our non-executive directors. These volunteers provide me with wise counsel, sound advice and help ensure we are effectively governed. This year, long-time supporter of the UKESF Neil Dickins replaced Lynn Tomkins as Chair of the UKESF's board of Trustees. I offer Lynn my sincere thanks for all her service and unfailing support. She was one of the co-founders of the UKESF and diligently served as a director from more than a decade.

Last year, our Board was strengthened with the appointment of two new Trustees, and this year we have appointed two Board Observers. Joanna Taylor and Ricki Tura are both graduated UKESF Scholars. Joanna and Ricki will attend UKESF Board Meetings to observe the proceedings and participate without the duties and rights of Trustees/Directors. The UKESF now has a community of close to 400 graduated Scholars and the Board is keen to ensure that we maintain close relationships with this growing community. The Board Observers will contribute insight from their experience of the scholarship, as well as provide different perspectives to benefit the Board's discussions and help to inform the UKESF's strategic decisions.

The final highlight of a busy year to mention is "Girls into Electronics". With support from the CSA Catapult, we significantly scaled-up the project this year. Tackling the gender imbalance in Electronics is a key priority for the UKESF and we organised events hosted by 10 of our partner universities; these saw 230 girls participate. Along with our other programmes, like "Electronics Everywhere" we are expanding our work in schools and we will continue to do even more in 2022/23.

None of our activities would have been possible without the support of our many stakeholders. Therefore, I would once again like to extend my personal and heartfelt thanks to all those individuals and organisations with whom we have collaborated: our sponsors, partners, scholars, volunteer trustees and, of course, our hard-working team at the UKESF.

Highlights of the Year

Record growth for the Scholarship Scheme

We are delighted that 2021/22 was another incredibly successful year for our Scholarship Scheme. Scholarships were awarded by 38 companies, the highest ever number of companies to offer scholarships in a given year.

It is, therefore, reassuring to know that employer satisfaction remains exceptionally high. In a recent survey, 100% of respondents said that they would recommend the UKESF. Also:

- 91% said support from the UKESF was 'excellent' or 'good'
- 83% agreed that the UKESF is value for money
- 100% of new companies said joining the UKESF was straightforward

Written feedback included: "Keep up the brilliant job" and "UKESF are always responsive and helpful."

CELEBRATING 10 YEARS OF HELPING THE ELECTRONICS INDUSTRY

For the last decade the UK Electronics Skills Foundation has taken on the vital mission to encourage more young people to study Electronics and to pursue careers in the sector. An educational charity, the Foundation operates collaboratively with major companies, leading universities and other third-sector organisations to tackle the skills shortage in the Electronics sector.

Introduction by Indro Mukerjee, UKESF Chair (2010–21)

The UKESF was started as a project to do something practical to address the skills gap in the industry. The skills gap has been a well-known thing in the UK and much discussed, but doing is better than just discussing so the intention was to take a practical step of action. The aim was to create something which would work in practice, become relevant and be long lasting, which is why the term 'Foundation' was used in the name.

I'm very pleased and proud of what's been achieved over the last decade. The original aims have certainly been achieved. The Foundation works well in practice, and feedback that's been rigorously tracked from all stakeholders has been positive throughout. It's certainly relevant in the industry, very well connected with all parts of it and often consulted and involved by both industry and Government on skills matters.

How did it all start for the UKESF? "Many people in UK industry recognised that the UK had punched massively above its weight through the development of Electronics over its history. To continue that was going to depend on the industry attracting outstanding talent," says Derek Boyd, a Director and Trustee of the UKESF and a former CEO of NMI/TechWorks. Thus, the idea to establish the UK Electronics Skills Foundation (UKESF) was formed to meet the needs of NMI members and address the growing skills shortage in the UK Electronics sector.

Wendy Daniel, UKESF Programme Director (2010–15), was recruited to set up and run the UKESF. "Our first step was to put together a working group made up of representatives from industry, academia and the public sector to identify the root causes for this skills shortage and to design a programme of activities to address the issues," she says.

It was decided that the UKESF would create a Scholarship Scheme for university undergraduates, linking students with companies who would provide bursaries and work placements, alongside providing activities to promote Electronics and STEM for school-age children.

Securing start-up funding was aided considerably by Lynn Tomkins, a longstanding Director and now Chair of the UKESF. "I was aware that the concept would only fly if we could generate income specifically for the UKESF. Putting the business case to the Chair and CEO of SEMTA that UKESF was worthy of their financial investment was both a challenge and, when secured, a significant step. Importantly, this was pivotal in unlocking funding from the Department of Trade and Industry and then getting companies to provide backing."

Indro Mukerjee, co-founder and long-time Chair (2010–21) of the UKESF, remembers, "It took a lot of hard work and determination to get things going, but it was very satisfying when we were able to launch." This launch included partnerships with five universities and six companies, and an initial cohort of twenty Scholars.

Fast forward 10 years and the UKESF has grown considerably. It now partners with twenty-six leading universities right across the whole of the UK, and has well-established connections with more than seventy employers. The Foundation has directly supported over 600 students and, of those who have graduated, 91% are working for Electronics, Engineering or Technology companies. Importantly, the UKESF has created a range of educational activities across different Key Stages to inspire the next generation. Read on to find out more about what the UKESF has achieved and what it now offers young people in the UK.

GETTING MORE YOUNG PEOPLE INTO ELECTRONICS

Throughout its ten-year history, the UKESF has worked tirelessly to make sure that more schoolchildren, parents and teachers are aware of Electronics and the exciting opportunities available. With the support of its corporate sponsors – Arm, AWE, Dialog Semiconductor and Qualcomm – the UKESF has created a range of educational Electronics-focused activities for students of school age through to university, inspiring young people with hands-on experience and connecting them with major employers in the sector.

Electronics Everywhere

Teachers are so important in inspiring and motivating the next generation; therefore, the UKESF produced classroom sets of resources to help them teach the Electronics content of the Physics and Computer Science curricula at A-level. "Electronics Everywhere" is a collaboration, primarily with the University of Southampton, and the UKESF has invested in the training of teachers and provided sets of resources to over five hundred schools to date. This means it has helped around 10,000 pupils to understand the fundamental building blocks of Electronics.

"Having the devices on a PCB allows the learner to focus on changing parameters, taking values and getting a real understanding … No time is lost to fiddling with wires … This board is brilliant – I love it and know it is a fantastic piece of kit." Head of Physics at a school involved with "Electronics Everywhere".

Insight into Electronics

The latest project for schools from the UKESF is an exciting new initiative called "Insight into Electronics". It is a self-paced, interactive and free course that provides young people with a hands-on introduction to microcontrollers, Electronics and programming. This is a collaboration between the UKESF and Aston University, with support from the Scotland 5G Centre. The course is specifically designed for UK-based sixth formers and Key Stage 4 pupils (S3 in Scotland) interested in Engineering, Electronics and Computer Science. It provides a fascinating insight into the technologies, for those thinking about studying these subjects at college or university.

#TurnOnToElectronics

Technology is the future and technology depends upon Electronics. This is the key message of the UKESF's engaging and innovative media campaign "#TurnOnToElectronics" to raise awareness among young people about Electronics. Fronted by Gadget Show presenter Georgie Barrat, the campaign features a manifesto with guidance on how supporters can help, as well as a website aimed at inspiring young people with an original video, information on Electronics in the UK and profiles of graduate engineers. The campaign has garnered significant media coverage and the support of the Royal Academy of Engineering.

"Electronics Everywhere matters to me both personally and professionally … I am proud to support it and to promote the potential of the UK Electronics sector to a new generation." Prof Bashir al-Hashimi CBE FREng, Dean, Faculty of Natural, Mathematical & Engineering Sciences, King's College London, and UKESF Trustee

arm AWE dialog SEMICONDUCTOR Qualcomm

Pages 16–17 of the 08/09/21 edition of *Electronics Weekly*

Electronics Weekly Celebrated 10 Years of the UKESF

In September 2021 we were featured in an 8-page supplement in Electronics Weekly, celebrating 10 years of helping the Electronics industry. The supplement included the story of our creation in the words of the people who were there, an overview of our education activities and work to encourage more girls to get involved in the sector, as well as profiles of some of our high-achieving graduated Scholars. The supplement was supported by Mathys & Squire.

Girls into Electronics Participants at University of Sheffield

Girls into Electronics

In February 2022 we announced a significant scaling up of 'Girls into Electronics', enabled by a new partnership with the CSA Catapult. Building on the success of the 2021 virtual course, the new hybrid course offered an in-person day at a university, supported by the delivery of additional content online before and after the event. Participants had the option to attend one of ten events, hosted by our partner universities across the UK.

Girls into Electronics participant feedback

"Seeing all the possibilities of what you could do during an EEE degree seemed to spark that sense of awe that a child would feel walking through a huge toy shop for the first time in me"

In total, 230 female students between the ages of 15–18 attended 'Girls into Electronics'. This is almost a tenfold increase of the number of participants from previous years. The participants were given an in-depth insight into what it would be like to pursue higher education and a career in Electronics. The programme included a sample undergraduate lecture from a senior academic, opportunities to hear from current female students and scholars about their experiences, and a 'hands on' introduction session to learn about microcontrollers.

The events received fantastic feedback:

- 97% of participants rating the day as 'Good' or 'Excellent'
- 89% of participants said that they felt more enthused about Electronics after attending
- 84% of students who were not previously considering a career in Electronics, now are

Clare Gunning, HR Director, CSA Catapult

"CSA Catapult is so proud to have sponsored UKESF's Girls into Electronics Programme. The skills shortage in engineering has the potential to impede the UK's growth as a world leader, and we want to build greater diversity within our sector and have a positive impact. We're very proud to be part of the future workforce's pathway into electronics."

Activities & Partnerships

Schools

Electronics Everywhere

'Electronics Everywhere, a partnership with the University of Southampton, shows young people how engaging Electronics can be. We provide specially designed circuit boards to teach core Electronics concepts to A-level students in Physics (the Music Mixer) and Computer Science (the Logic & Arithmetic Kit), along with CPD for teachers, free to state schools.

Over the past year, we have distributed 485 kits which have been shared amongst 559 schools.

We will aim to distribute Electronics Everywhere to more schools in the forthcoming year.

> **Pete Colquhoun, Faculty Head of Science, Biggar High School**
>
> The music mixers are a fantastic resource for teaching capacitors and LEDS in the Electricity unit. They are easy to use, and they develop practical skills as well as enhancing knowledge of course content. I highly recommend them!

Insight into Electronics

In July 2021 we launched an exciting new initiative called 'Insight into Electronics', a collaboration between ourselves and Aston University, with support from the Scotland 5G Centre. The course is self-paced, interactive and free, and aims to provide young people with a flexible, hands-on introduction to microcontrollers, Electronics and programming. As well as an extensive guide and informative videos, participants also receive a free Grove Beginner Kit including an Arduino. We received an astounding response from keen students in Years 10-13, with over 650 sign-ups in the first week.

In total, 604 kits have been sent out. Because of extremely high demand, we shared 294 kits with individuals, and a further 310 kits were sent to teachers at 31 schools, where 590 students had signed up across these schools,

We have received excellent feedback from students who have received the kits:

- 89% of students said the online resources were either excellent or good
- 93% of students said the kit was either excellent or good in terms of use
- 88% of students said they felt more enthused by Electronics after using the kits

Insight into Electronics recipient feedback

"Truly thanks a lot for the Arduino, as it really helped me delve further into Electronics through the aid of the kit. I would otherwise normally not have been able to access such technology."

"It was a great starting point to Electronics and the resources provided were very helpful, especially as someone who had no experience with computers or Electronics before."

"I now want a career involving Electronics!"

We are delighted to have received additional funding from Imagination Technologies for 2022/23, and 600 more kits will be distributed to students in the forthcoming year.

Undergraduates

Diversity & Inclusion

We are committed to making Electronics inclusive and accessible, and this year we are pleased that 22% of our successful Scholars are female (compared with 17% of maths, engineering and computer science undergraduate entrants, OfS 2022).

Additionally, in March 2022, we shared a blog post by James, one of our Scholars, 'Thoughts on Promoting Inclusion in Electronics'. Read an extract below, or visit our website to read the full post.

James Mutumba, UKESF Scholar 2019–23 (Surrey/EDA Solutions), extract from 'Thoughts of Promoting Inclusion in Electronics' blog post

"Being a UKESF Scholar has given me the opportunity to reach out and create awareness about Electronics and STEM in general. Through my interactions with Black students as a STEM ambassador, and at the University of Surrey, one of the factors still hindering diversity in STEM is the lack of positive role models who share the same background as young people from minorities. In my view, this means that these young people from underrepresented groups aren't inspired into careers as they don't see others like them. This misconception, that these roles are not for them, creates a vicious circle."

UKESF Scholars at the 2021 TechWorks Awards & Gala Dinner with guest speaker Piers Linney (centre)

Scholarship Scheme

This year, 68 Scholarships were awarded to Electronics undergraduates at partner universities, up from 64 last year. All applicants were able to apply for up to four of the 38 leading companies in the Electronics and Engineering sectors offering our Scholarships. Each Scholarship includes a bursary, a paid summer work placement and a paid-for place at our residential workshop, among other benefits.

Louis Fairs, UKESF Scholar 2019–23 (Surrey/Chess Dynamics)

"My confidence and soft skills grew in ways that could never be trained at university, and my knowledge of the way an engineering company operates will prove very useful in my future career."

L–R: Neil Dickins (IC Resources), Oana Lazar, David Kong, Stew Edmondson (UKESF)

Scholar of the Year Award

Scholar of the Year 2021/22 was awarded to Oana Lazar (Southampton/Tessent Embedded Analytics, part of Siemens [formerly UltraSoC]) at the TechWorks Awards & Gala Dinner, London, with David Kong (Edinburgh/Onsemi) named runner-up. Kindly sponsored by IC Resources, the award celebrates Scholars who have made a significant contribution during their work placement and who have actively promoted Electronics to young people.

As well as exceeding expectations during her 12-month placement with Tessent Embedded Analytics, the Award judges applauded Oana's exceptional academic performance, her technical skills and her advocacy for women in engineering. She was Highly Commended for this Award in 2020 and named runner-up in our Automotive Electronics Competition the same year. She also received the first ever 'Southampton Hub Values Award', and has been put forward by Tessent's VP of Engineering, and Siemens' Senior Director of Portfolio Strategy, to represent Tessent for the Global Semiconductor Alliance's 'Female Up and Comer Award'. Oana is graduating in 2022 and will be joining Siemens DISW as a Software Engineer.

Oana Lazar, Scholar of the Year, 2021

"It is an absolute honour and a true pleasure to receive the 2021 UKESF Scholar of the Year Award. There could not be a better time to get involved with the Electronics industry than now, and there could not be a better way of doing so than through the UKESF. You never know which doors may open for you in the exciting, ever-changing, and revolutionary world of Electronics, taking the entire world in new directions."

Group exercises at the Scholar Workshop, 2021

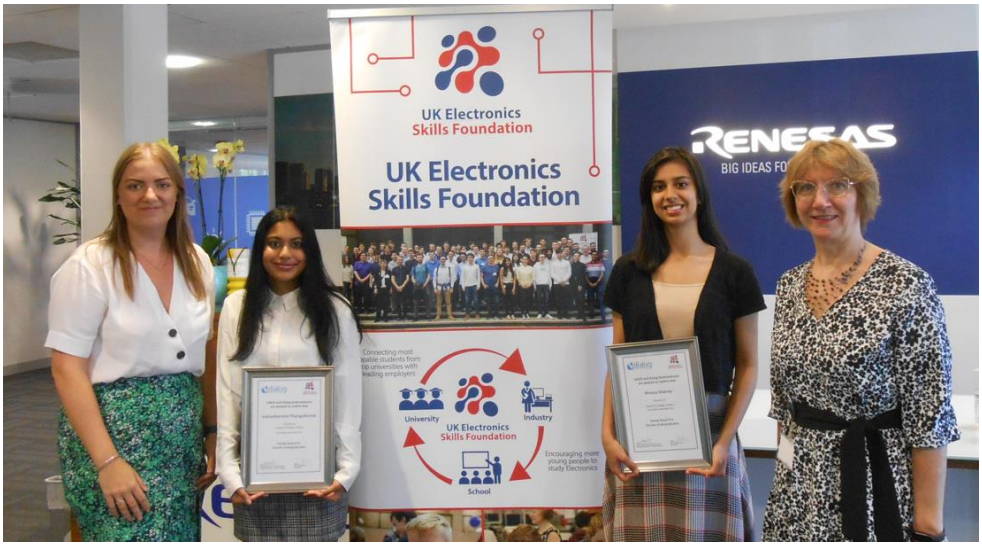
Scholar Workshop

Following a year's break due to the pandemic, our Scholar Workshop returned in September 2021 and was more successful than ever, with 98% of attendees rating it as 'Excellent'. Over 50 undergraduates from leading universities across the UK met at the University of York for four days of professional and personal development, which included hearing from a range of speakers, taking part in group exercises and networking with like-minded peers.

Feedback from 2021 Scholar Workshop attendees

"Fantastic week! Surpassed all expectations and it has changed the way I think about my career and the way I interact with the people around me."

"I really don't know how I can express how great and what an amazing opportunity this has been. I believe everyone will benefit from the work being done by the UKESF."



Indira Thanigaikumar (centre left) and Bhavya Sharma (centre right) on placement at Renesas

Renesas Award for Female Undergraduates

The Renesas Award for Female Undergraduates (previously known as the Dialog Award) is a collaboration with our corporate partner Renesas (formerly Dialog). This award recognises outstanding female undergraduates who are commencing the first year of their studies on Electronics-related degree courses.

The recipients will be supported with a bursary, a paid summer work placement at Renesas, and student membership of Women's Engineering Society (WES) for the duration of their degree.

The 2021 Award winners are Indira Thanigaikumar and Bhavya Sharma. Both Indira and Bhavya are studying at Imperial College London, and are completing their placement in Summer 2022.

The 2022 Award winners are Arkapriya De and Tianya Liang. Both Arkapriya and Tianya are studying at the University of Cambridge, and will be undertaking their placement in 2023.

Bhavya Sharma (Imperial College London), Renesas Award recipient 2021

"This award means a lot to me – it has not only boosted my confidence to pursue Electronics, but also provided an invaluable opportunity to gain a first-hand insight to the industry.

Thanks to the process technology team at Renesas, I've had a fabulous time gaining a detailed overview of all the different parts and processes to semiconductor technology."

L–R: Anna Buckley, UKESF Scholar, and James Taylor, Marcus Perrin and Emily Dale, DER Award winners at the Centre of Power Electronics Annual Conference

DER Undergraduate Award

In collaboration with Innovate UK and the Driving the Electric Revolution (DER) Challenge, the UKESF launched the DER Undergraduate Award. From 53 submissions, four outstanding students were awarded a bursary and a summer work placement with leading PEMD employers. Elaine Galloway from the University of Sheffield is undertaking a placement with Collins Aerospace, and Emily Dale from University of Manchester, James Taylor from Imperial College London and Marcus Perrin from the University of Sheffield are all completing placements with ZF Automotive.

The award holders also had the opportunity to celebrate their achievement the Centre of Power Electronics Annual Conference in Warwick in July 2022.

L–R: Trevor Gill (RCF), Patrick Hope, Max Rigby, Stew Edmondson (UKESF)

RF Engineering & Communications Competition

The competition, run in partnership with the Radio Communications Foundation (RCF) and with support from Leonardo, showcases the work of students at UKESF partner universities who are focusing on RF engineering and communications in their final year. The 2021 winner, Patrick Hope (UKESF Scholar, Surrey/R-P-R), was awarded at the TechWorks Awards & Gala Dinner, London, for his project titled 'STAR XL Flight Radio X-Band Transmitter', summarised on a poster for entry to the competition. Max Rigby (Loughborough/non-Scholar) was named runner-up for his project, 'A 3D Printed Anisotropic Superstrate for Circularly Polarised Satellite Antenna Arrays'.

Patrick Hope (Surry/R-P-R), RF Eng & Comms Competition winner

"I'm really pleased to have won the UKESF's RF Competition, especially against such strong competition. The UKESF provides great opportunities to showcase effort and achievements to the working world, and this prize is no different. Thank you also to R-P-R Ltd for their continued support of me as a UKESF Scholar."

BrightSparks Awards

Five UKESF Scholars were recognised in the 2022 BrightSparks Awards. The BrightSparks programme, run by Electronics Weekly in partnership with RS Grassroots, and supported by the UKESF, aims to highlight the brightest young Electronics Engineers in the UK.

L–R: Neil Dickins, Simon A Betts, David Kong, Oana Lazar, Nathan Ruttley (former UKESF Scholar), Nishika Chettry, Sharon Kudenko

The five Scholars who received the award, Simon A Betts, David Kong, Oana Lazar, Nishika Chettry and Sharon Kudenko, were invited to the IET in July 2022 to collect their award and celebrate their achievement.

WES Student Conference

For the sixth consecutive year, we supported our final-year female Scholars to attend the annual Women's Engineering Society (WES) Student Conference, which took place in November 2021. Places for our Scholars were kindly sponsored by Enigma People Solutions.

Hosted online over two days, the conference brought together students, academics and early career engineers to explore this years' theme of "Serving Society". Delegates had the opportunity to attend a number of insightful sessions, as well as network with peers.

UKESF Scholar and WES Student Conference 2021 delegate

"Events like the WES Conference are crucial for connecting women in STEM and helping build our confidence in our studies and the workplace, empowering us to make change from within the engineering industry, and leading the way for future female engineers."

Communications & Engagement

Online Presence

On the UKESF website, the average number of users per month increased by **412** compared to last year, taking the total to **3,017**, while the average number of page views per month has increased by **585**, rising to **9,290**.

We maintained our excellent newsletter response rates – our average newsletter open rate was **33%** (the average rate for the UK in 2021 was 19%), with an average click-through rate of **5.9%** (likewise, 1.7%).[1]

Over the course of the year, we gained **84** new Twitter followers, taking our total number to **975**, and sustained an average of 5,967 impressions per month.

On our LinkedIn company page, we gained **326** new followers, taking the total to **1,126**. We also gained **16** new Facebook followers, taking the total there to **376**.

1) *Source: getresponse.com/resources/reports/email-marketing-benchmarks.html*

Income & Expenditure

Income 2021/22 (2020/21)

Sponsorship, Grants and Donations – £76,807 (£34,422)
Scholarship Scheme (bursaries, management fees and workshop fees) – £337,250 (£263,650)
Total income = £414,057 (£298,072)

Expenditure 2021/22 (2020/21)

Charitable activity costs – £233,798 (£172,278)
Administration and support costs – £158,553 (£117,754)

With Thanks To…

The UKESF Steering Board and our Trustees:

> Prof Bashir Al-Hashimi CBE FREng, Rupert Baines, Dr Derek Boyd, Neil Dickins, Heather MacDonald and Dr Graeme Philp.
>
> As well as our Trustees who stepped down in 2021/22:
>
> Lynn Tomkins and Darren Race

All the Scholarship-sponsoring companies and all of our Partner Universities.

All the organisations that have supported our work and we have collaborated with:

> TechWorks, IC Resources, CSA Catapult, the Scotland 5G Centre, Imagination Technologies, Women's Engineering Society, Enigma People Solutions, Mathys & Squire, Skills 4 Ltd, ThinkEleven, The Radio Communications Foundation, The Smallpeice Trust, Cyber Security Associates, The IET, Kinnery, Rapid Electronics, Sugar NLP, Innovate UK and the DER Challenge Team

Special thanks to the following companies for their donations this year: Arm, AWE, Dialog Semiconductor, Embecosm and Qualcomm.

"Moving beyond talk about the skills shortage to take positive action is what the UKESF is all about."

Stew Edmondson, CEO, UKESF

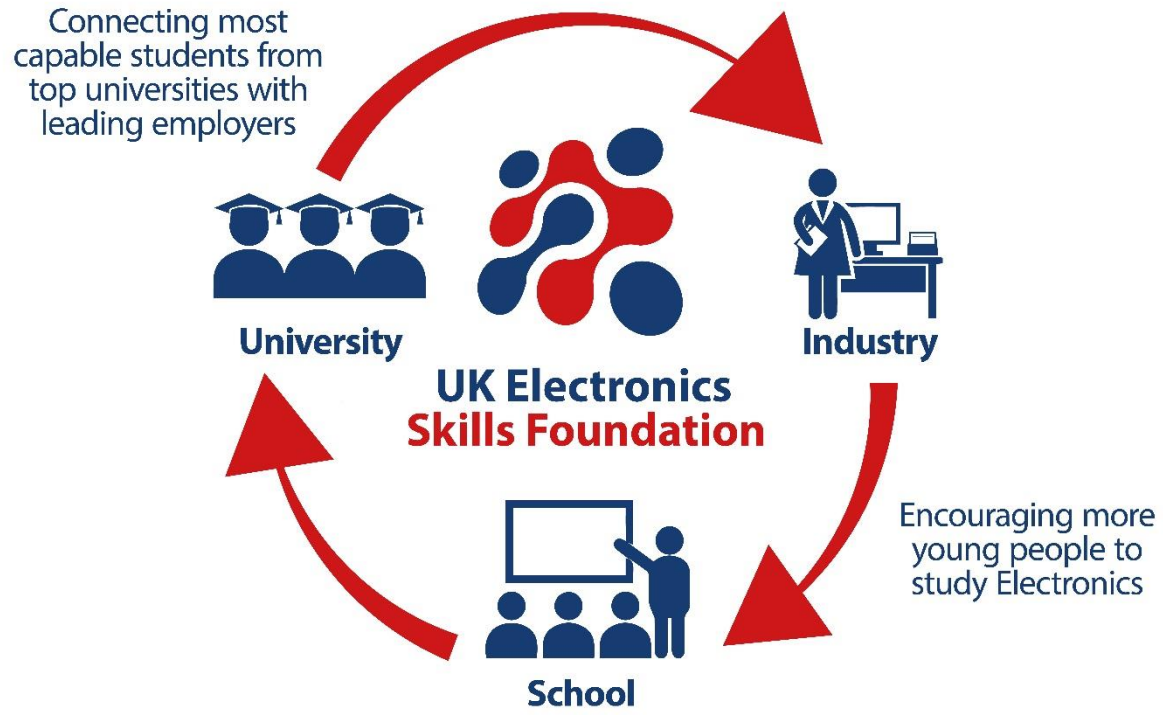
Our Strategic Priorities

The purpose of the UKESF is to tackle the skills shortage in a coherent way. Our aim is to:

> "**Encourage more young people to study Electronics and to pursue engineering careers in the sector.**"

To achieve the aim, we have four strategic priorities:

- Ensure more schoolchildren are **aware** of Electronics. Show these children, their parents and teachers that there are exciting and worthwhile careers available as designers and engineers in the Electronics sector.
- With our partners, provide opportunities for them to develop their **interest** in Electronics and engineering, through to university study and/or apprenticeship.
- At university, ensure that undergraduates are encouraged to pursue careers in the Electronics sector and they are supported in their professional **development** so when they graduate they are equipped with work-ready skills and experience.
- After graduation from university, we will help create a community of Electronics engineers to secure the future pipeline. We will **build relationships** and act as the representative voice for the sector on skills.



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