



## The Engineering Professors' Council Engineering Enrolments Survey 2017

### Introduction

The EPC's Engineering Enrolments Survey (previously Early Enrolments Survey) is conducted annually. We aim to give our members a sense of the recruitment and enrolment experience in engineering across UK universities and help you to understand your position relative to the national position. What's more, our insight is available long before official enrolment (HESA) data and even before accepted applicant (UCAS) data becomes available for 2017/18.

The first-glimpse findings were launched at the Annual EPC Recruitment and Admissions Forum on 15<sup>th</sup> November 2017. This report summarises the findings.

### Methodology and response rate

We canvassed all members, via an online survey, for information on the total number of *new* enrolments (at both undergraduate and postgraduate level) this autumn – and the position relative to last year. A total of 57 responses were received.

We collected data at the level of HESA cost centre (plus four non-standard engineering subjects). This resulted in data coverage of 147 distinct engineering disciplines from the 57 respondents.

The makeup of our sample was broadly in line with last year demographically, with approximately 3 in 5 responses from non-Russell Group universities in both years.

For the first time this year, we collected data on gender; this information was provided for approximately half of our sample. We also collected data on attendance (full-time or part-time) which was available for approximately 40% of the data. Additionally, we collected information on Degree apprenticeships for the first time.

Throughout this report, our sample of university information is presented anonymously, with institutions identified only by their key demographics (e.g. mission group, region) to retain university confidentiality.

Due to the different data collection methods within the sector, we received some responses with distinct UK and EU breakdowns and some where the information was provided for the UK and EU collectively. We have not aggregated the distinct data to provide the most granular information possible – the charts below contain both sets of information.

## Headline findings

- There's no apparent collapse in EU students in advance of Brexit, but there is a detectable decline, borne most obviously by English universities.
- Women are better represented among engineering students that come from the EU than among those from the UK. Will Brexit damage efforts to achieve a better gender balance in engineering which is a major challenge for the sector?
- Russell Group growth in undergraduate Engineering is mirrored by non-Russell group decline.
- The gender balance is better at Russell Group universities (which corresponds to the larger overseas cohort).

At the level of separate engineering disciplines, the following questions emerge, however it's worth noting these may be patterns that reflect shifting strategies rather than patterns of student applications:

- Mechanical, aero and production engineering continues to be the sector superstar in terms of growth.
- Was last year's counter-trend decline in General engineering accepts (UCAS) just a wobble?
- Has Chemical, process and energy engineering had its day?
- What's evolving? Does growth in 'other engineering disciplines' mean some universities have found a magic bullet? This corresponds to the development of new interdisciplinary models of engineering which may be more attractive to a wider range of students (and, as those who run them would argue, may equip graduates better for a more flexible future labour market).

[Summary findings: engineering enrolments profiles](#)

- At both undergraduate and postgraduate level, Mechanical engineering dominates our sample enrolment population (in keeping with the national undergraduate picture).

Table 1: Undergraduate enrolments by discipline and domicile, 2017

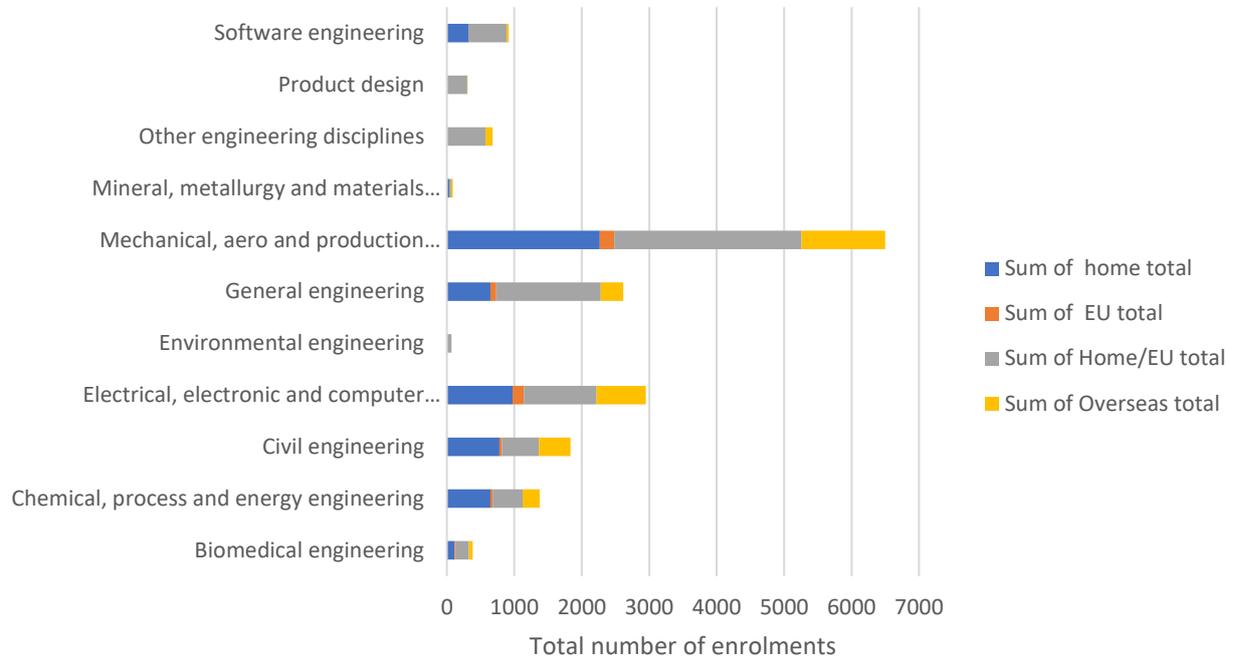
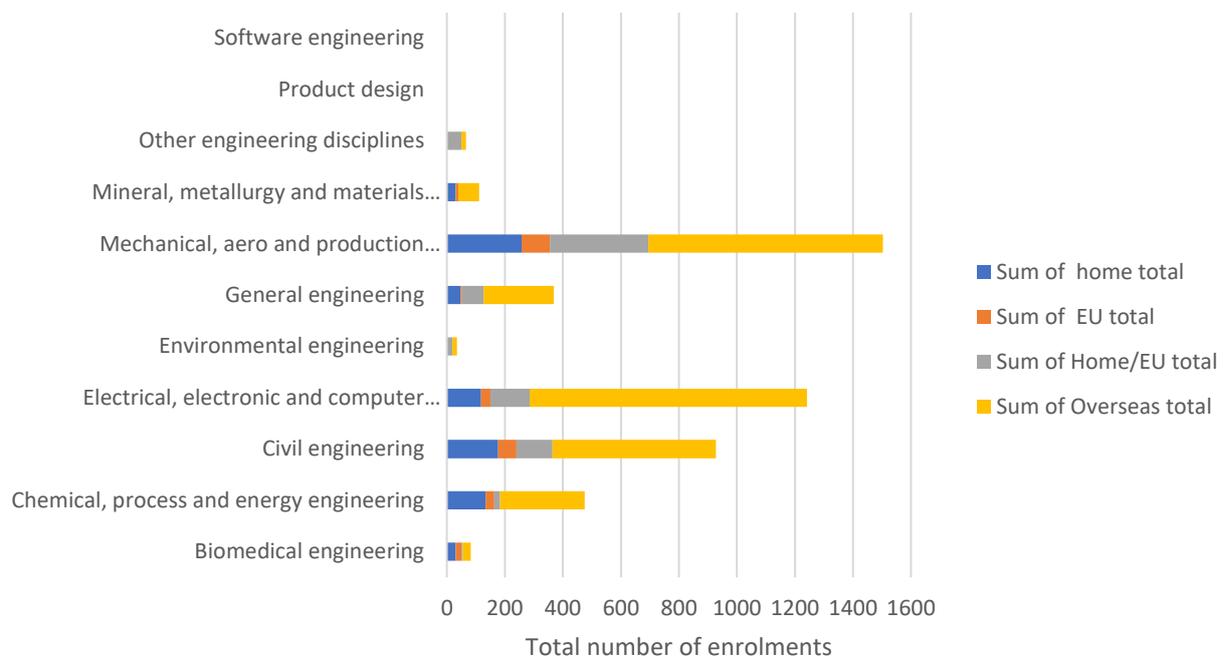
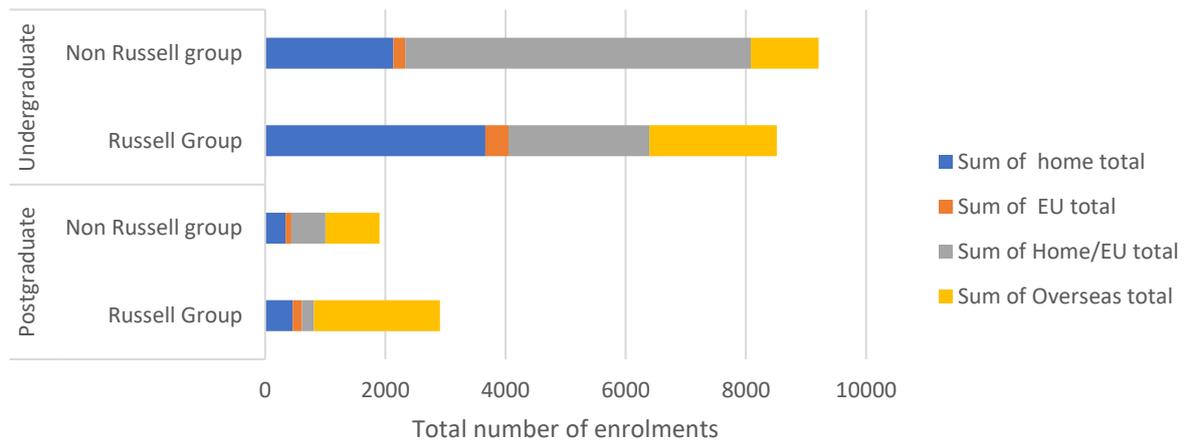


Table 2: Postgraduate enrolments by discipline and domicile, 2017



- Overseas enrolments feature more prominently in postgraduate courses generally, especially within the Russell Group of universities; the Russell group is dominated by full-time overseas enrolments.

Table 3: Undergraduate enrolments by discipline and domicile, 2017



[Summary findings: new profile data for 2017](#)

- Generally speaking, female: male ratios were better among EU and overseas enrolments than for their UK counterparts.
- Russell Group universities attracted proportionally more home and overseas female enrolments than their non-Russell Group counterparts.
- Where reported distinctly, EU enrolments saw the best female to male ratio at all levels.
- Biomedical engineering had the best female: male ratio among home/EU undergraduate enrolments. For overseas undergraduates, it was Software engineering.
- Home/EU part-time enrolments represent a sizeable undergraduate cohort among the non-Russell group universities.

[Summary findings: new degree apprenticeships data for 2017](#)

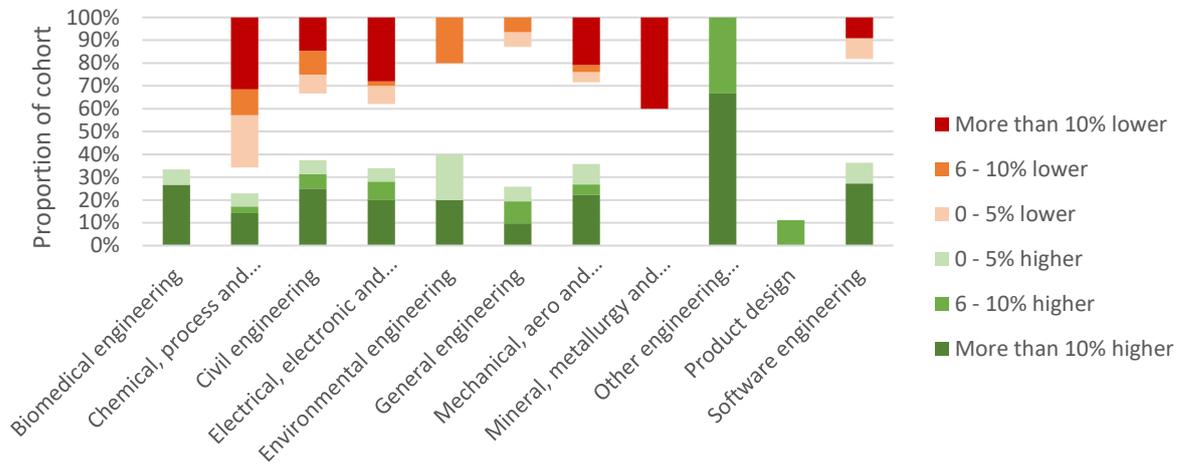
- A total of 164 undergraduate degree apprenticeship enrolments were reported for 2017-18
- Over half (57%) of these were in Mechanical, aero and production engineering.
- One quarter were in Software engineering (26%).
- Others featured in Electrical, electronic and computer engineering; General Engineering; and Mineral, metallurgy and materials engineering.

[Summary findings: undergraduate enrolments compared with 2016-17](#)

- Growth was reported in Biomedical engineering and Product design.
- Mechanical, aero and production engineering witnessed greater growth than decline. This continues the trend in national acceptance figures last year (UCAS) which show that Mechanical engineering continues to grow, and has almost doubled since 2007.
- Growth also outweighed decline in Civil engineering; Environmental engineering and Software engineering.
- There appears to be a healthy market in Other engineering disciplines.
- Chemical, process and energy engineering showed the greatest proportion of lower enrolments than last year.
- This continues the trend in national acceptance figures last year; UCAS reported a fall in Chemical, process and energy engineering following many years of growth.
- Mineral, metallurgy and materials engineering enrolment are also reported to have declined.

- The declines reported in Electrical, electronic and computer engineering also outweighed the reported growth.
- At undergraduate level, the greatest reported stability is in General engineering; this is good news as it was a decliner in last year's official UCAS acceptance data.

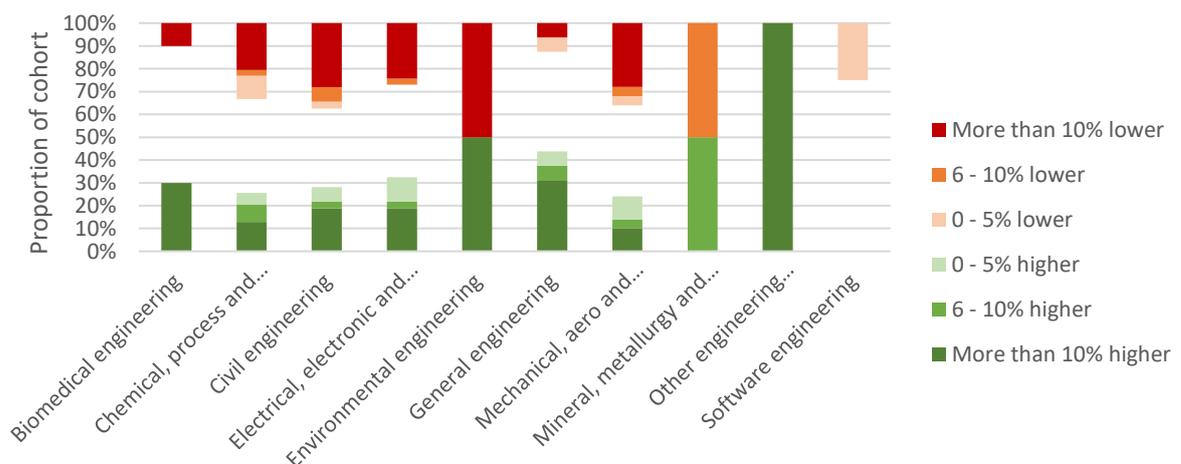
Table 4: Higher or lower undergraduate enrolments



[Summary findings: postgraduate enrolments compared with 2016-17](#)

- Most growth (relative to decline) was seen in Biomedical engineering and General engineering.
- Electrical, electronic and computer engineering saw greater growth than decline in our responses.
- Civil engineering and Mechanical, aero and production engineering witnessed greater decline than growth.

Table 4: Higher or lower postgraduate enrolments



Summary findings: regional enrolments compared with 2016-17

- Undergraduate enrolments for Scotland and Wales and Northern Ireland at undergraduate level were reported to be higher overall.
- Enrolments in England as a whole were quite stable (at both undergraduate and postgraduate).
- At both undergraduate and postgraduate level, Home (reported separately) and Overseas enrolments had increased.
- EU and the collective Home/EU group showed a decrease in enrolments overall.
- Declines were most profound for English universities at undergraduate level.
- Home and overseas growth is witnessed across all administrations (undergraduate).

Table 5: Higher or lower regional enrolments

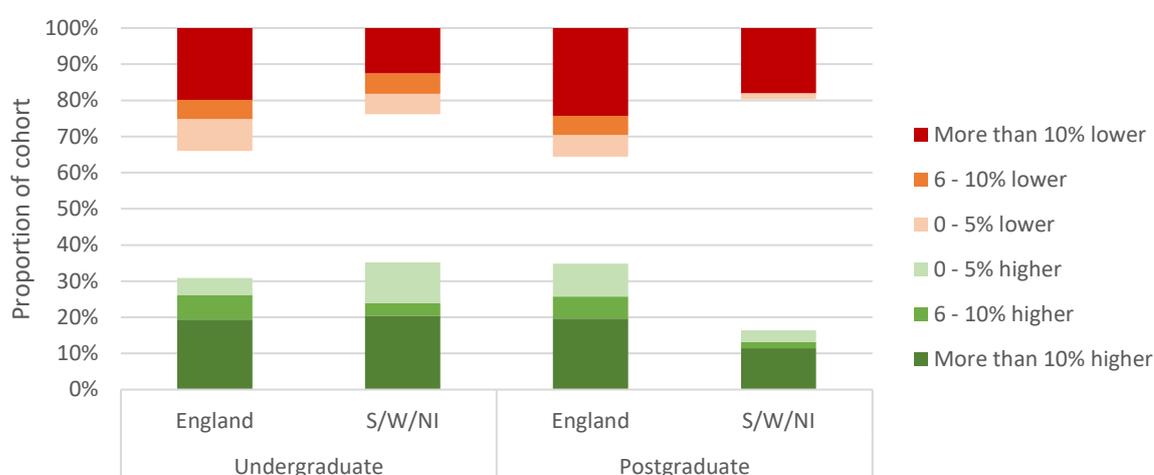
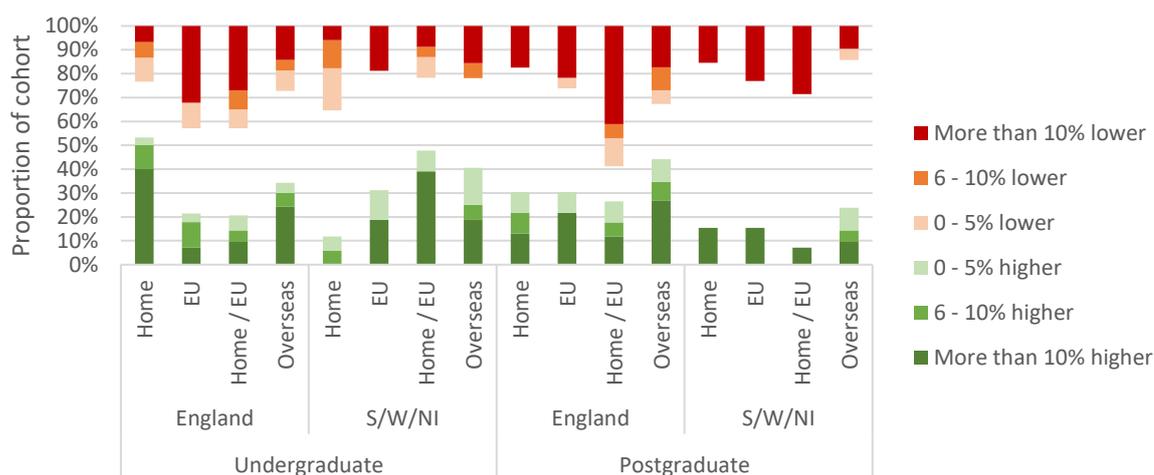


Table 6: Higher or lower regional enrolments by domicile



Summary findings: Russell Group / non-Russell Group enrolments compared with 2016-17

- Russell group universities showed growth at undergraduate and postgraduate level.
- Russell group growth in the overseas market exceeded non-Russell Group across the board.
- Home growth was also most notable among Russell Group universities.
- University Alliance and those not in a mission group were stable, and the rest reported a decline in our survey.

Table 7: Higher or lower Russell Group / non-Russell Group enrolments

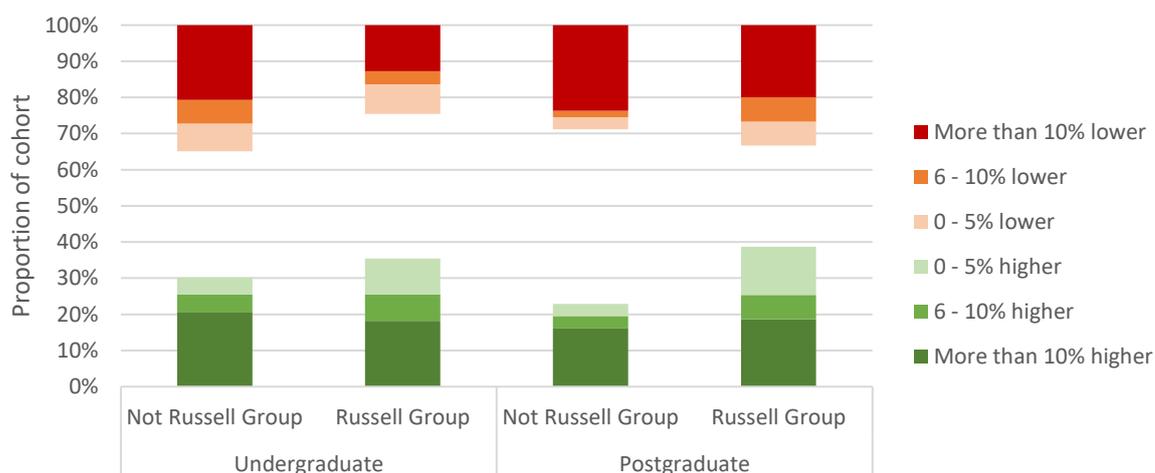
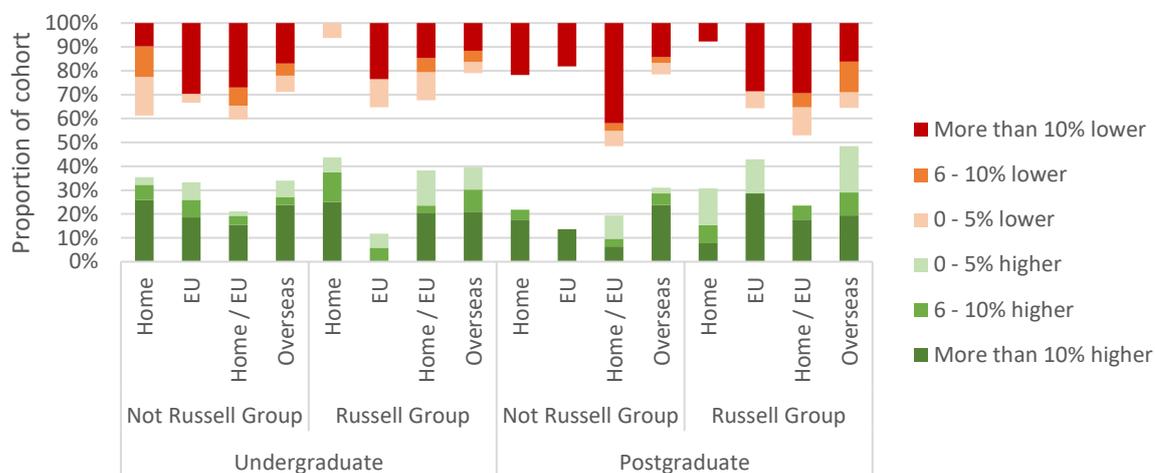


Table 8: Higher or lower Russell Group / non-Russell Group enrolments by domicile



*Stella Fowler, Policy and Research Officer, 24 November 2017*