



EPC Bulletin | May 2020 | Twitter [@EngProfCouncil](https://twitter.com/EngProfCouncil)

The EPC has surveyed engineering departments and mapped their huge and varied contributions to the Covid-19 response, sharing the inspiring stories with the media. See 'EPC news' below...

We've been running a series of live-stream webcasts including Sir Mark Walport, Chief Executive of UKRI, in April and a panel of experts on 'Accreditation under lockdown' in May. Coming up next, Professor John Perkins CBE will deliver the EPC Presidents' Prize Address on Friday 5th June. See 'Upcoming events' below...

In the meantime, don't forget to join our [LinkedIn Engineering Academics Network](#) to discuss the disruptions facing engineering and the evolving solutions. See 'EPC news' below...

Also in this bulletin:

- What will happen to engineering if international student numbers plummet?
- EPC response to OfS's consultation on adopting new registration powers
- The upcoming EPC Congress 2020

EPC news

COVID-19: University engineers across the UK commit expertise and equipment to join coronavirus struggle

Thank you to our members who shared with us the many ways that universities across the UK have stepped up to beat coronavirus. We were grateful to receive responses from more than 50 separate engineering departments and we have showcased dozens of examples through a [press release](#) and a [members' resource](#) on the EPC website.

Through the EPC survey the phenomenal scale of the sector response has become clear as teams of university-based engineers across the UK have joined forces with colleagues, students, industrial partners and frontline clinical staff to support both local and national Covid-19 initiatives.

University engineering teams' contributions have ranged from developing augmented reality headsets to jump-start the manufacture of lifesaving ventilators, using drones to deliver medical supplies to island communities, adapting diving masks into medical equipment, and inventing a molecular test and smartphone app that can tell people if they have Covid-19 in just half an hour.

Alongside tremendous efforts from universities, engineering departments in particular have been at the forefront of the campaign against the pandemic, lending specialist equipment, resources and problem-solving skills. In fact, our research showed that 96% of engineers surveyed reported that they and their colleagues had volunteered their skills and resources, deploying their efforts in local communities and on a nationwide level.

For example, Swansea University engineers are leading a project using a blast of gas for rapid decontamination of ambulances, cutting cleaning time to under 20 minutes and minimising the risk to workers.

Ulster University engineers have been analysing call data from crisis helplines to show that distressed individuals are contacting crisis helplines for longer calls since the pandemic outbreak. This data is critical in showing the increased need for this helpline support while traditional face-to-face options remain unavailable.

At The University of Birmingham student engineers co-ordinated an online quarantine hackathon – Hack Quarantine – with over 2,500 technologists and scientists across five continents taking part. In the global initiative, participants around the world worked to invent solutions to problems created by the Coronavirus pandemic.

Meanwhile, many engineering departments have been collaborating to mass-produce hundreds of thousands of face shields and other PPE for NHS and other healthcare workers. The University of Hull alone produced and distributed over 21,000 and, by working with industrial partners, engineers at the University have increased output to over 70,000 per week – certified to the highest EU standards – to buoy up the national supply chain.

See the press release, photos, EPC President quotes and a media and members resource showcasing dozens of examples you provided on the [EPC website](#). And why not join those who have already taken to Twitter to share one another's achievements @EngProfCouncil?

WEBINAR SUCCESS: recordings now available

The EPC webinar series continues, with Professor John Perkins up next. Both webcasts to date have been a huge success attracting hundreds of you, our members. If you missed the live-stream webinar with [Sir Mark Walport](#), CEO of UKRI (who was originally to be headlining EPC Congress in April) or last week's '[Accreditation under lockdown](#)', you can access the recordings by following the links above.

DATA BLOG: How will the probable collapse in international student numbers as a result of coronavirus affect UK engineering departments?

We've crunched the numbers to produce a detailed [blog](#) addressing the dilemma of international enrolment through the engineering lens. We hope this will help you engage fully with the flurry of activity around the health of this year's international enrolments within your university.

ENGINEERING ACADEMICS' NETWORK

We'd like to remind you that we've brought forward part of our plan to launch the Engineering Academics' Network – a new initiative for EPC members to connect as individuals. Over the coming months, we will roll out the Network and a range of activities, but for now we invite you to join the

conversation on a group we have created for the Engineering Academics' Network on [LinkedIn](#) to discuss and share the key issues facing us all. The group is growing fast and EPC members are welcome to join, to comment and to share their own news, ideas or concerns.

CONSULTATION RESPONSES: REF timetable and OfS extension of powers

On behalf of members, the EPC's Research, Innovation and Knowledge Transfer Committee responded to the REF team's survey on [changes to the REF2021 timetable](#) as a result of Covid19. After canvassing members' views and careful consideration by the Committee, out of the proposed options, the EPC's preference was for a single revised REF submission deadline, by 31 March 2021, and to keep 31 July 2020 in place as the end of the assessment period for impact. We also argued for a case-by-case mitigation route for individual, affected case studies that have been delayed past this point. The full response is on the [EPC website](#).

Meanwhile, the [OfS launched a consultation on the integrity and stability of the English higher education sector](#) which allowed a relatively short response time. As a result, EPC executive provided a robust response, in consultation with the Board, disagreeing to the proposed introduction of a new ongoing condition of registration and associated changes to the OfS's regulatory framework. This new condition would extend OfS's powers, particularly as they relate to admissions. We disagreed because the Board felt that:

- The new ongoing condition of registration is unnecessary;
- The new ongoing condition of registration is overreaching;
- It is unreasonable to ask an individual institution to avoid damaging the sector as a whole when individual institutions are not responsible for effects that rely on behaviour outside their individual control;
- The student number cap may seriously disadvantage recruiting universities anyway; and
- Any implementation which imposes retrospective control over activities that took place prior to the announcement of the new powers is inappropriate and unprecedented.

The full response is on the [EPC website](#).

You can read EPC Protocol for Consultations [here](#).

Upcoming events

EPC WEBCAST SERIES: The EPC Presidents' Prize Address, Friday 5th June 2020, 12.00-13.00.

Every two years, the EPC honours an individual who has made an outstanding contribution to engineering education and academia and this year the President, Professor Colin Turner, has invited Professor John Perkins CBE to receive the award and deliver an address as a live webcast. All EPC members are warmly invited to attend.

Prof Perkins's address will consider 'Engineering skills for the future', a subject on which he might reasonably be called the nation's leading expert. It was the focus of his influential 2013 report for the Government (when he was scientific adviser to the Department for Business, Innovation and Skills). This was revisited in a follow-up paper, published last year. He was also the inaugural chair of the EPC/IET initiative 'New Approaches to Engineering Education', which has been driving

innovation in student experience since 2017, and he will report on some of its landmark achievements.

This address will be an unmissable event for engineering academics at all levels, particularly those with an interest in teaching, learning and employability as it will outline the strategic and practical challenges facing our discipline and the ways in which we can rise to meet those challenges. Attendees will have an opportunity to question Professor Perkins.

This event will be free and is open exclusively to academic staff working in member institutions of the Engineering Professors' Council and to selected guests. [Registration](#) is essential so that we can send you joining instructions.

EPC EVENT: Annual Congress 2020 - Industry & Academia: Supercharging the Crucible, 7th to 9th September 2020

The EPC Annual Congress – 'Industry & Academia: Supercharging the Crucible' is scheduled to take place from Monday 7th to Wednesday 9th September 2020. The venue (Sheffield Hallam University) remains the same, as does the generous support of our sponsors – SHU's Materials & Research Institute and the IET.

[Book your tickets](#) risk-free by opting to pay by invoice and it won't be payable until 7th August when a final decision on the viability of going ahead with the event will be made.

The list of speakers is among the best we've ever offered – headlined by Lord Kerslake, former Head of the Civil Service and now Chair of the Civic Universities Commission, who will address the universities role in communities.

We also have the entertaining and enlightening [Adam Hart-Davies](#) talking about what makes Britain great and, at the Congress dinner in Sheffield's famous Cutlers' Hall, Perrier Comedy Award winner [Simon Fanshawe OBE](#) will be discussing diversity.

More information and details of other speakers are available on the [EPC website](#).

OTHER ONLINE EVENTS: AdvanceHE Connect, How do we think about labs in an online context? 2nd June 2020

Colleagues and students are invited to come together to consider what we are learning about our courses and learning environments, and what changes we are making now that can and should be continued into the future, even after we all return to our buildings. An overview of the Pioneering Programmes and Practice in Engineering Education series is [here](#), as well as sign up instructions.

OTHER ONLINE EVENTS: Royal Academy of Engineering, 3rd June 2020, 11-12pm

The excellent engineering education and skills policy seminar series continues each Wednesday morning. A range of guest speakers will talk on a variety of topics. Next up, Dr Ruth Graham on the world's leading engineering universities. The registration link can be found [here](#).

OTHER EVENTS: EAEEIE 2020 Annual Conference, 10th to 13th February 2021

The 30th Annual Conference of the European Association for Education in Electrical and Information Engineering (EAEEIE) will be held in Prague, Czech Republic. Please note the change of date.

The conference will bring together lecturers, researchers and professionals in the field of Electrical and Information Engineering (EIE) all over Europe and outside, with the aim to exchange ideas and information and contribute to the development of EIE education. Short abstracts for full paper presentation at the conference can be submitted [here](#).

OTHER EVENTS: 1st International Conference on Science and Technology Education STE 2020, 15th to 16th October 2020

The 1st International Conference on Science and Technology Education STE 2020 will take place in Porto, Portugal. Please note the change of date.

The focus is on education in science and technology. The conference will provide an international forum for the sharing, dissemination and discussion of research, experience and perspectives across a wide range of teaching and learning issues. Further information is available on the [conference web site](#).

In the news

UNIVERSITY BAILOUT PACKAGE

In the coming weeks, the EPC will be responding to the Government's range of measures to protect students and the higher education sector from the impact of coronavirus. Please watch this space for more information on how you can get involved or contact s.fowler@epc.ac.uk.

In the meantime, we have provided a [summary](#) of the Government's range of measures to protect students and the higher education sector from the impact of coronavirus, together with some useful links to further information.

UCAS: Clearing Plus

More information on UCAS Clearing Plus, which is being launched alongside the bailout package, has been [revealed](#) this week. There are initial concerns that the methodology used will reinforce existing patterns of acceptances, which is bad news for women in engineering. We're advised that providers can define the students they want to reach, including targeting by measures of disadvantage. It's not yet clear if this includes gender.

With the contract between universities and UCAS potentially making its way into the remit of the OfS under the new powers about which they've consulted during recent weeks, this may be an important issue to watch. The EPC will be doing so.

Consultations

UK PARLIAMENT SCIENCE AND TECHNOLOGY COMMITTEE: inquiry into UK Science, Research and Technology Capability and Influence in Global Disease Outbreaks

Once the COVID-19 pandemic has passed its peak, the Science and Technology Committee will inquire formally into the place of UK research, science and technology in the national and global response, and what lessons should be learned for the future. The consultation touches upon the engineering departments' EPC Covid-19 survey responses. Please [contact us](#) if you feel that there are issues that the EPC should raise.

UK PARLIAMENT SCIENCE AND TECHNOLOGY COMMITTEE: inquiry into a new UK research funding agency

The House of Commons Science and Technology Committee will inquire formally into the nature and purpose of the new UK research funding agency to provide a new approach to funding emerging fields of research and technology “broadly modelled” on the US ARPA. The March 2020 Budget stated that the Government would “invest at least £800 million” in this “blue skies” funding agency, which would fund “high risk, high reward science”.

The Committee is seeking written submissions by Tuesday 30 June to inform the Government’s thinking behind the nature and purpose of ARPA and how it fits into the existing research and innovation ecosystem. The EPC is considering its approach to this consultation and would be grateful for members’ thoughts.

OFFICE FOR STUDENTS: Consultation on the higher education admissions system in England

This consultation is now paused but the EPC continues its work to assimilate the full detail to make it accessible to our members.

The OfS has outlined three options for possible future reform. The first two options are for all students to apply to university *after* they’ve got their grades or for universities to wait to make all their offers until exam results are in. The third is to keep the system as it is but with a few changes, such as getting rid of personal statements and references and increasing the amount of contextual offers that universities make.

The current social distancing limitations may have an urgent and lasting effect on university admissions and the scope of the consultation may change when it re-opens. The EPC will be conducting a full member consultation in due course.

You can read EPC’s Protocol for Consultations [here](#).

Opportunities

THIS IS ENGINEERING: This is Engineering Day 2020

The second This is Engineering Day will take place during Tomorrow’s Engineers week on Wednesday 4th November 2020. Following the huge support received for This is Engineering Day 2019, the Royal Academy of Engineering is calling on as many people as possible to get involved this year to help reach an even wider audience.

Under the theme of ‘Be The Difference’, they’ll be showcasing all the ways that engineering shapes the world for the better as we all continue to transform the image of engineering. We want to show more young people, from all backgrounds, what a difference they can make if they choose engineering.

If you’re an engineer, work for an engineering organisation, or in any way benefit from engineering, please get in touch with [the team](#) to discuss how you can support the day.

THIS IS ENGINEERING: Image Pledge

As part of the Royal Academy of Engineering-led campaign to alter the public perception of Engineering, an ‘image pledge’ has been developed in order to help create a more positive and

diverse visual representation of engineers on internet search engines. The EPC and its members are invited to commit to this campaign by signing the Royal Academy of Engineering image pledge to make engineering more representative of the society it serves.

To offer guidance on how to make good images of engineering more visible online, the Royal Academy of Engineering have created a helpful 'how to' guide. You can also help by sharing your more representative images of engineers and engineering.

You'll find more detail on the [Royal Academy of Engineering website](#).



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