

Enrolments to taught engineering programmes in UK universities 2015/16

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Executive Director

Engineering Professors' Council (EPC)



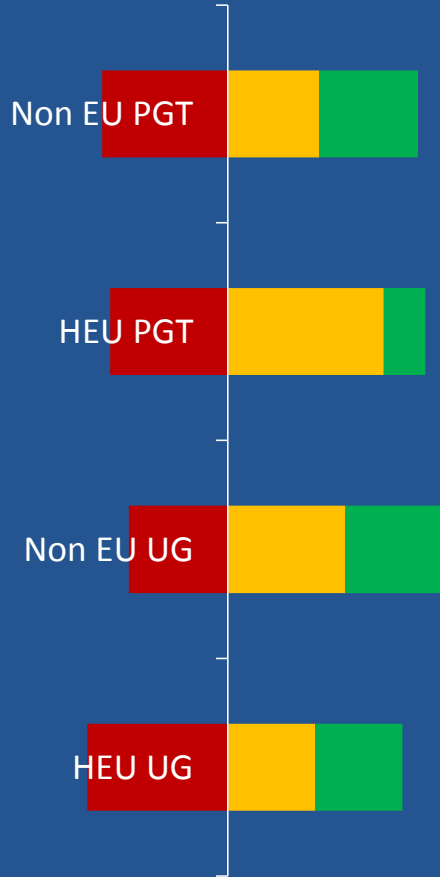
The EPC early enrolments survey

- Annual survey undertaken of EPC members, anonymous, position relative to prior year, not precise figures
- Intention is to give members a sense of their position relative to national position
- UCAS provide applications data for undergraduates but not for postgraduates so poll gives an early “heads up” prior to official enrolment figures published by HESA 12 months+ after the event

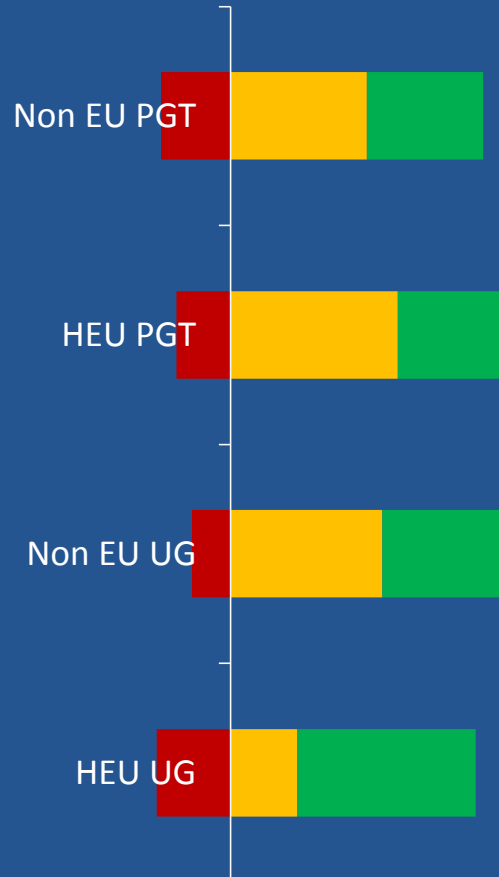


EPC enrolments survey: summary of prior years

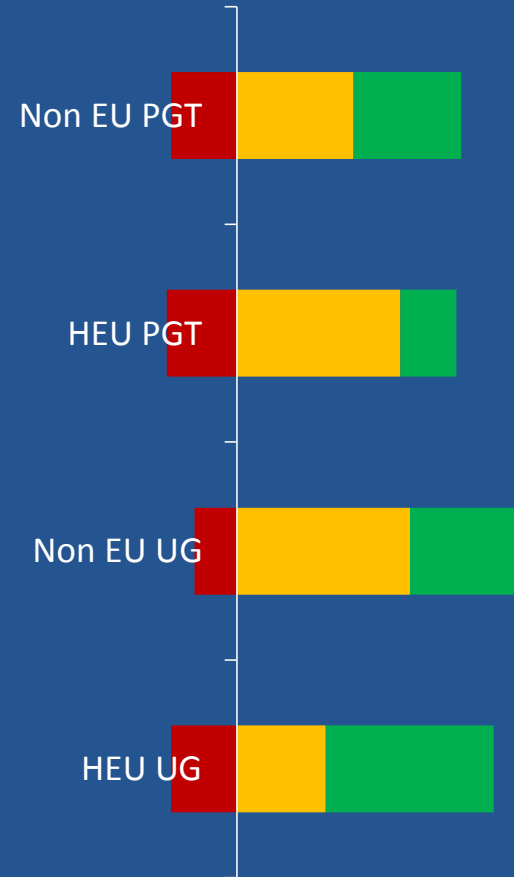
2012/13



2013/14



2014/15



■ About the same ■ Higher ■ Lower

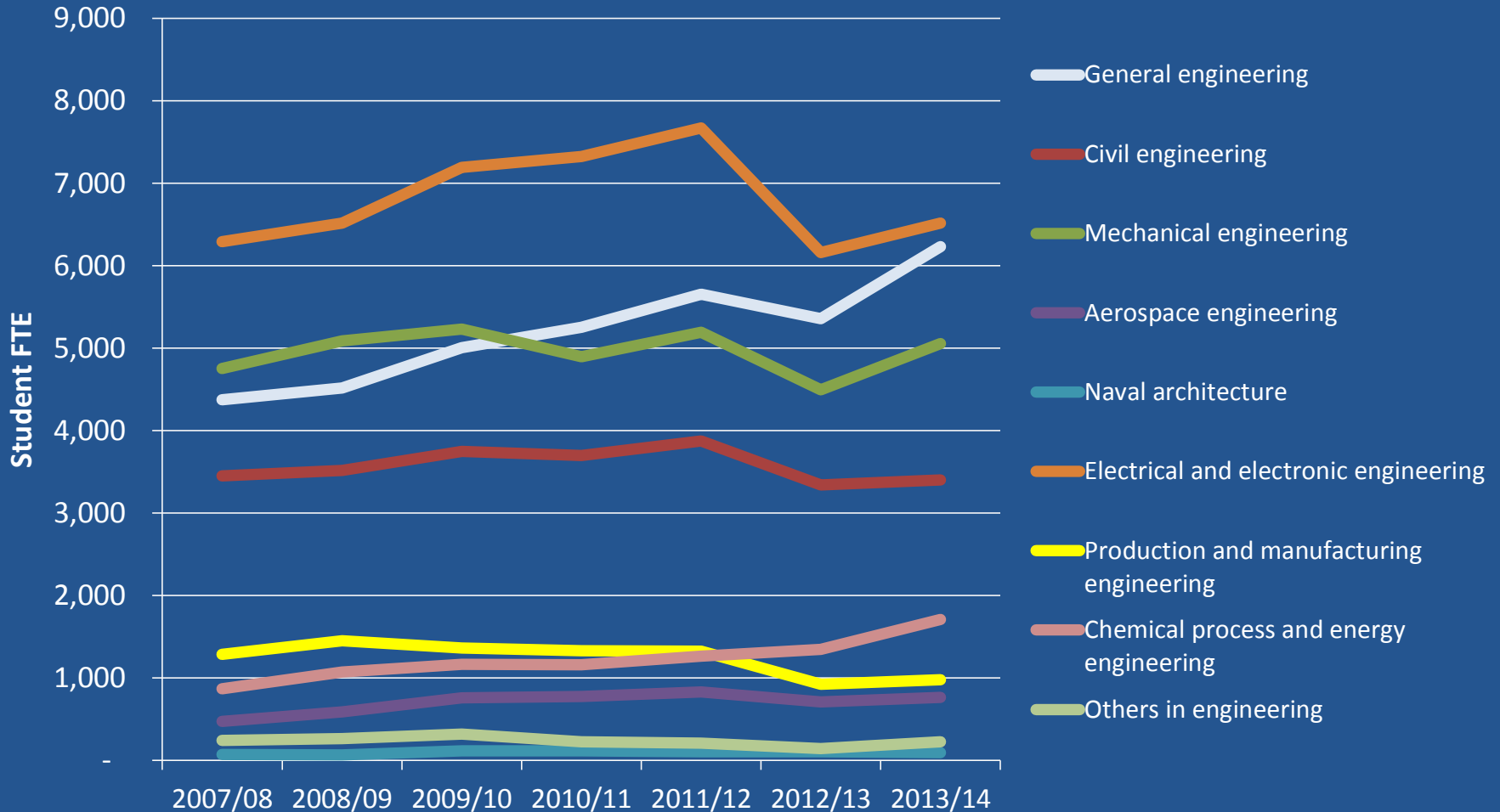
■ About the same ■ Higher ■ Lower

■ About the same ■ Higher ■ Lower



Enrolments to engineering in UK HEIs: some context

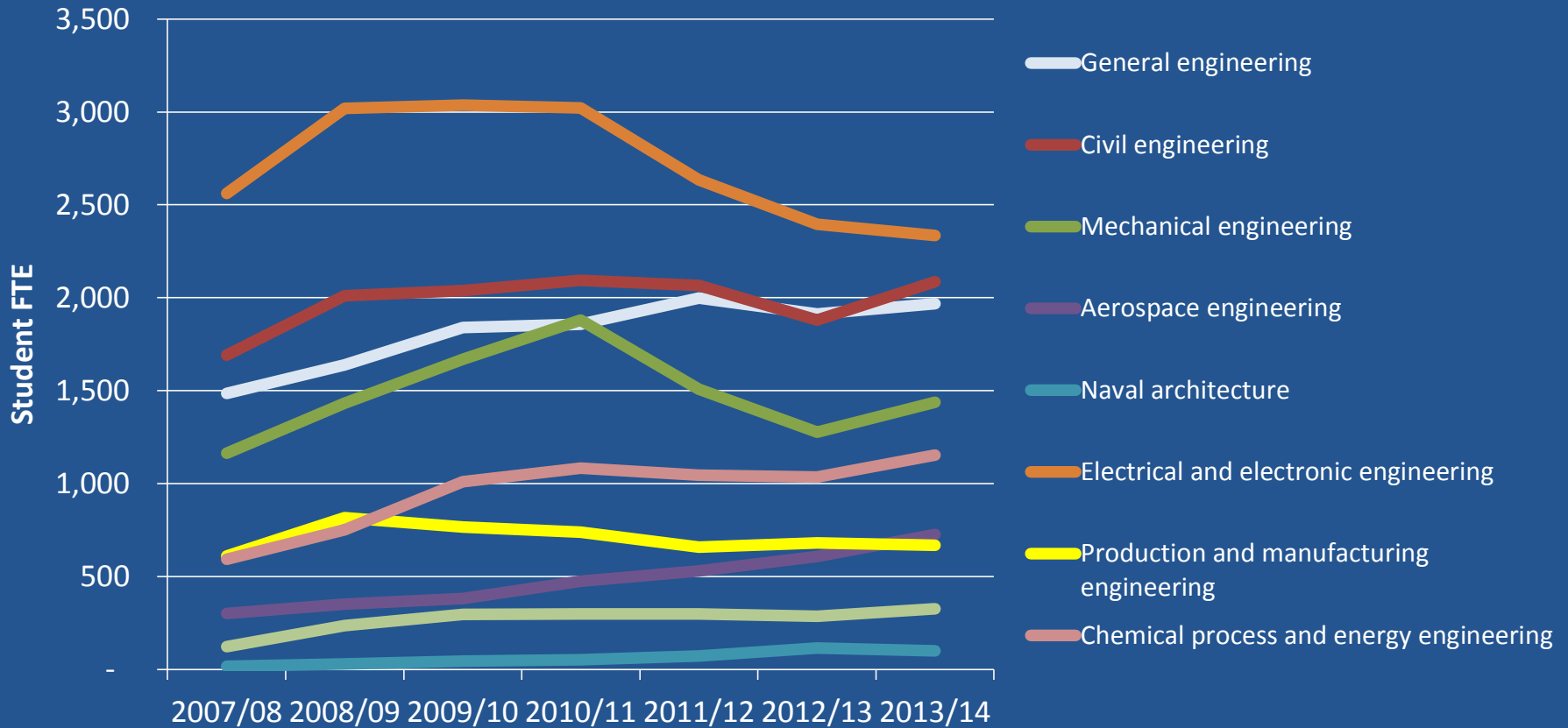
First year UG engineering (JACS Codes H1-H9)





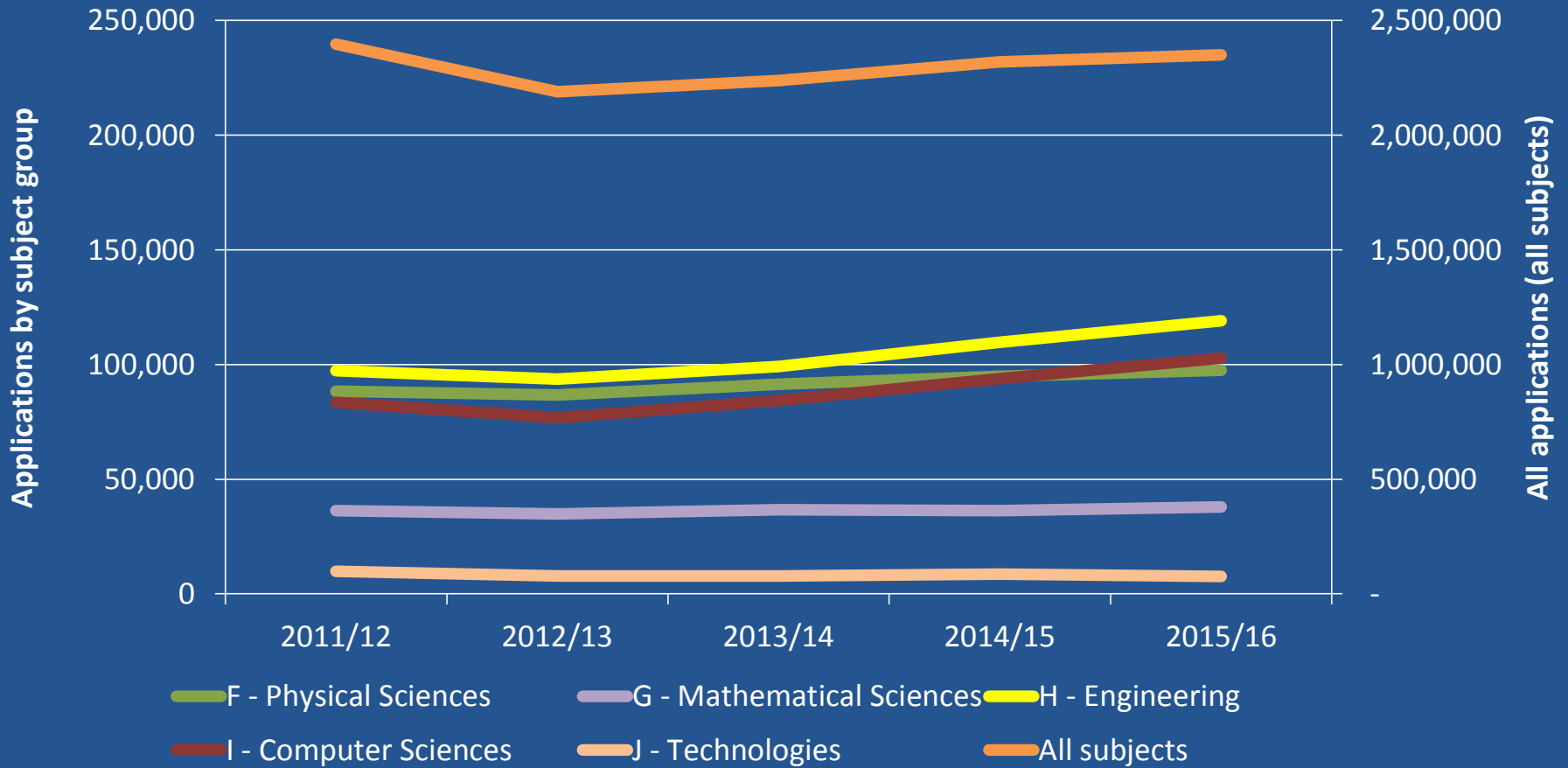
Enrolments to engineering in UK HEIs: some context

New students PGT engineering (JACS Codes H1-H9)





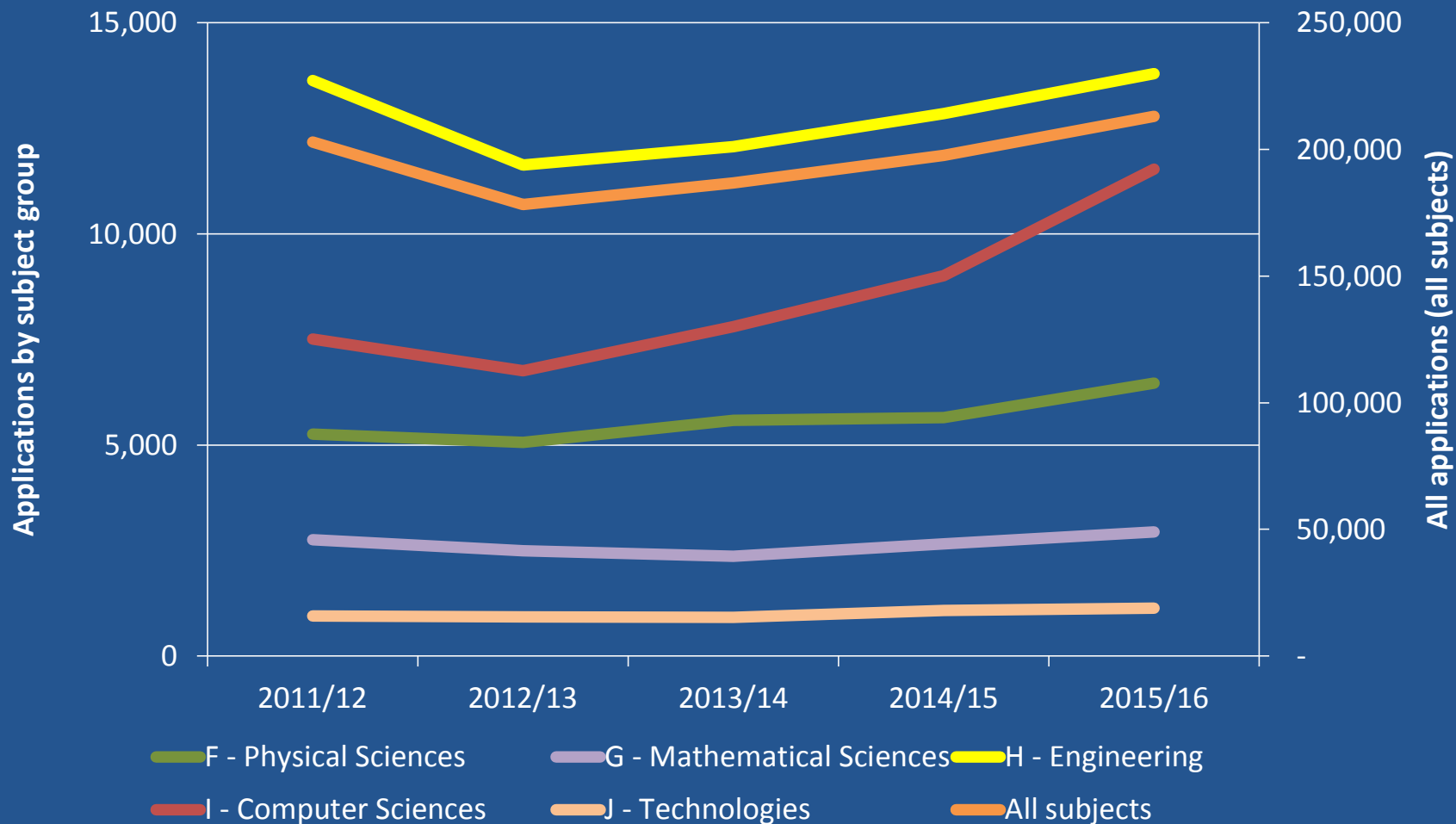
UG applications to engineering (UK domicile)



Undergraduate applications to engineering for 2015/16 entry increased by 8.6% from UK domiciled students compared with 2014/15 (the national average across all disciplines saw an increase of 1.2%).



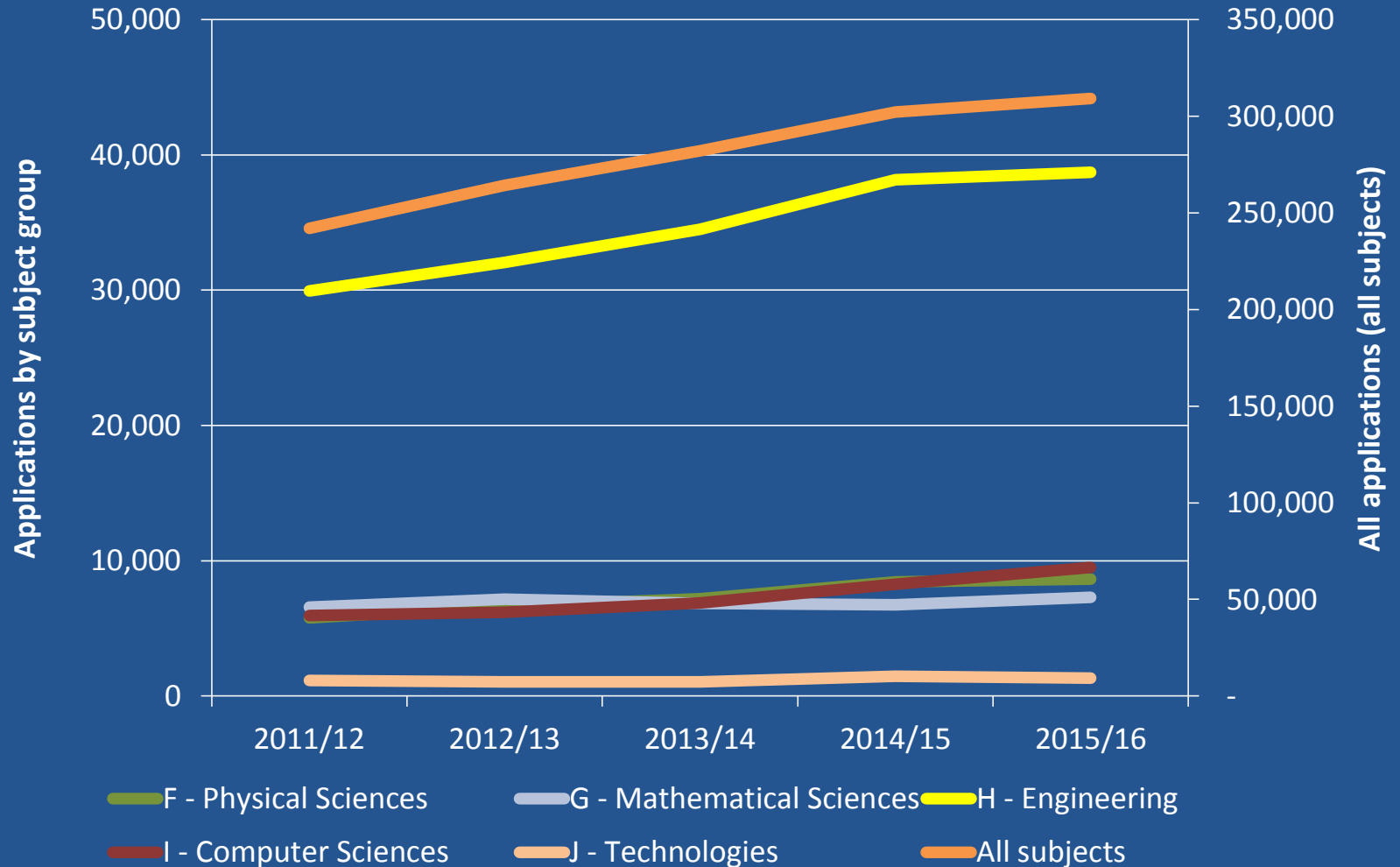
UG applications to engineering (EU domicile)



Undergraduate applications from EU to engineering for 2015/16 entry increased by 7.4% compared with 2014/15 (all subjects: 7.8%).



UG applications to engineering (non EU domicile)



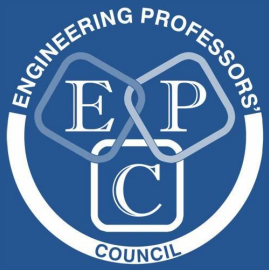
Undergraduate applications from non EU domiciled students to engineering for 2015/16 entry increased by only 1.4% compared with 2014/15 (all subjects 2.3%).



Further information on student number and applications trends

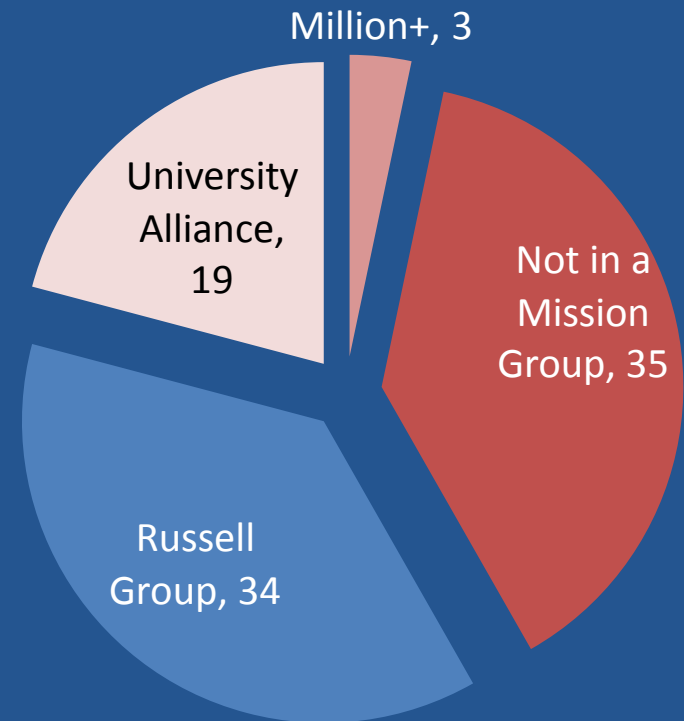
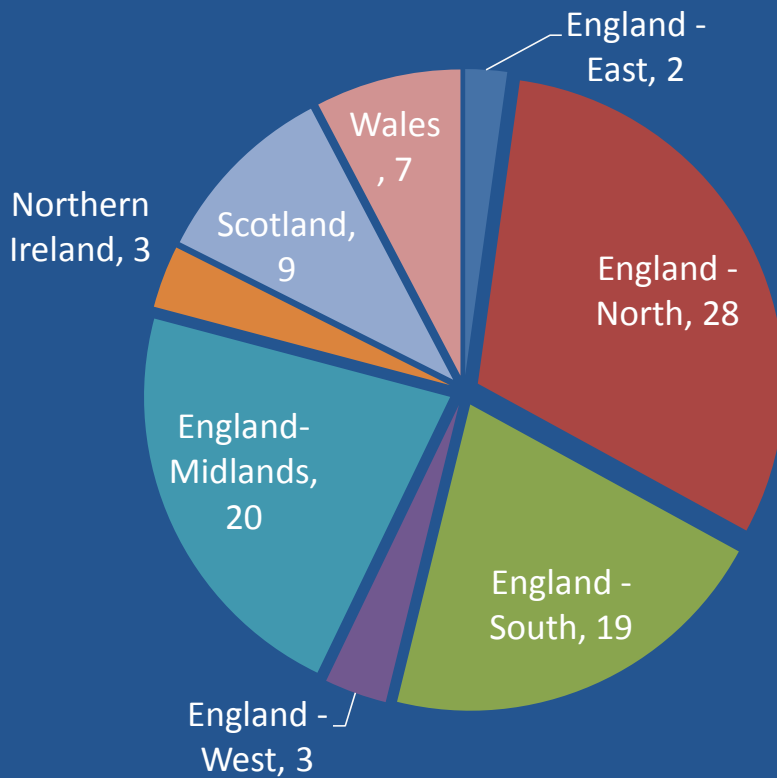
<http://epc.ac.uk/services-2/>

The screenshot displays the EPC website interface. At the top, there is a navigation bar with tabs for Home, About us, Events and projects, Publications, Members' portal, Committee, Sectoral groups, and Site map. Below this, the main content area is titled 'Datasets and analysis'. It includes a 3D bar chart showing an upward trend, a text block explaining that a password is required for some data and providing a 'contact us' link, and a paragraph mentioning that some datasets have been updated to reflect the disbanding of the 1994 Group in November 2013. A sidebar menu on the right lists various datasets and analysis tools, including Academic staff numbers, Applications, Completion, Degree classification, Destination of Leavers from Higher Education (DLHE), Expenditure by academic cost centre, Gender benchmarking, National Student Survey (NSS), Research Assessment Exercise 2008, Research grants and contracts income by academic cost centre, Student numbers and profiling, and Student-staff ratios. A bottom navigation bar contains a small 'S' icon.



EPC 2015/16 enrolments survey: response

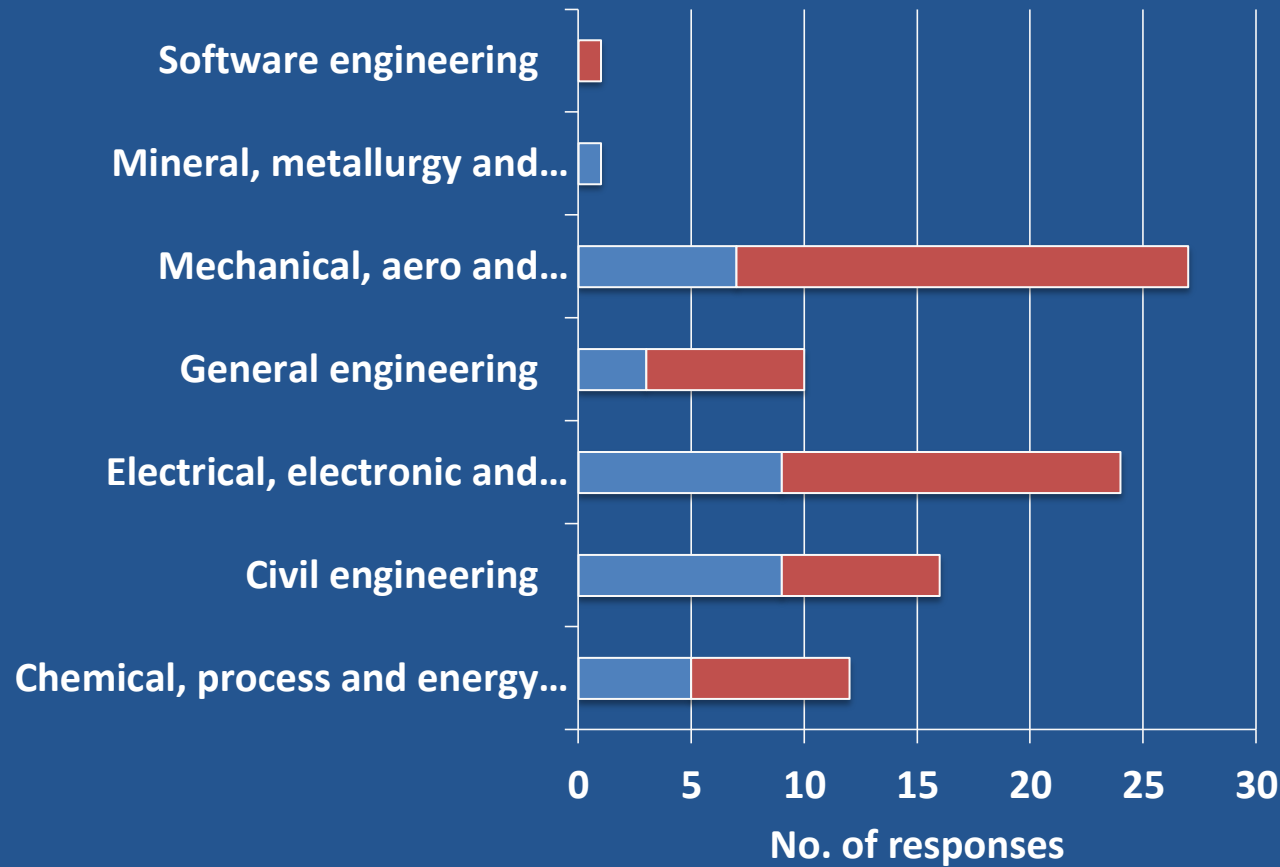
62 universities
responded
(91 departments)





EPC 2015/16 enrolments survey: response

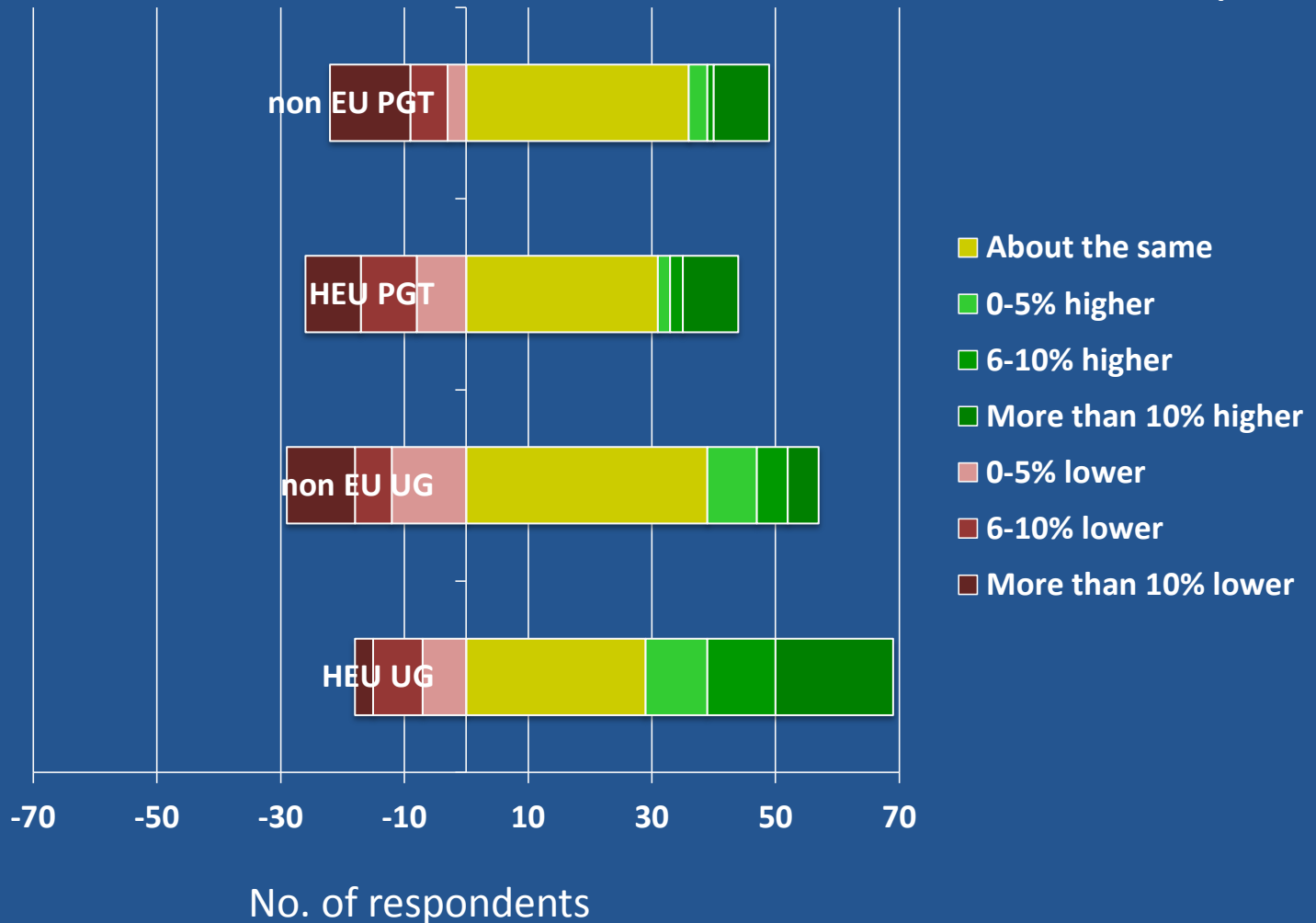
62 universities
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EPC 2015/16 enrolments survey: summary

Increase/decrease
compared with
2014/15

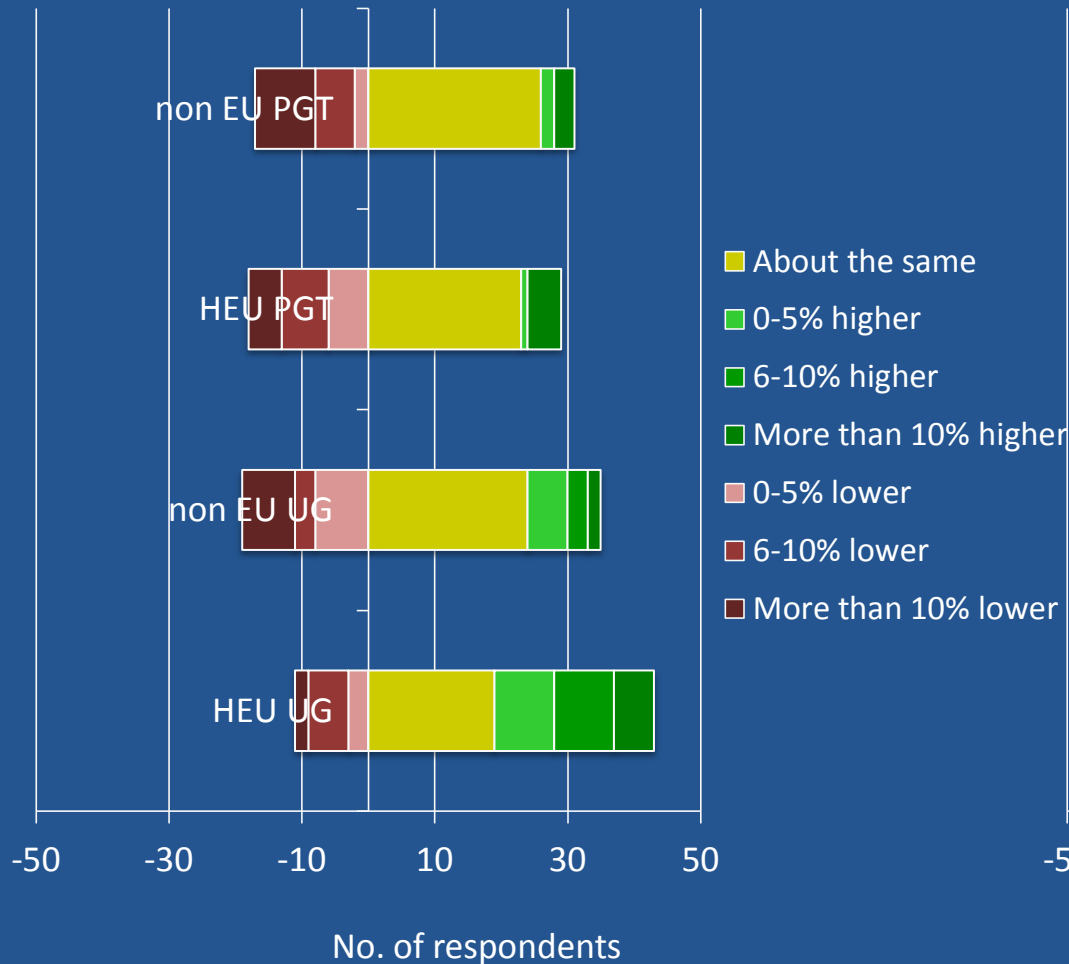




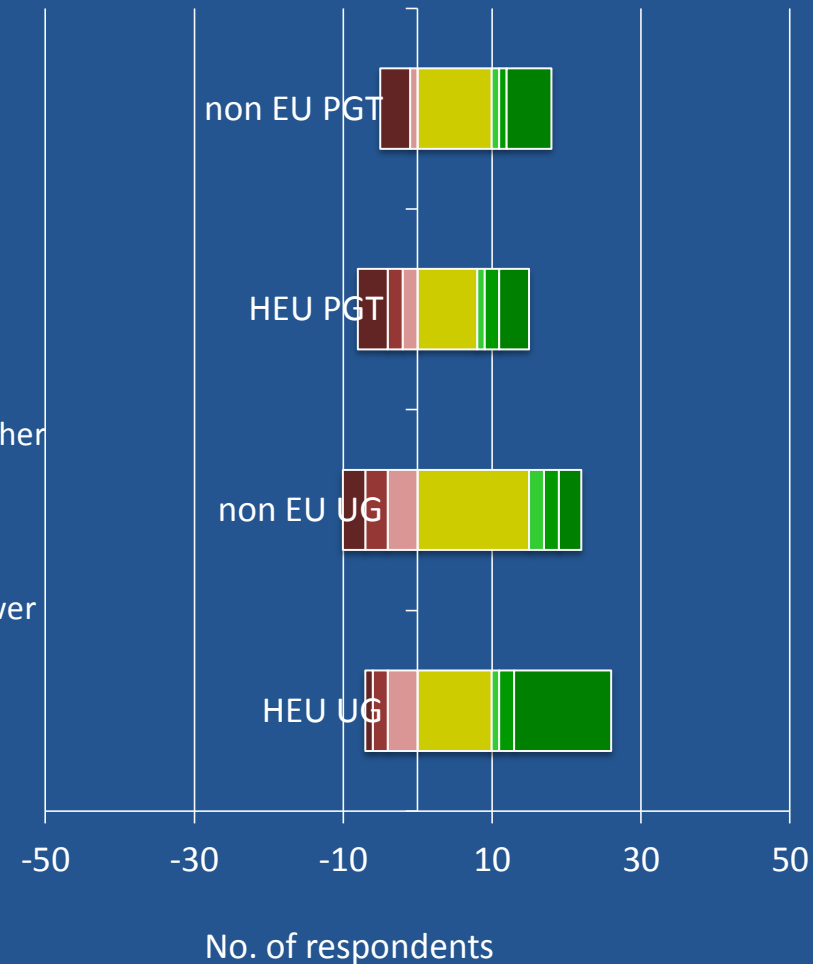
EPC 2015/16 enrolments survey: university type

Increase/decrease
compared with
2014/15

Non Russell Group

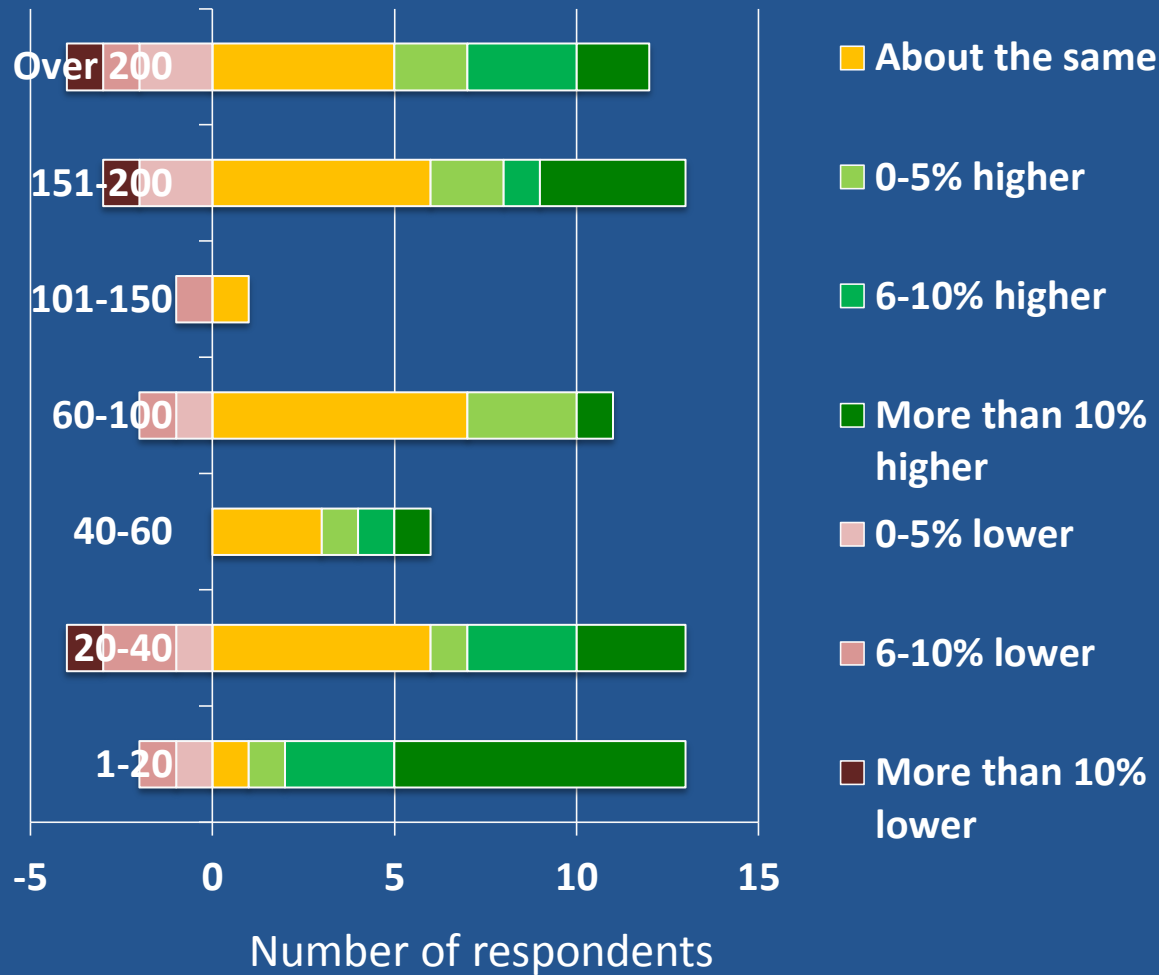


Russell Group



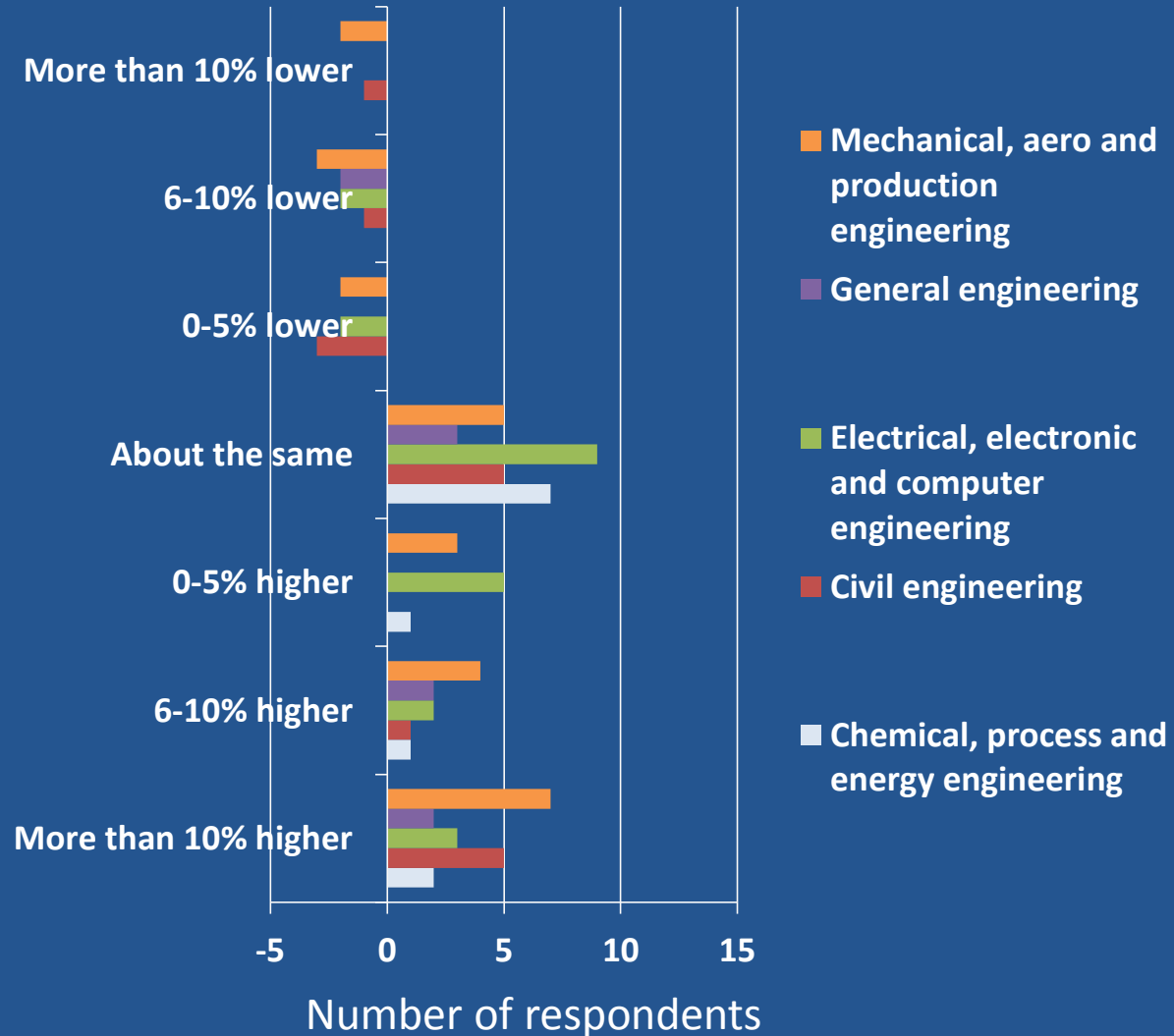


HEU undergraduates: all respondents, by size of department (no. of students)



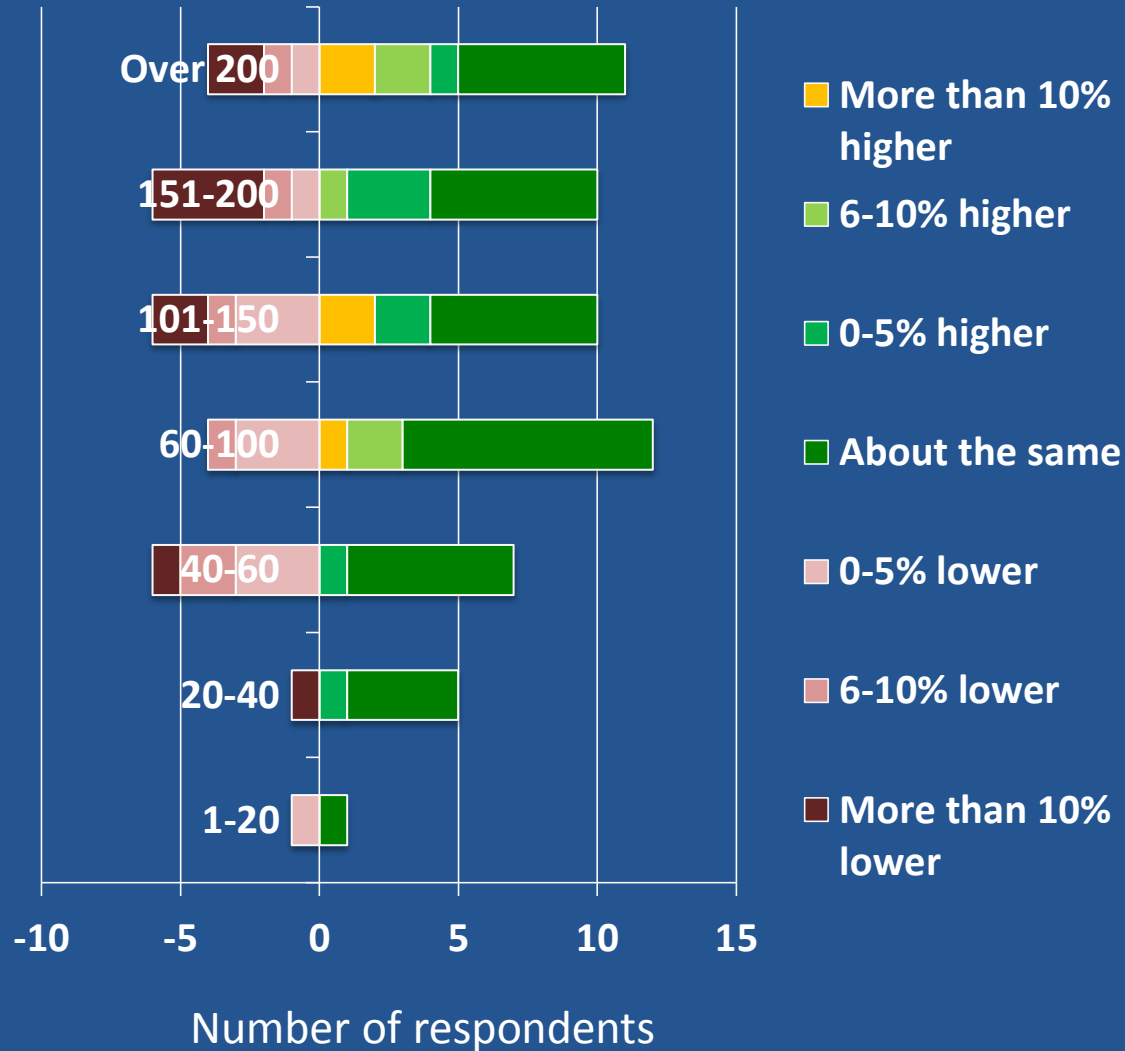


HEU undergraduates: all respondents, by discipline





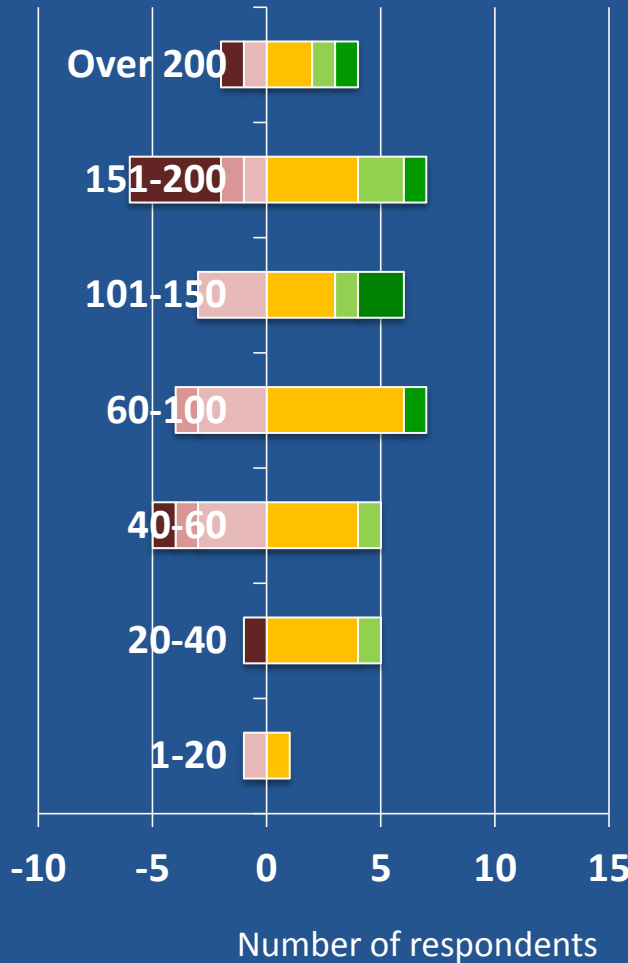
Non EU undergraduates: all respondents, by size of department



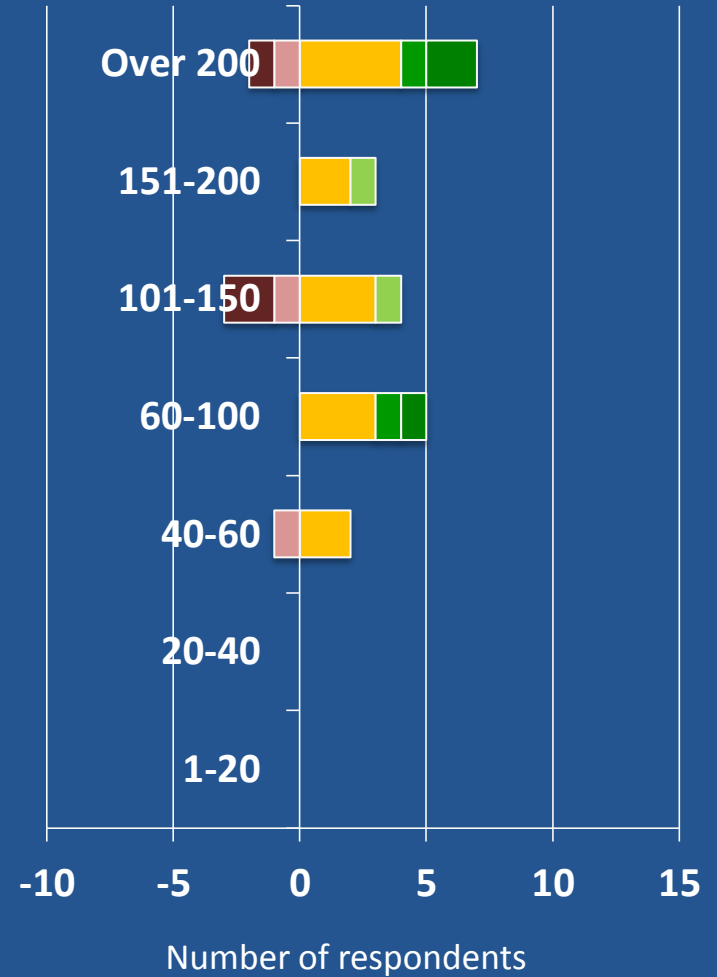


Non EU undergraduates: all respondents, by size of department

Non Russell Group (n=57)

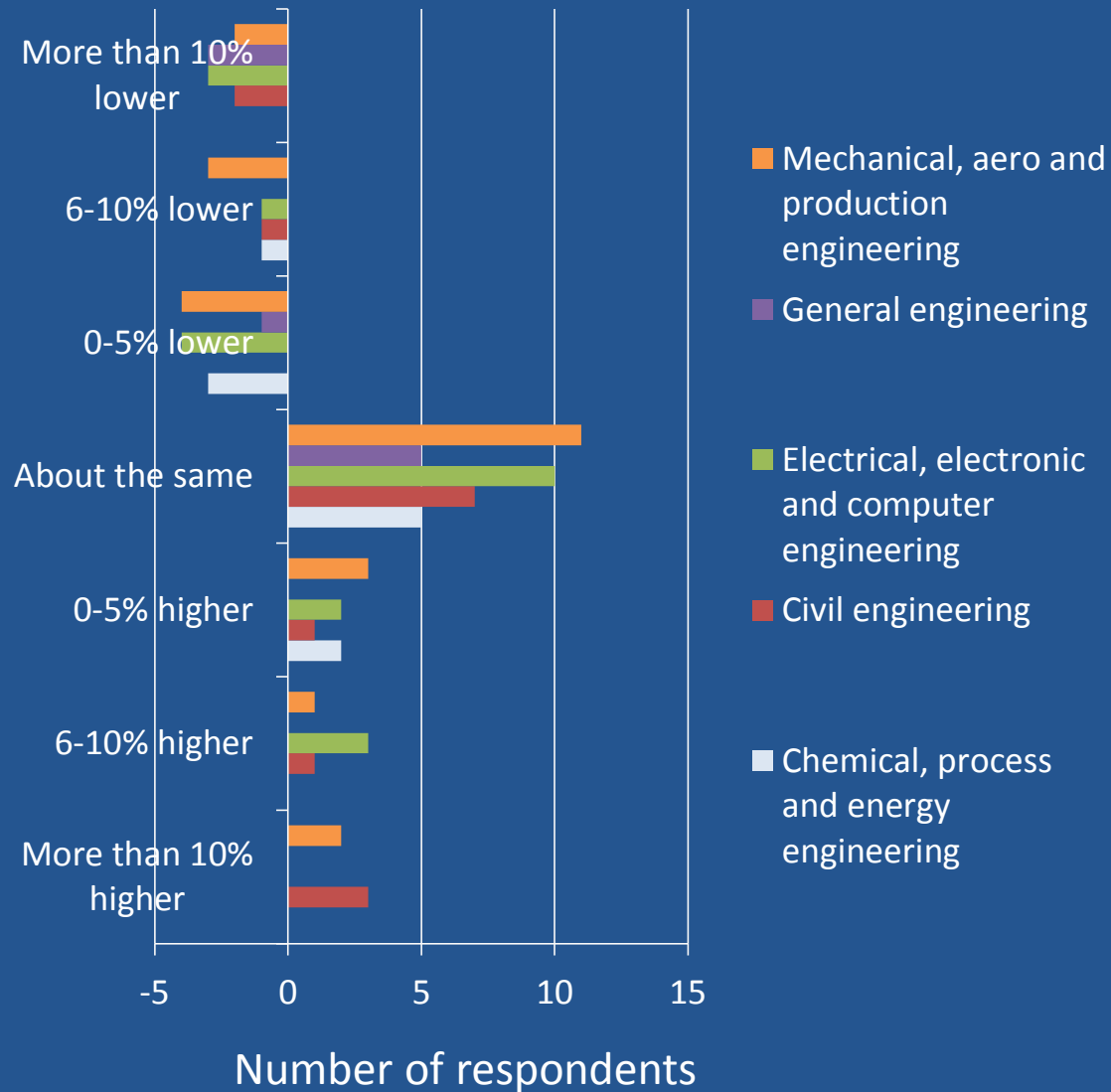


Russell Group (n=34)



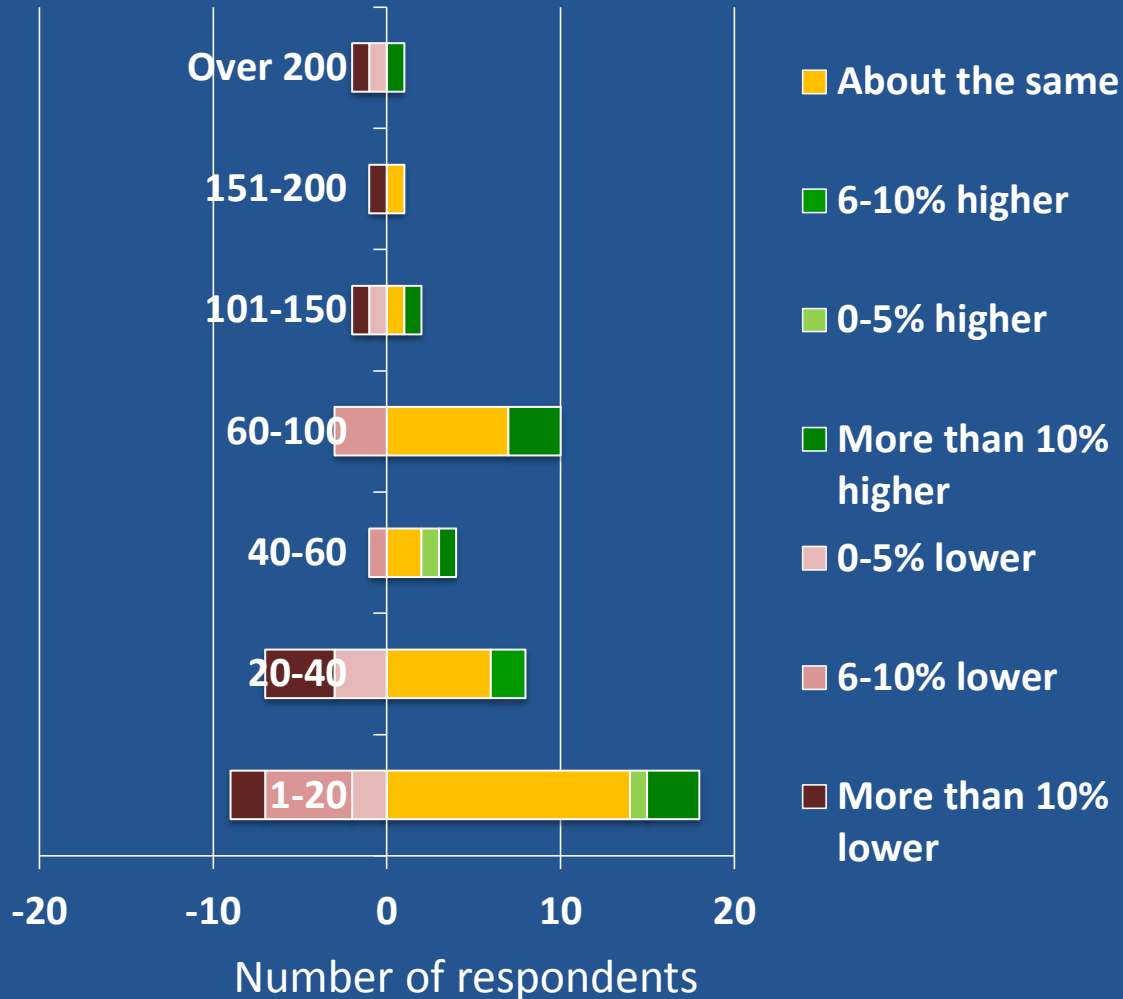


Non EU undergraduates: all respondents, by discipline





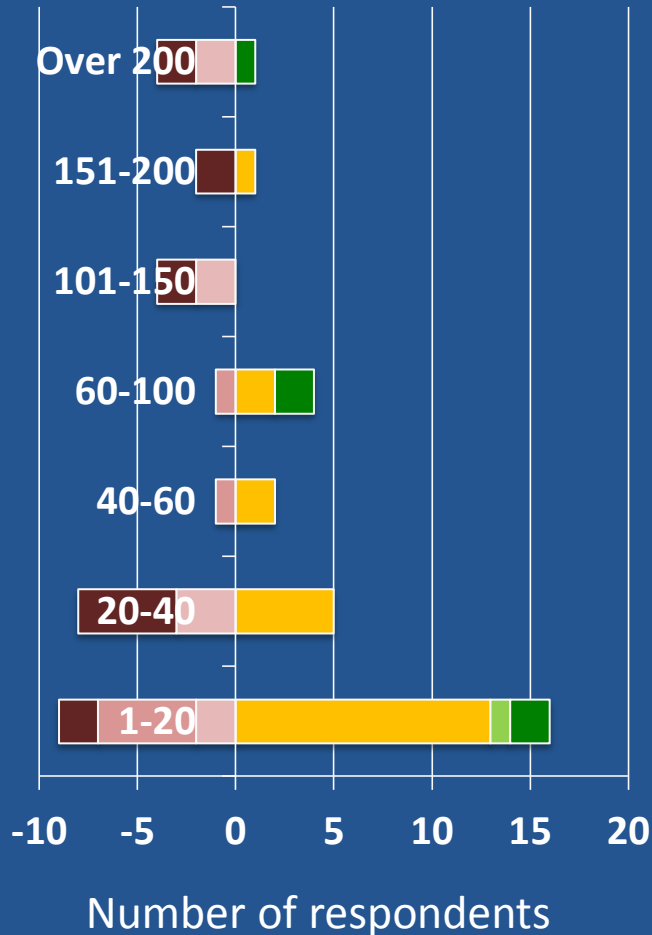
HEU postgraduate (taught): all respondents, by size of department



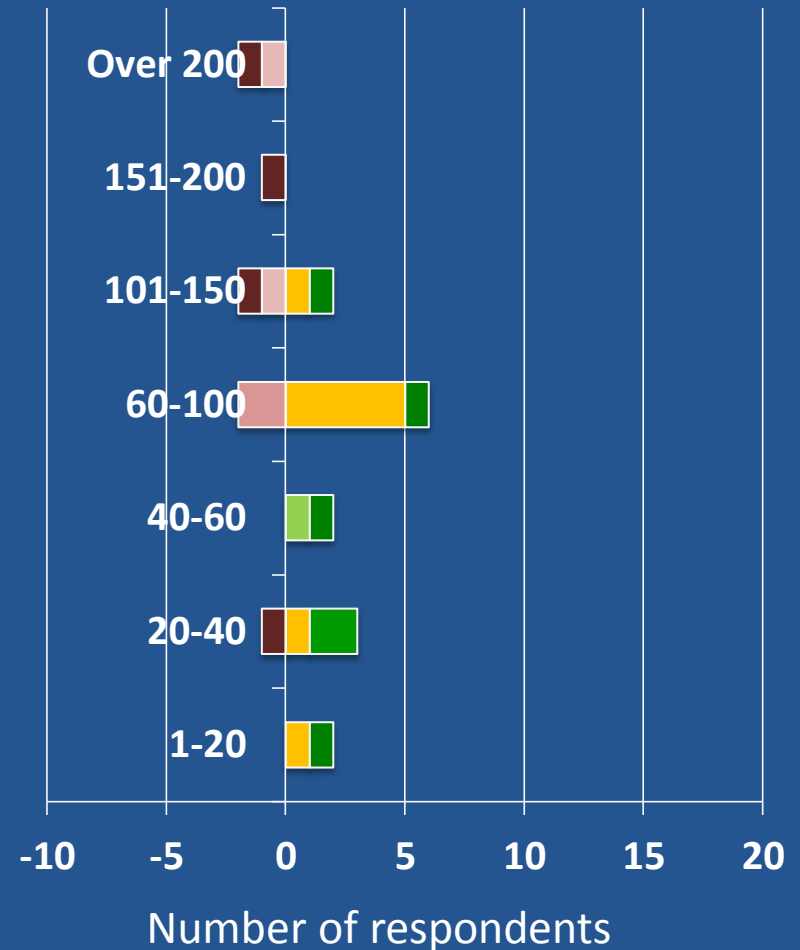


HEU postgraduate (taught): all respondents, by size of department

Non Russell Group

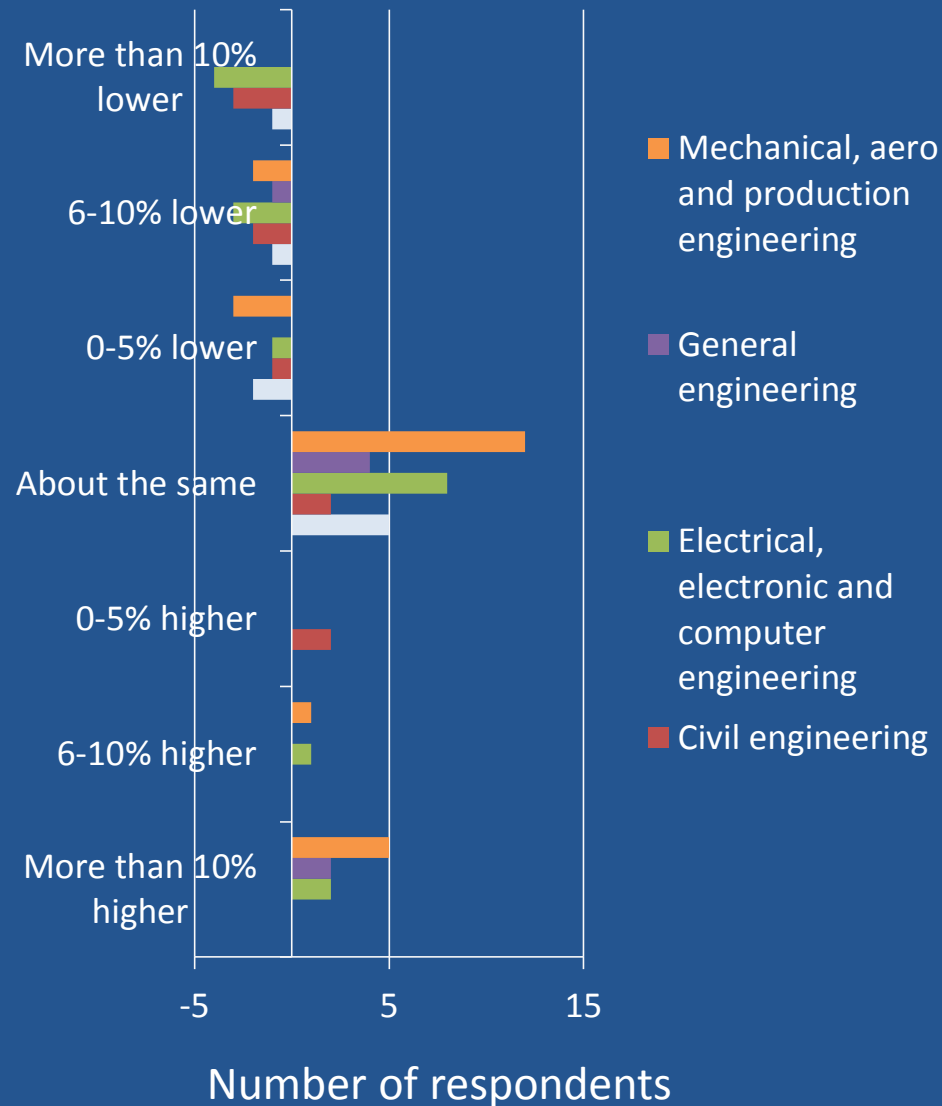


Russell Group



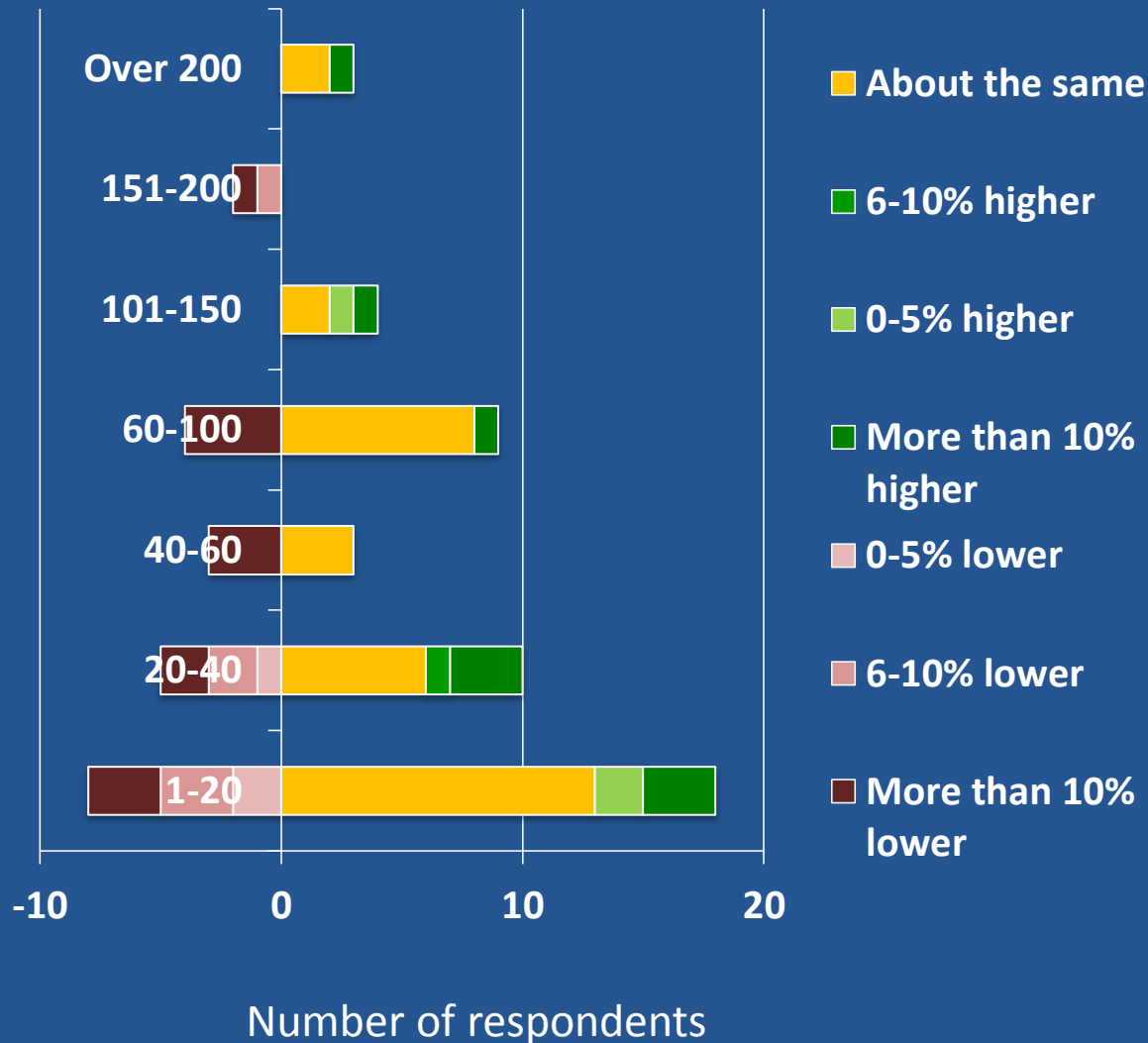


HEU postgraduate (taught): all respondents, by discipline





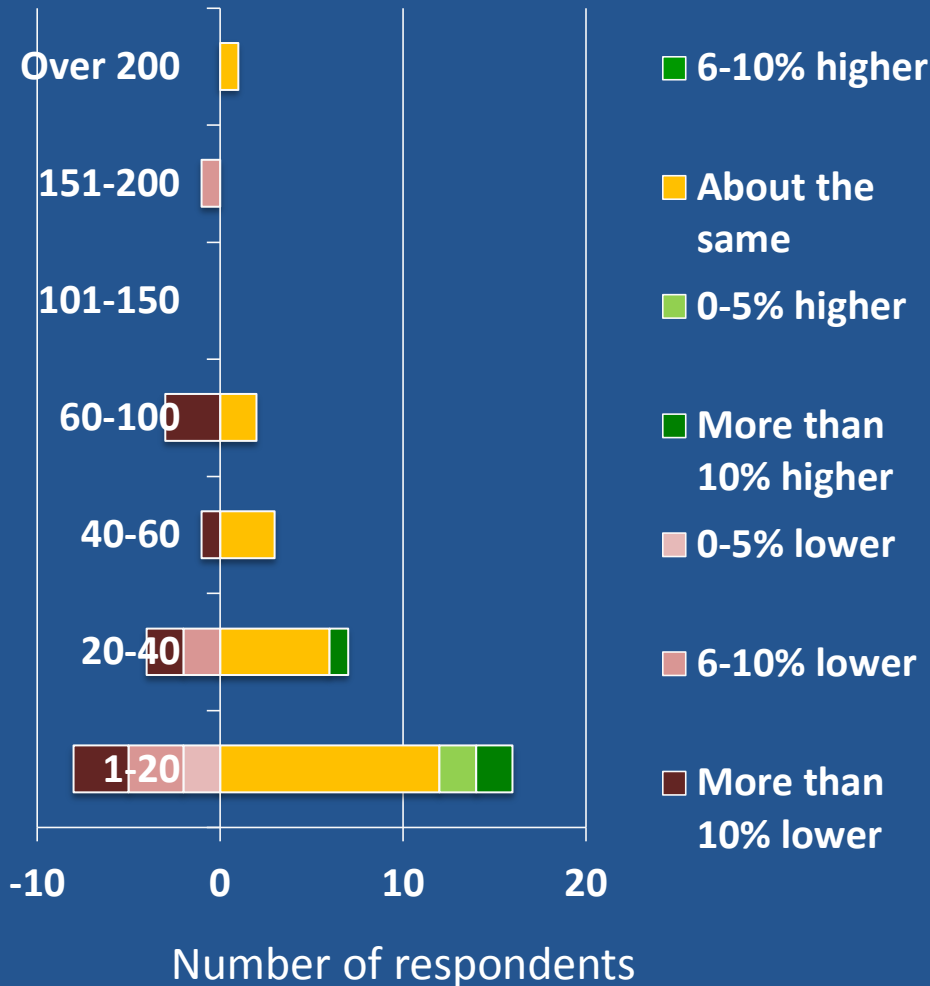
Non EU postgraduate (taught): all respondents, by size of department



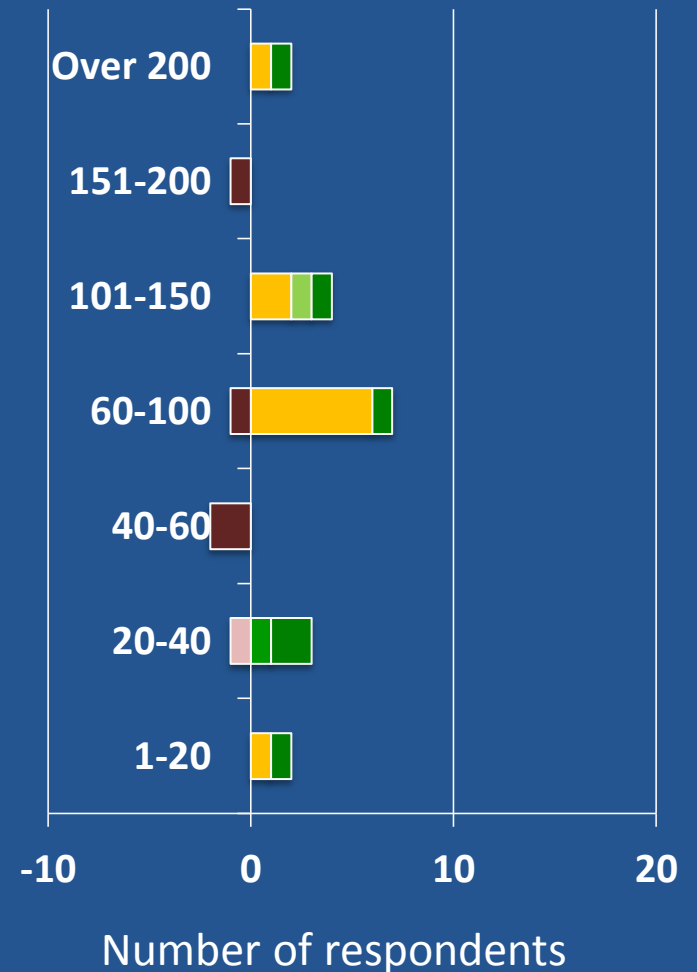


Non EU postgraduate (taught): all respondents, by size of department

Non Russell Group

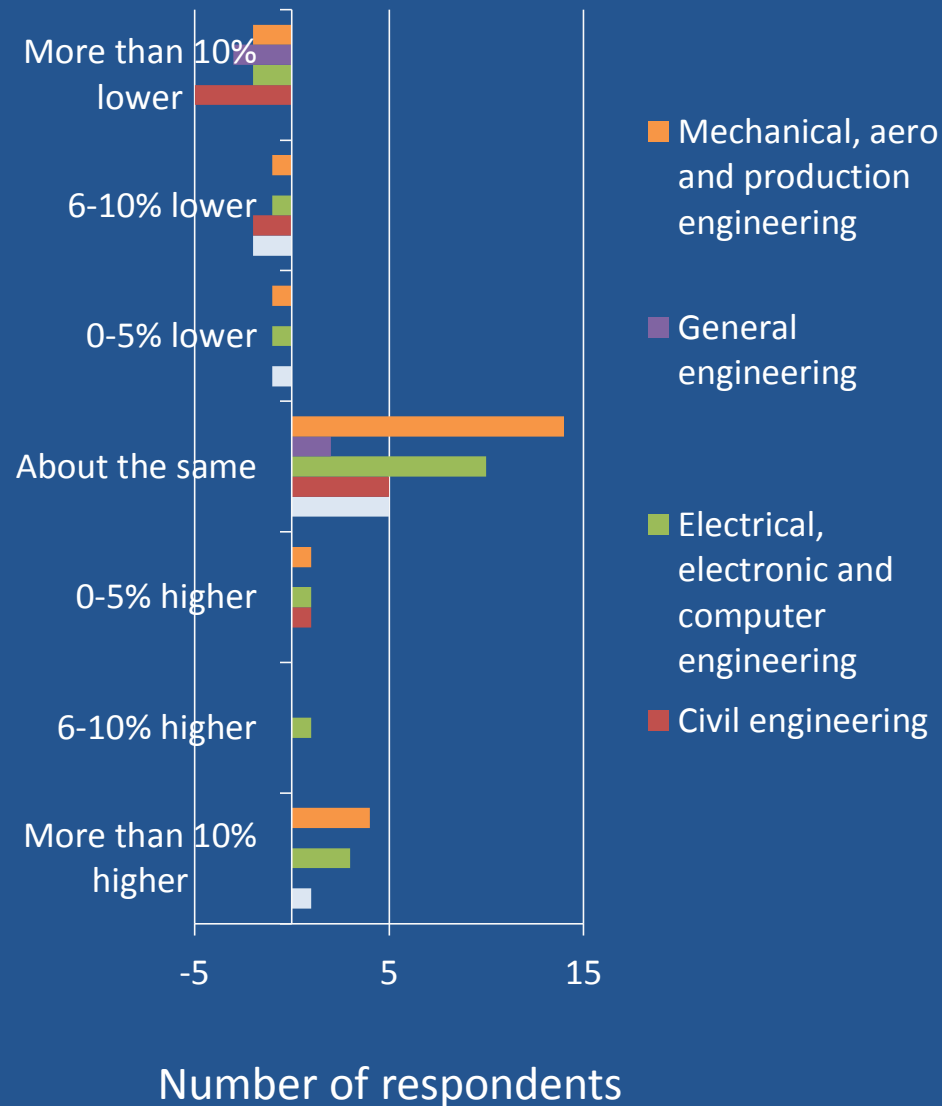


Russell Group





Non EU postgraduate (taught): all respondents, by discipline





Postgraduate-level study?

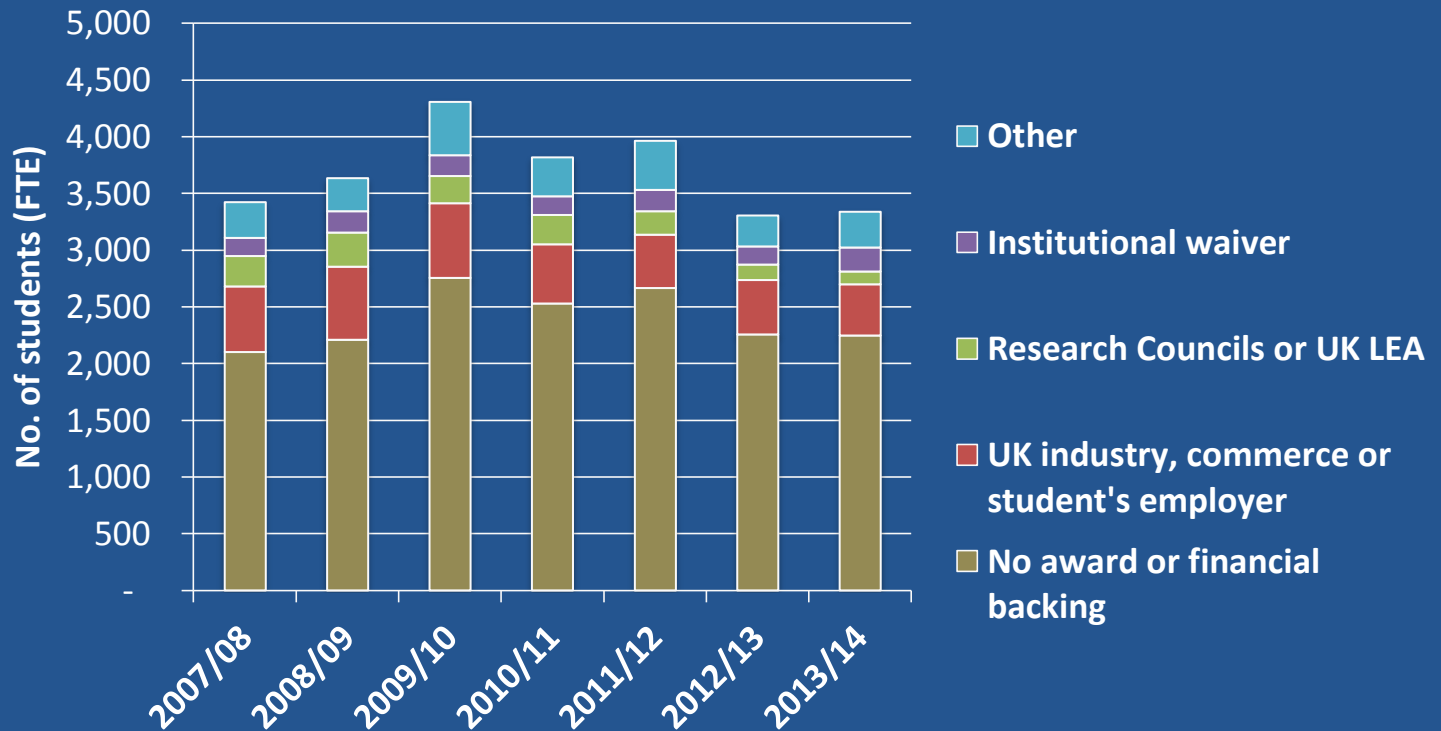
'It's the subject-specific knowledge gained through Masters and PhD courses that is essential for the organisation [plus] the research experience that goes along with it. This is generally something people don't get at Bachelors level.'

From Masters with a Purpose: Taught postgraduate employability and employer engagement, Universities UK (2014)



The stats...

Engineering Taught Master's (MSc) students* - UK origin (26% of all engineering MSc students)



* Excludes integrated Master's (MEng)

Source: EPC analysis of Higher Education Database for Institutions data, 2014)



Perkins Review: task group on specialist skills

Improving demand

Developing trusted sources of information and advice

Identifying and developing programmes which improve access for smaller businesses (SMEs)

Improving supply

Recognising the different and complex motivations of PG students (and their employers) and meeting their needs



Developing trusted sources of information and advice

Beta version

UCAS
Postgraduate



Search for courses, universities or colleges



Welcome to the beta version of our new postgraduate search tool! Being a beta version means it's still in development, so isn't a completed, fully functioning website yet.

This site is currently in its early phase of release, so we would really like you to have a play with it, explore its features, and let us know what you think.

As you'll appreciate, some features are still in development, so it's not yet a complete working product.

We are sharing this with you as part of our journey to improving the services we provide. Please let us know what

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www.prospects.ac.uk/postgraduate_study.htm

Find a job

Find a course

http://www.prospects.ac.uk/postgraduate_study.htm



Perkins Review: task group on specialist skills

Identified 3 main types of PG engineering student.
Recommendations to improve the opportunities available to them to participate in programmes with work-based learning experience...

1. Self-motivated career developers:

Using the learning from HEFCE's postgraduate pilot scheme, the results of which have recently been published, to identify initiatives which are successful in attracting under-represented groups.

For example: Brunel University's mentoring scheme for female engineering students

<http://www.brunel.ac.uk/cedps/courses/women-in-engineering>



Brunel University: Women in Engineering Programme

- £10k scholarship for 30 female applicants
 - 45 companies signed up for mentoring scheme
 - The number of HEU **female applicants** to MSc engineering programmes at Brunel **more than tripled** (compared with previous year)
-
- ✓ **80%** said their mentors gave them all the help they needed and were really enjoying the programme
 - ✓ **78%** said programme provided necessary skills to advance their career in engineering
 - ✓ **71%** said they had increased in confidence
 - ✓ **70%** said it increased their sector knowledge
-
- ✓ **78%** said the programme increased their employability



Improving supply

2. Employer-sponsored specialism-seekers:

- Work with the Industry Strategy Councils to ensure that specialist skills initiatives and sustainable models of funding are reflected in their strategies.
- Develop collaborative initiatives from which experience can be drawn to develop new schemes, tailored for the sector's particular needs – including SMEs.

For example:

- **University of Derby's Innovative Engineering Solutions MSc programme focused on the needs of SMEs**

<http://www.derby.ac.uk/courses/postgraduate/innovative-engineering-solutions-msc/>



University of Derby: MSc Innovative Engineering Solutions

- **University of Derby's** Post Graduate Support (PSS) Programme “**Innovative Engineering Solutions**” involved a consortium of c.40 employers and recruited 49 students
- Students all had First or 2:1 class degrees from engineering or related disciplines such as design, physics, chemistry or mathematics. Rigorous selection process also included aptitude and psychometric testing.
- Under-represented groups were particularly encouraged and **25% of the first cohort were women.**
- Useful particularly for SMEs without a graduate programme.
- Contributes to gaining Chartered Engineer status – added benefit for SMEs seeking quality accreditation to support business development.
- **Employers have seen immediate impact** in reduced recruitment costs and an improved ability to fill their skills gaps – both particular challenges for SMEs



Improving supply

3. Converters:

- Showcase and promote existing initiatives which enable students to “convert” their undergraduate STEM degree to an engineering specialism and explore the potential to extend the opportunity to those without a science degree but with the necessary aptitude.
- We are grateful to **BIS** for providing **£1.5M in pilot funding** to help universities and business work together to build and promote new (or expand existing) conversion programmes. The call for bids **closes on 27th November, 2015**.

<http://www.hefce.ac.uk/kess/engineer/>



Upcoming events

Annual General Meeting 6 April, 2016

Senate House, University of London

Award of the President's Prize to Sir Bill Wakeham

Guest speaker Vicky Ford MEP (key negotiator on Horizon 2020) and
A N Other Minister (to be confirmed)

<http://epc.ac.uk/events/engineering-professors-council-annual-general-meeting/>

Congress 2016

5/6 September, 2016

Hosted by University of Hull to coincide with
Amy Johnson Festival

<http://epc.ac.uk/events/engineering-professors-council-annual-congress-2015/>

****20th anniversary awards 2016****

Student prize: Back to the Future

<http://epc.ac.uk/20th-anniversary-awards-2016-back-to-the-future/>