December 2017

Department for Education

Securing student success: risk-based regulation for teaching excellence, social mobility and informed choice in higher education

Written submission on behalf of the Engineering Professors' Council

Introduction

1. The Engineering Professors' Council (epc.ac.uk) represents the academic engineers in the UK, with 81 university engineering faculties as members comprising over 6,500 academic staff. All branches of engineering are represented within the membership.

2. Our primary purpose is to provide an influential voice and authoritative conduit through which engineering departments' interests can be represented to key audiences such as funders, influencers, employers, professional bodies and Government.

3. The Engineering Professors' Council (EPC) welcomes the opportunity to comment on the objectives and approach of the Office for Students.

4. While we support the new regulatory framework's commitment to act in the interests of students first and foremost, to take a risk-based and proportionate approach, and to prioritise widening access and supporting participation, the EPC's response takes the form of commentary on key areas about which the EPC Board has expressed reservations.

5. The EPC is unable to answer the full suite of questions contained in the online consultation and wish only to comment in relation to questions 1 and 4.

    a. Do you agree or disagree that these are the right risks for the OfS to prioritise?

    b. Would exploring alternative methods of assessment, including Grade Point Average (GPA), be something that the OfS should consider, alongside the work the sector is undertaking itself to agree sector-recognised standards?

6. In particular, the EPC has reservations around the risk that objective two may not be met (that all students, from all backgrounds, should receive a high-quality academic experience, and their qualifications hold their value over time in line with sector-recognised standard).

From all backgrounds

7. The EPC welcomes efforts to remove barriers to access to higher education, especially for the most deprived.

8. The EPC is committed to support to members in this area, in particular with our work on Degree Apprenticeships, which are likely to attract individuals from groups underrepresented elsewhere in higher education.

9. To this end, we believe that support for those underrepresented in HE should be directed at early careers education with sustained and incremental support regarding HE choices, including: impartial careers advice, investment in the recruitment and training of career advisors; CPD for teachers on educational pathways, particularly engineering. Higher education's interests and, more particularly those of students, may be served better by universities actively supporting a wider careers strategy than by seeking to operate a distinct, albeit compatible, access agenda.

10. Higher education has a significant role to play in continuing to provide high-quality, collaborative outreach with a focus on what works. However, there can and should be better consideration about how to capture and integrate the efforts of specific disciplines in this regard in the wider outreach landscape.

11. Engineering has a good record in attracting certain ethnic groups and students from less advantaged groups. Black & ethnic minorities represent 24%[1] of engineering & technology undergraduates.

12. The EPC would draw Government's attention to gender inequalities in engineering, which require focused, funded, evidence-based interventions. Women represent only 15% of engineering & technology undergraduates and just 6% of the engineering workforce.[2]

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[1] http://www.raeng.org.uk/inclusivecultures

[2] http://www.raeng.org.uk/inclusivecultures

13. We have previously steered Government to consider initiatives to tackle disadvantaged students' non-completion rates, not just widening access. The EPC therefore welcomes the Office for Student's focus on retention, in addition to recruitment, as well as recognising the value of student progression into rewarding employment.

14. The EPC fully endorses closer relationships between the higher education sector and the schools and further education systems in order to ensure better outcomes for both current and prospective students. These transition points and the relationships between sectors are critical, not least when it comes to widening access and successful participation. There is no single correct form that such relationships should take and while there should be requirements to establish positive relationships, onerous obligations on higher education institutions to conform to particular relationship models with schools is not justified by evidence.

15. The EPC would also urge OfS to support engineering awareness campaigns with advice for career advisors, students in schools and parents.

High-quality academic experience

16. The EPC notes that the OfS will use the teaching grant strategically, in line with Government priorities, and welcomes that supporting STEM as well as access and successful participation for the most under-represented and disadvantaged students, has been cited as a possible priority.

17. We do, however, believe that the Engineering sector is highly vulnerable to a lack of funding.

18. The EPC believes that the Government's Industrial Strategy depends on engineering and related disciplines, and that Government should invest in engineering in higher education that will lead to enhanced UK industry capability and competitiveness.

19. We agree that higher education must be responsive to employer and industry needs and support the OfS's role of addressing employer and student needs and expectations in the short, medium and long term by considering the skills gaps that exist today, and anticipating the demands of the future economy.

20. We have, in previous consultation responses, cited concerns about the future of engineering in Higher Education and the wider impact on society through research, innovation, skills shortages and economic impact.

21. A shortfall of engineering graduates is well documented, with EngineeringUK quoting a conservative estimated shortfall of 20,000 engineering graduates each year in the UK[3].

22. The EPC agrees that more engineers are needed to address the skills gap. The UK must provide the resources to increase the capacity and to plug the pipeline shortage, which, given the scale of the deficit, will involve at least some increase in the funding available.

23. We welcome that the majority of the teaching grant funding is used to support provision where the cost is greater than the amount received as tuition fee income because the course is costly to provide.

24. The EPC draws the regulator and Government's attention to the fact that, at present, engineering courses are typically cross-subsidised in universities by other degree programmes, international student fees and/or research funding.

25. While the high cost of engineering courses is nominally reflected in HEFCE price group funding, targeted allocations for very high cost STEM subjects currently include only Chemical engineering, Mineral, metallurgy and materials engineering (generally subject line H8).

26. The EPC recommends that targeted allocations be implemented for **all** engineering disciplines.

27. While the EPC supports measures to ensure value for money, we consider that the introduction of differential fees across disciplines would have a significantly deleterious impact on engineering delivery. Fees that would be high enough to reflect the true cost of such a strategically important discipline would be likely to damage recruitment efforts that require more support, not less. Such a policy would run counter to efforts to widen the participation or women, ethnic minorities and students from disadvantaged backgrounds in STEM in general and Engineering in particular.

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[3] http://www.engineeringuk.com/media/1355/enguk-report-2017.pdf

28. Any significant reduction in funding of Engineering Courses will have a detrimental effect on the quality of the students' learning and academic experience.

29. We agree that it is important that the OfS works with universities to add value for students, rather than just adding to the regulatory burden for all.

30. In particular, the EPC calls for the Government and the regulator to do more to incentivise embedding work-related and work-based learning into courses.

Qualifications hold their value over time in line with sector-recognised standard

31. The EPC welcomes that provider-level regulation will not be used to drive continuous improvement.

32. The EPC believes that the sector is responsible for setting standards so that qualifications hold their value over time. However, we do not support standardising of degree classifications.

33. Further, we question the Government and OfS's apparent assumption that grade inflation is an encouraged sector practice. Where grade inflation genuinely exists, it must be tackled. However, a distinction must be made between improved outcomes and clear evidence of grade inflation. There is growing professionalism in teaching and universities must not be penalised for the number of high-class degrees they award without further scrutiny.

34. We insist that institutional autonomy and academic freedom must be maintained and protected and agree that providers should be encouraged and enabled to innovate and determine their own approaches to deliver excellent outcomes.

35. We believe that autonomy and self-governance supports diversity, while standardisation diminishes diversity.

36. Universities are not, and must not become, homogenous institutions delivering a standard national curriculum. Individual curriculum specialisms and idiosyncrasies create a sector diversity akin to different locations and campus types, which students need and welcome and which should be celebrated.

37. Furthermore, diversity is essential for a broad and flexible talent pipeline; to support the needs of industry, it is imperative that all Engineering degrees, in particular, should not be the same.

38. Rather, the EPC calls for diversity with a core of standards. We need variety in UK HEIs, which is often linked to whole university recognition and reputation.

39. UK universities have built an international reputation for excellence by being responsive to the changing needs of students, employers, and wider society.

40. The high-quality international reputation of the UK sector is a huge selling point internationally. Any suggestion this is being diluted will hurt the profile of HE in all four nations, as well as the Industrial Strategy.

41. We are concerned that the regulator approach to mitigating the risk of inconsistent or declining standards at institution level will be addressed by an initial and general ongoing condition that will apply to all providers in the Approved categories. Rather, we support an approach based on governance and information, not punitive sanctions.

42. Engineering is already well regulated, despite a diverse range of specialisms, pathways and careers, and already supports an expectation of equivalency through accreditation and external examiners.

43. In engineering, we have a long-standing, well-respected set of national standards for professionals. This provides consistency and transferability across the sector.

44. Operating under Royal Charter, the Engineering Council is the UK regulatory body for the engineering profession, and sets and maintains internationally recognised standards of professional competence and ethics. These are set out in the UK Standard for Professional Engineering Competence (UK-SPEC).

45. The UK Standard for Professional Engineering Competence (UK-SPEC)[4] sets out the competence and commitment required for professional registration[5] as an Engineering Technician (EngTech), Incorporated Engineer (IEng) or Chartered Engineer (CEng). It also includes examples of activities

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4 http://www.engc.org.uk/ukspec

5 http://www.engc.org.uk/professional-registration/

that demonstrate the required competence and commitment. The requirements for the Accreditation of Higher Education Programmes (AHEP)[6] in engineering are set out in line with UK-SPEC. AHEP sets out the standard for degree accreditation. It also outlines the purpose and application process for universities that wish to secure or maintain accreditation of their programmes. The Approval of Qualifications and Apprenticeships Handbook (AQAH)[7] describes the approval process and required output standards for the purpose of technician registration (EngTech or ICT*Tech*).

46. Through the Engineering Council, the profession agrees the overall standards for each level of professional recognition, and individual institutions then apply these standards to their particular disciplines.

47. The quality assurance processes UK higher education has in Engineering are already world-class. The accreditation framework is additional to degree standards above the threshold (degree classifications) such that a student can have confidence that their qualification is of a recognised standard.

48. The Engineering accreditation framework is rigorous, external to the university, and already therefore a measure of objective reference. In addition, this is benchmarked internationally.

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6 http://www.engc.org.uk/ahep

7 http://www.engc.org.uk/standards-guidance/standards/approval-of-qualifications-and-apprenticeships-handbook-aqah/