



## EPC Bulletin | February 2021 | Twitter [@EngProfCouncil](https://twitter.com/EngProfCouncil)

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EPC is gearing up for yet another busy year in remote circumstances amid the continuing global pandemic.

Already this year we've bought you two online events, have been busy with a flurry of consultations and we're working on multiple research projects which are due to be published soon.

Sir Michael Barber, Chair of the Office for Students, launched our 2021 online seminar series with 'Emerging stronger', a look at what have we learned about learning under lockdown and how we can we use the experience of trying to deliver high-quality engineering degree programmes to strengthen our teaching in future. February's live-only webcast walked us through security-mindedness in academic research with contributions from Research England and government security advisors.

Finally, we bring you news of a purposeful change of approach to Congress 2021 to reflect our extended physical limitations: our Congress theme of *A Better World* will now stretch over two years, through a series of online events with high-profile speakers (watch this space) through Summer 2021 with a live face-to-face Annual Congress in 2022, to be held at UWE.

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## EPC news

### **EPC LIVE WEBCAST: Emerging stronger**

Sir Michael Barber, Chair of the Office for Students, launched our 2021 seminar series in January as we asked how we could use the experience of trying to deliver high-quality engineering degree programmes to strengthen our teaching in future. The webcast explored the findings published by the EPC in August 2020 entitled [Emerging Stronger: Lasting Impact from Crisis Innovation](#), edited by Prof Bev Gibbs and Dr Gary C Wood. The lessons of Emerging Stronger have already been fed into OfS's review to the Government a review of digital learning. Great timing too, as just a few days before Sir Michael was [commissioned](#) to conduct a review of government delivery to "ensure it remains focused, effective and efficient".

### **EPC LIVE-ONLY WEBCAST: Trusted research: how secure is your research?**

February bought us this live-only webinar reflecting themes raised by our recent guest blog on the [EPC website](#) to support academics to balance the opportunities of international research

collaboration with the security risks connected with intellectual property, sensitive research and personal information.

This is a big deal which has since hit the mainstream [media](#), with almost 200 British academics apparently being investigated on suspicion of unwittingly transferring world-leading research in advanced military technology such as aircraft, missile designs and cyberweapons to China. The individual academics could face a maximum of ten years in prison if found in breach of the Export Control Order 2008.

A recent academic [report](#) has also outlined how UK universities are unintentionally generating research that is sponsored by and may be of use to China's military, unaware of a possible dual use that might lead to a contribution to China's military industries. It is claimed that much of the research in which China is involved on the production of Weapons of Mass Destruction (including intercontinental ballistic as well as hypersonic missiles) is entirely based at UK universities, while other research outputs include cooperation with researchers in China, often at the military-linked universities or companies sponsoring UK research centres.

Introduced by David Sweeney, Executive Chair of UKRI, the EPC webinar explored how engineering underpins critical infrastructure and the development of sensitive technologies. The very design and construction and operation is these days likely to involve [digital engineering](#), open data initiatives, advanced manufacturing processes, intelligent transport systems and [smart city](#) initiatives all of which can be done in a security-minded way.

Our expert speakers included government security advisors who appeared anonymously. They highlighted the range of malicious threats – whether from hostile regimes, terrorists or criminals – facing academia and the public and private sectors and the vulnerabilities that can be mitigated by forethought and proportionate countermeasures that enable, rather than inhibit, the desired innovation. The webcast concluded with a [Trusted Research](#) briefing on securing the integrity of the system of international research collaboration, vital to the continued success of the UK's research and innovation sector.

A [summary](#) of the disclosable parts of the webinar, plus key links to help academics manage risks appropriately, is available on the [EPC website](#) (together with recordings of other recent events).

### **EPC INFLUENCE: Accreditation**

In early January, we contributed to a discussion [convened](#) by QAA between a range of professional, statutory, and regulatory bodies (PSRBs) and universities minister Michelle Donelan. The EPC raised concerns around the impact of the pandemic on:

- short-notice arrangements for students to complete their awards, including the format of assessments;
- confusion about the value of accredited degrees; and
- the availability of placements and the related impact of this on students' ability to progress and complete their accredited qualifications.

A summary of the meeting, and feedback gathered in advance of that meeting, is on the [EPC website](#).

We understand that a number of members are particularly concerned about accreditation or the delivery and assessment of accredited programmes in the light of recent rule changes and OfS's change of emphasis in performance metrics. Please [contact us](#) if you want us to raise issues directly with the Engineering Council. We will also shortly be conducting a short survey of members to understand better the prevalence and impact of these concerns to inform ongoing discussions.

#### **REF 2021 PANEL: updated membership**

Congratulations to Prof Mark Sandler (Queen Mary University of London) who is the latest appointment to the Research Excellence Framework 2021 Engineering Sub panel 12 following the latest round of EPC nominations last year. Prof Sandler joins Prof Sarah Spurgeon (UCL), Prof Paul Conway (Loughborough University), Prof Jin Wang (Liverpool John Moores University) and Prof Rossi Setchi (Cardiff University) who were nominated by the EPC and appointed previously.

REF panel membership lists are publicly available to view on the [REF website](#).

#### **EPC INFLUENCE: Digital learning**

Another outcome of our '[Emerging Stronger](#)' report (see above) was that the EPC submitted detailed findings to a OfS call for evidence on digital learning that led to [Gravity Assist: Propelling higher education towards a brighter future](#). This newly published landmark review is by Sir Michael Barber who was commissioned specifically by the government.

We are grateful to Prof Bev Gibbs (one of the editors of *Emerging Stronger*) for her work drafting our contribution, which has been recognised by Sir Michael's review including a direct quotation from the EPC. Engineering also featured in the launch.

#### **ENGINEERING ETHICS**

Next month the EPC is due to launch a project, funded by the Royal Academy of Engineering, to produce a series of engineering ethics case study resources for use in engineering higher education. In advance of this, the RAEng is conducting a survey to gain a better understanding of what would be useful in this resource. To support their work, ours and yours, please complete the survey [here](#).

## **Upcoming events**

#### **EPC ONLINE EVENT: Congress 2021 – A Better World**

In recognition that the world is changing, we too have decided to change our approach to EPC Congress in 2021 and to bring you a timely theme – A Better World – focusing on ethics, sustainability and recovery. This theme is obviously huge and so we have decided to spread it across two years of activities including a series of three online live webcasts in June 2021, with high-profile speakers. The names have already been confirmed and will be announced soon.

Then from 6<sup>th</sup> to 8<sup>th</sup> June 2022, the EPC Congress will return to a physical format at UWE in Bristol – a great opportunity to meet and network with colleagues. Save the dates.

#### **EPC COMMUNITY ONLINE EVENT: Inclusivity in Engineering Education & Engineering Education Research? A Misnomer or Mismatch of Expectations? 11th March 2021, 1100-1300**

The UK and Ireland Engineering Education Research Network are pleased to invite you to their next Roundtable Discussion: Inclusion in Engineering Education - The Role of EER. The Event will take place on MS Teams.

Grounded in research conducted by the presenters, a number of key variables will be considered in the context of Engineering Education and EER including social class, mental health, gender and ethnicity. Each conversation will start with a 5-minute presentation and will raise a number of questions for discussion.

For tickets, please visit their [booking site](#).

## In the news

It has been a busy start to the year for HE policy and politics, despite the roll-out of a third UK lockdown at the start of the year – significantly impacting campus presence and face-to-face teaching and cancelling summer level 3 exams again this summer across all the UK nations.

After numerous delays, the government FE white paper has now been published, alongside an interim response to the Augar Review and the Pearce review of the TEF. Brief details are below, and the EPC has produced a helpful summary of these, and other policy developments, on the [EPC website](#).

### **SKILLS FOR JOBS: DfE White Paper**

Headlines from the White Paper have focused on the building of a new suite of level 4 and 5 qualifications on the foundations of T levels and IfATE's employer-led standards for higher apprenticeships. New kitemark standards will price out existing level 4 and 5 qualifications (such as BTECs) because they will no longer be eligible for funding.

### **AUGAR REVIEW OF POST-18 EDUCATION AND FUNDING: Government response**

The news is there is no news. This is an interim response while we await a consultation on further reforms to the higher education system ahead of the Comprehensive Spending Review later this year for the final picture. Crucially for engineering, the Government retains the option to lower fees while at the same time clearly signalling STEM as a labour market priority. The Teaching Grant letter supports this, announcing an £85 million increase to the amount allocated through the main "high-cost subject funding" method for high-cost and "strategically important" subjects, including engineering.

### **TEACHING EXCELLENCE FRAMEWORK: Pearce report and Government (holding) response**

Unsurprisingly, subject-level TEF has been abandoned, and the whole exercise will move from annually to every four or five years by 2022. Despite Pearce's recommendations, TEF will retain its name, lack of clear purpose, and three (renamed) 'award' levels, joined by a fourth sub-par level in a move that backs up the Government's OFSTED-esque [quality and standards agenda](#).

### **BREXIT: Turing, Horizon Europe and an International Education Strategy**

The Turing Scheme – a replacement for the Europe-wide Erasmus+ now that its door is closed following the UK's departure from the EU – was launched by Gavin Williamson earlier this month.

Alongside this, the government has updated its International Education Strategy with a commitment to increase the amount generated from education exports, such as fees and income from overseas students and English language teaching abroad, to £35 billion a year, and sustainably recruit at least 600,000 international students to the UK by 2030.

The EPC welcomes the enabling of the UK's participation in exchange as a springboard to wider international engagement in Europe and globally (especially when considered alongside the UK securing associate membership of Horizon Europe) but notes that the money set aside for worldwide Turing is no more than was distributed for EU-only Erasmus (despite higher likely costs) and is currently for one year only with no guarantee longer term.

### **PROFESSIONAL QUALIFICATIONS**

Is my professional title still valid in the EU? Will my combination of academic qualifications and professional experience still count post Brexit? What does the information on recognition of professional registration in the EU on the [Engineering Council website](#) mean for me? We've published a simplified version on the [EPC website](#) to help you decide.

### **ENGINEERING COUNCIL GUIDANCE: Covid-19, sustainability and ethics.**

The Engineering Council has now published updated [Covid 19 Information for HE Providers](#) (as well as updated guidance for PEIs). The key change is that they are now recommending virtual accreditation visits in light of the ongoing duration of the Covid situation. (They initially thought postponement might be the best option). They have also moved from an expectation that virtual visits will be followed up with on-campus visits to asking PEIs to make a judgement as to where they can or cannot confidentially accredit without a follow-up visit. Initial experience of virtual visits does suggest that they require more preparatory work for all participants, but it is now clear that postponements would be for a significant period which would cause problems for HEIs (i.e., in marketing programmes) and result in an unmanageable backlog of accreditation activity.

Meanwhile, Engineering Council [guidance for engineers on sustainability](#) has also been updated. The suite of guidance also includes guidance on ethics.

### **ACADEMIC SPIN-OUTS: Enterprise Hub**

The Royal Academy of Engineering has published a [report](#) on academic spin-outs. Just four universities – Oxford, Cambridge, Imperial and UCL – account for a third of UK spin-out companies, with all such companies raising £1.30 billion in investment in 2018.

## **Consultations**

### **OFFICE FOR STUDENTS: consultation on HE quality and standards**

Thank you to the many members who responded to the EPC's full member consultation on the Office for Students' consultation on regulating quality and standards in HE. The EPC survey showed that most members were critical of OfS's approach.

The EPC response highlighted engineering as a subject area where there is already a clearly defined set of standards – in terms of learning outcomes – governed across the UK by the Engineering Council and assured by Professional Engineering Institutions. We suggested that the OfS should focus its attention on standardising outcomes in those subjects where there are no PSRBs and where universities therefore have total control over both processes and outcomes. Otherwise, the OfS would need to give serious consideration to how it intends to tie in provider standards set within sector standards with professional body requirements without leading to contradictions, conflicts and burgeoning bureaucracy that would add nothing and undermine autonomy.

We also raised serious concerns over widening access and levelling up, in that by placing the onus on the provider to identify the additional support students need to successfully complete their course through their admissions processes, they render universities accountable for addressing the failings of education and social policy and educational delivery pre-higher education. We fear it will encourage HE institutions to avoid selecting students with lower prior attainment or any other circumstances that might hamper their earnings outcomes (such as socioeconomic disadvantage, ethnicity, gender, disability, etc).

The full response is available on the [EPC website](#). You can read the EPC Protocol for Consultations [here](#).

Although there is, as yet, no formal response from the OfS, the Government's intention to exert power over metricised HE "underperformance" permeates the policies of the day. Within these, the OfS is asked to roll questions of standalone modular provision into its thinking on the development of the quality regime.

### **POST-QUALIFICATIONS ADMISSIONS: DfE consultation**

The Department for Education has, as expected, launched a consultation on admissions, jumping on the PQA bandwagon already [crowded with proposals](#) outlined by the Office for Students, UCAS and UUK. The latest, DfE, consultation is aimed principally at when students receive and accept university offers (not the wider assessment, admission or policy agendas).

The consultation presents two options which are predicated on removing teacher predictions from the system altogether in favour of on exam results. The first, "post-qualification applications and offers", creates a longer application window by moving results dates forward to the end of July, and higher education term dates back to the first week of October. The second, "Pre-qualification applications with post-qualification offers and decisions" would mean applications being made during term-time (as now) but offers being made after results day.

DfE recognises that courses which require additional entrance tests, auditions and/or interviews will also need to be accommodated in either system, somehow (cue the consultation).

DfE's consultation runs until mid-May. The EPC is currently considering its response and will publish further information shortly.

Meanwhile, you can hear more about how PQA might affect the future of admissions in engineering by watching our timely (November) debate at the [EPC Recruitment and Admissions Forum Series](#) which asked *Entry Qualifications, where now?* with keynote speaker Helen Thorne MBE, Independent HE consultant – and until very recently the Director of External Relations at UCAS –

guiding EPC members through the changing nature of entry requirements and university offers, and potential implications for admissions reforms. Helen was joined by Dennis Sherwood of SilverBullet Machine, an acclaimed commentator on qualifications and predicted grades, and a panel of frontline sixth form and university experts.

You can access this and other EPC webinar recordings on the [EPC website](#). There is also an [EPC poster](#), based on your responses to last years' EPC members' Admissions Survey.

### **POSSIBLE FUTURE CONSULTATIONS: Office for Students (OfS) consultation on funding**

We are promised a consultation on “further reforms” to the higher education system in spring 2021. Also mooted as a consultation on funding, it may pick up on some of the missing in action proposals from Augar et al including the future of foundation years and reforms to student finance. “Other matters” are expected in it including minimum entry requirements. Hopefully all ahead of a final decision on quality and standards.

There are also Government promises of consultations on lifelong loan entitlement and future iterations of TEF. We're looking forward to a busy time digesting it all, gathering your thoughts and representing them.

## **Opportunities**

### **EPC COMMITTEE VACANCIES: Recruitment and Admissions Committee**

The work of the Engineering Professors' Council is delivered via its Committees and working groups. They each meet 2 or 3 times per year on a perpetual calendar to set out a programme of activities, including a draft dissemination programme and to steer and receive updates on the activities of their working groups and/or smaller task groups. In addition, they will provide reports to the EPC Executive Board on matters that have arisen in the policy arena and an update on progress with the agreed pro-active programme of activity.

The EPC Recruitment and Admissions Committee has vacancies for Committee members and it is also looking to appoint a new Vice Chair in keeping with our regular succession planning strategy (the Vice Chair will go on to assume the Chair). If you would like to discuss the work of the Committee, join the Committee, or nominate yourself, please contact the [EPC Executive](#) in the first instance.

### **VICE CHAIR: Research, Innovation and Knowledge Transfer Committee**

The EPC Research, Innovation and Knowledge Transfer Committee has a vacancy for a Vice Chair, following early appointment of the previous Vice Chair to Chair of the Committee. If you would like to discuss the work of the Committee, join the Committee, or nominate yourself, please contact [Andy Alderson](#) in the first instance.

### **VISITING PROFESSORS SCHEME: Royal Academy of Engineering**

The new round for [Royal Academy of Engineering Visiting Professors scheme](#) has now opened and will close on Thursday 1 April 2021 at 4pm.

This scheme supports the appointment of industrial engineers as Visiting Professors at UK universities. This industry-into-academia initiative aims to utilise the experience of the Visiting

Professor (with backgrounds as industrialists, entrepreneurs, consultants or innovators) to enhance teaching and learning as well as the employability and skills of UK engineering degree students while strengthening external partnerships with industry. Under the objectives of this scheme, senior industry practitioners participate in course development, face-to-face teaching and mentoring of engineering undergraduates at the host university for at least 12 days a year for three years. The Award provides the university with the support necessary for the attendance of a Visiting Professor to a maximum value of £10,000 per year over three years up to a maximum of £30,000 in total.

For more information, please visit the Royal Academy of Engineering's [Visiting Professors web page](#).

#### **VIRTUAL INTERNSHIP PROGRAM: student opportunities from Global Engineering Deans Council**

To respond to the significant decline in work-based learning opportunities caused by the COVID-19 pandemic, the GEDC has launched a Global Virtual Internship Program offering students of GEDC member institutions virtual internship opportunities at other member institutions and partner associations. Each institution is asked to maintain an approximate reciprocity between the number of students and opportunities they bring to the program (sic).

You need to [register](#) to access the program and add profile and opportunity details before publishing your student opportunity. Once completed, you can manage your opportunities and share all the available opportunities with students at your university. If you are not a GEDC member organisation, you may still participate in GVIP; please contact [info@global-virtual-internships.com](mailto:info@global-virtual-internships.com).



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