



Enrolments to engineering programmes in UK HEIs: the current situation

Susan Kay

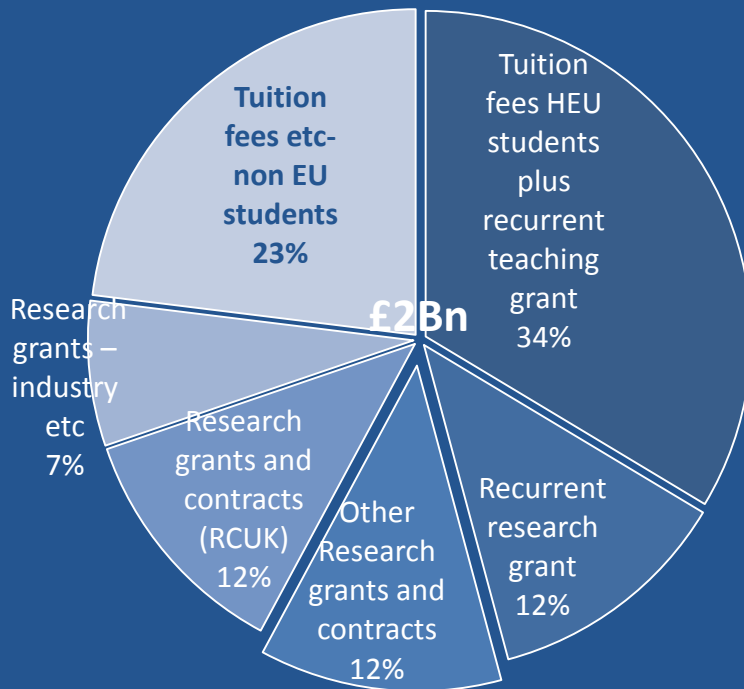
Executive Director

Engineering Professors' Council

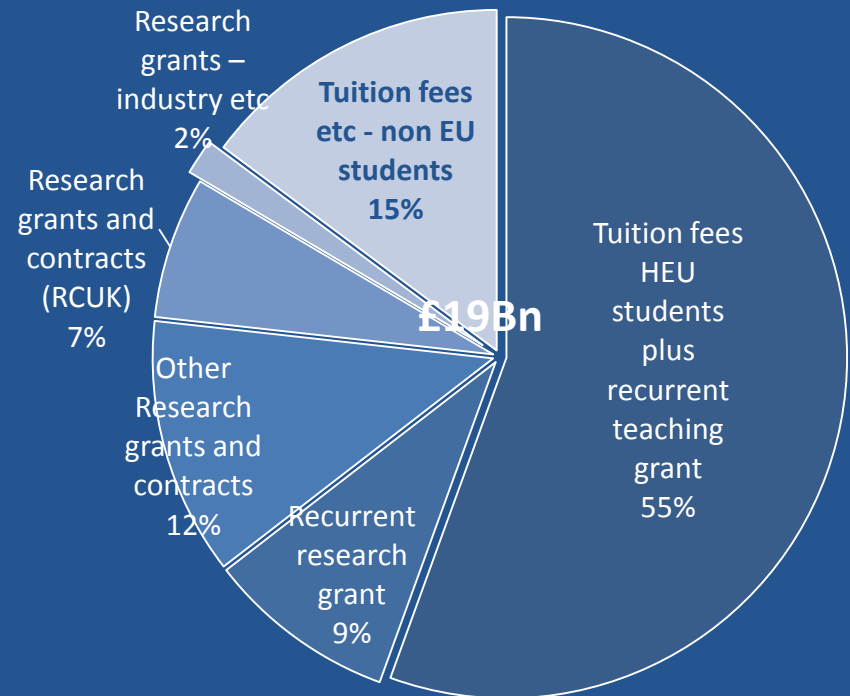


Enrolments to engineering in UK HEIs: some context

**Income: engineering
2011/12**



**Income: all other subjects
2011/12**



The substantially different income mix is a result of a substantially higher proportion of research funding and substantially higher proportion of income from non EU students – and this is true across all types of university.



Key issues: pressure from a number of directions

Changing global
HE landscape

Attractiveness
of UK to
overseas
students and
academic staff

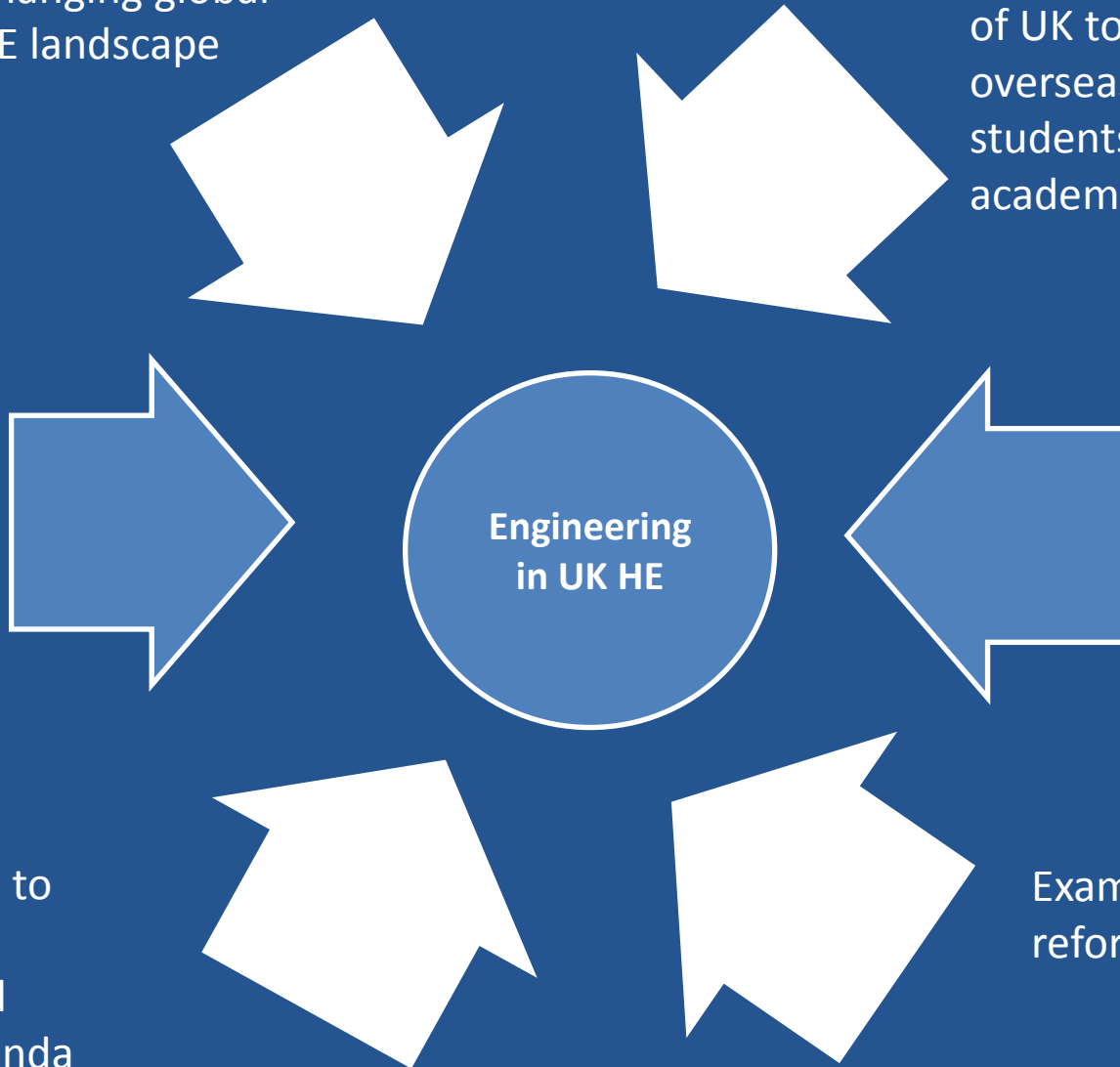
Concentration
in research
funding
distribution.
Impact of
impact

Outcome of REF

Engineering
in UK HE

Contribution to
economic
recovery and
the skills agenda

Examination
reform





Enrolments to engineering in UK HEIs

EngineeringUK through its annual report:

EngineeringUK 2013: The State of Engineering (Dec 2012)

identified that:

“in order to meet the future UK demand for engineers with Level 4+ skills, the UK needs to roughly double its output of students with Level 4+ qualifications via universities and colleges of further education.”



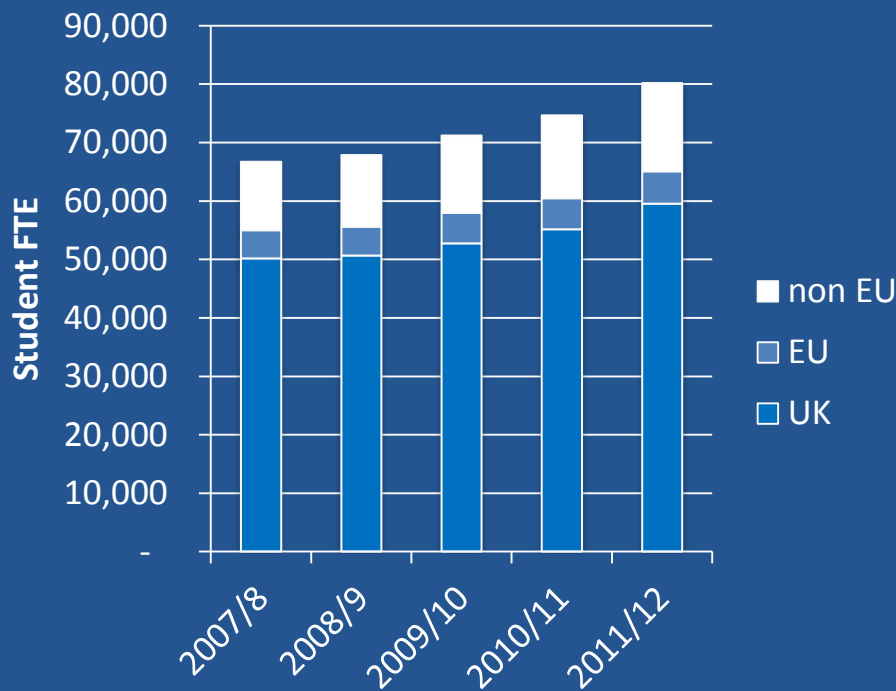
6 key themes of Perkins Report (draft version...)

1	PERCEPTION	Changing the perception of engineering making it much more accurate and positive; challenging outdated negative views of the profession; amongst parents, teachers and pupils.
2	DIVERSITY / GENDER	Addressing the diversity issues in engineering including the 'gender gap' (only 9% of professional engineers in the UK being women). We need to ensure that efforts in this area reach out to the widest possible talent pool
3	INDUSTRY ENGAGEMENT	Encouraging sponsorship and strengthening industrial links to students, thereby making engineering courses more attractive and increasing students' employability
4	CONVERSION / RETRAINING	Enable re-entry to engineering and conversion between sectors. Seeking to help engineers who have left the profession and wish to rejoin it and others who wish to convert to it
5	EDUCATION SYSTEM	Working with the DfE to increase the numbers of students with the appropriate educational background to pursue engineering careers (maths & physics especially)
6	APPRENTICE-SHIPS	Encouraging and supporting the provision of more engineering apprenticeships, particularly higher level apprenticeships

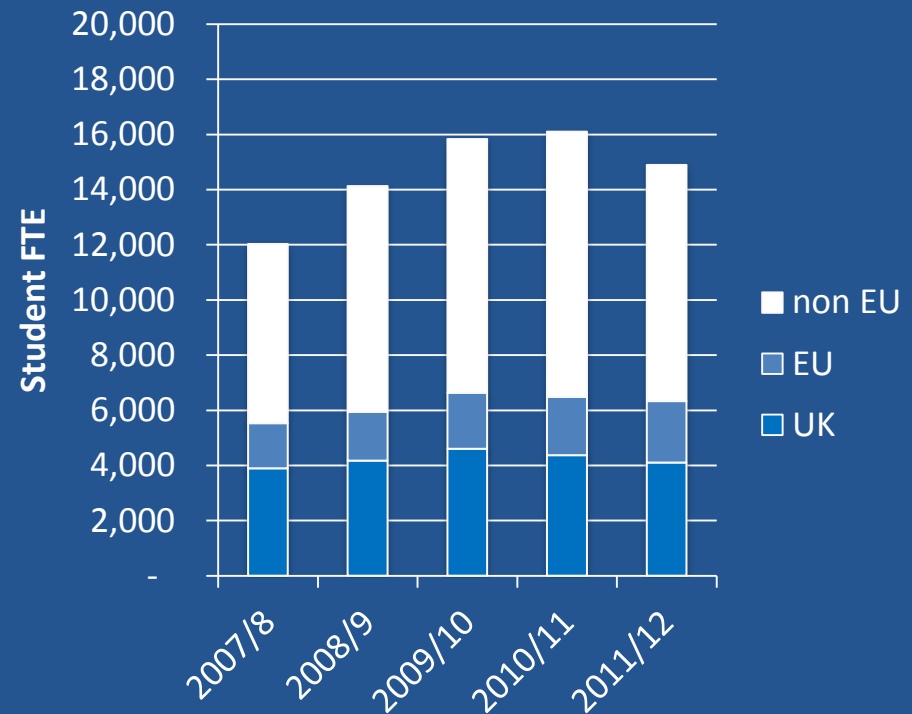


Enrolments to engineering in UK HEIs: some context

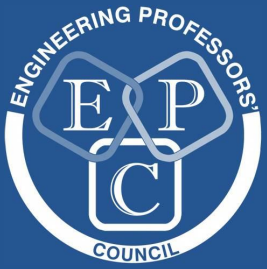
Engineering: UG first degree



Engineering: PGT



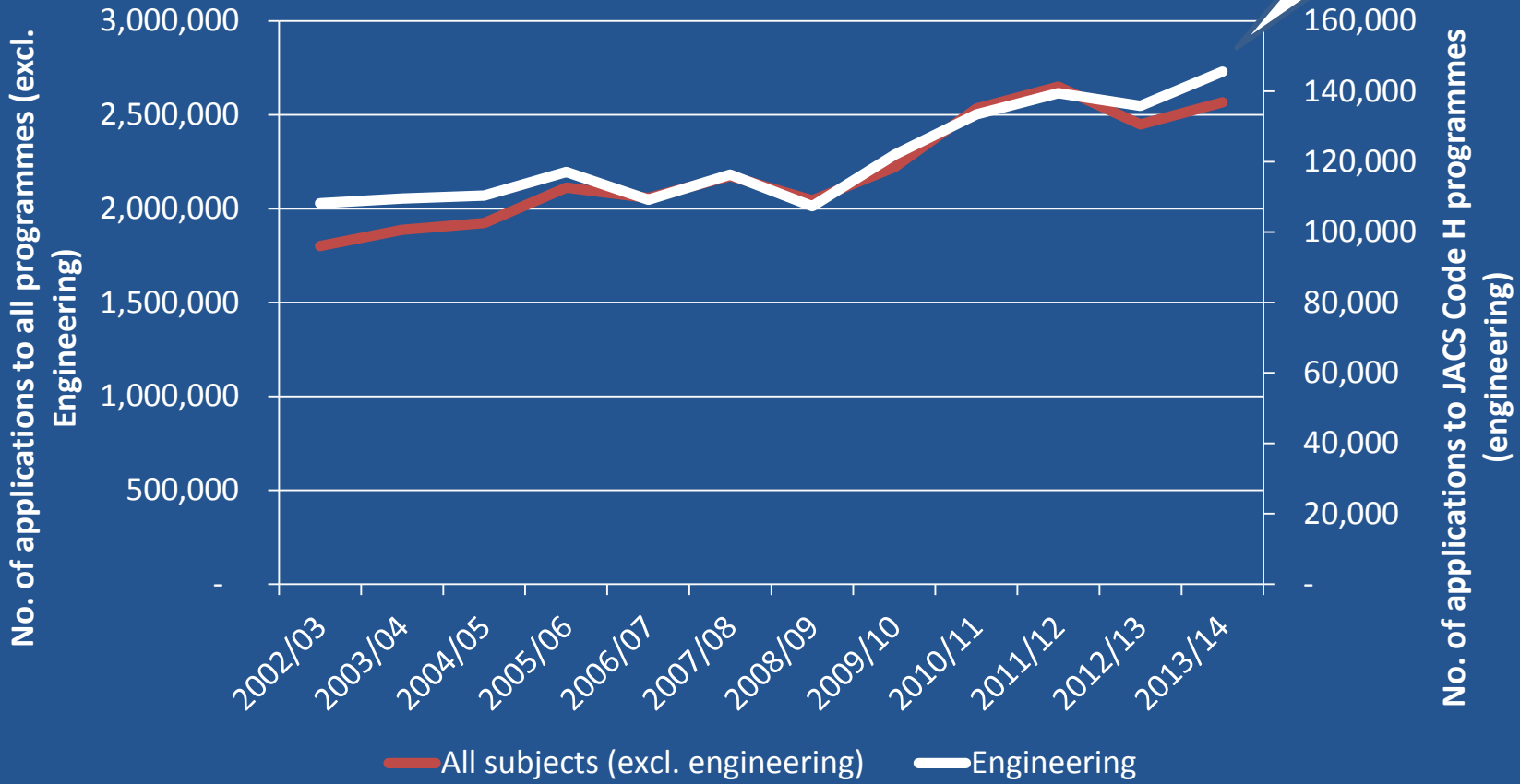
The proportion of students from outside the EU is substantially higher in engineering than for other disciplines. UG: 19% *cf* 8% in all other, PGT: 57% *cf* 31% in all other, PGR: 44% *cf* 31% in all other

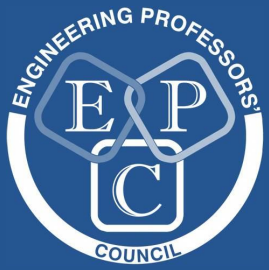


UG applications to engineering in UK HEIs

Accepted applications for 2013 not yet available by subject line

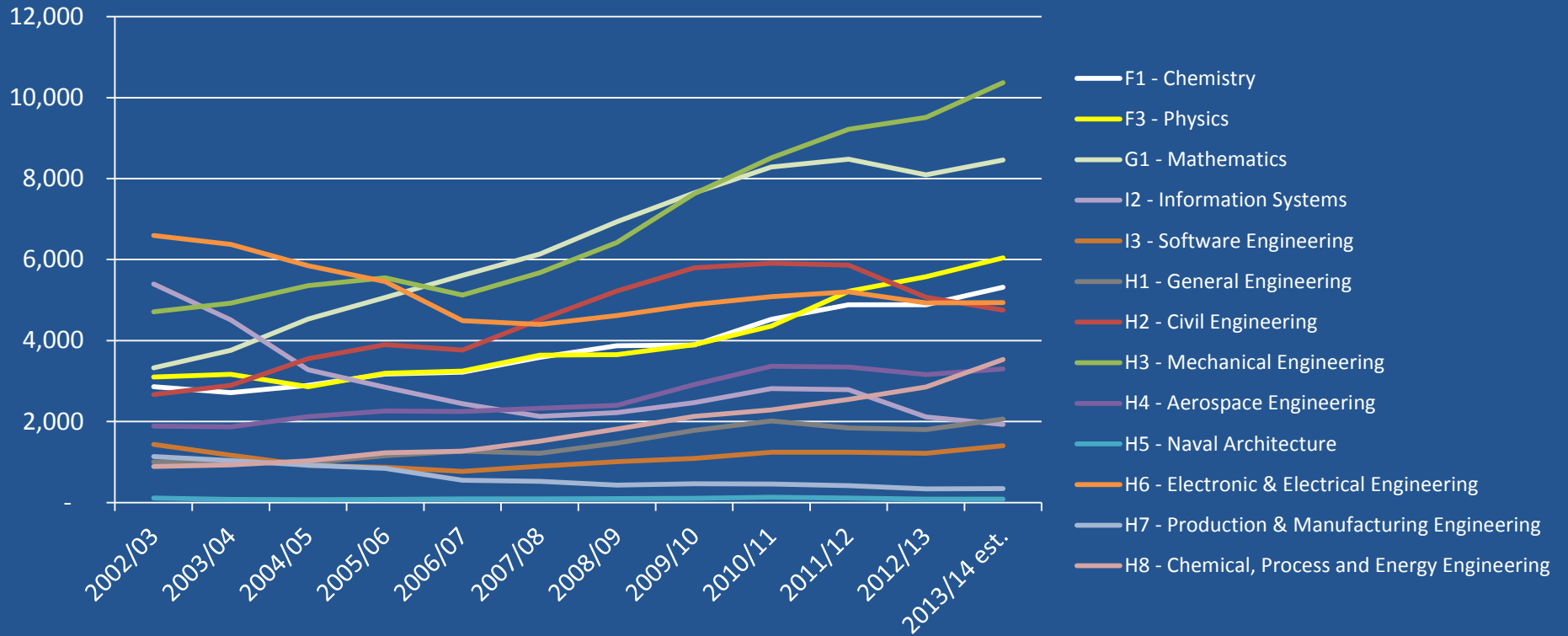
UCAS applications to first degree programmes (as at June 2013)





UG applications to engineering in UK HEIs

UCAS applicants to first degree programmes





Undergraduate application trends

Percentage change from 10, 5, 3, 2 and 1 year back

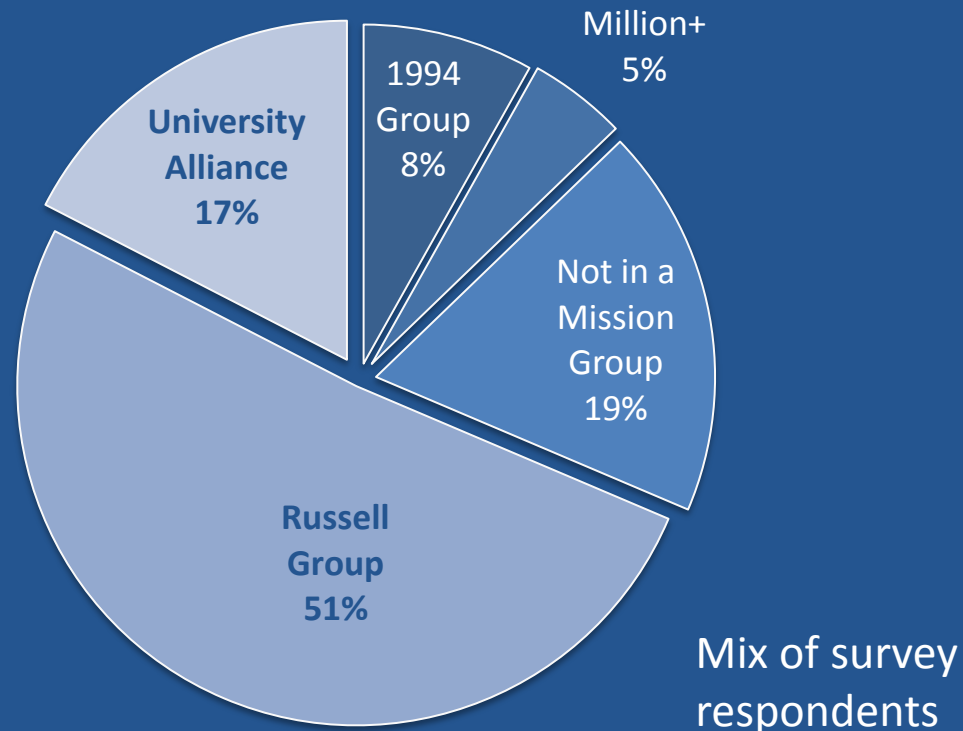
Subject group change	from 2003	from 2008	from 2010	from 2011	from 2012
F1 - Chemistry	+96%	+37%	+18%	+9%	+9%
F3 - Physics	+91%	+66%	+39%	+16%	+8%
G1 - Mathematics	+125%	+22%	+2%	0%	+4%
G4/I1 - Computer Science	-3%	+33%	+11%	+5%	+12%
G6/I3 - Software Engineering	+20%	+38%	+13%	+13%	+15%
H1 - General Engineering	+105%	+40%	+2%	+12%	+14%
H2 - Civil Engineering	+64%	-9%	-20%	-19%	-6%
H3 - Mechanical Engineering	+111%	+61%	+22%	+12%	+9%
H4 - Aerospace Engineering	+77%	+37%	-2%	-1%	+4%
H6 - Electronic and Electrical Engineering	-23%	+7%	-3%	-5%	0%
H7 - Production and Manufacturing Engineering	-67%	-21%	-25%	-17%	+2%
H8 - Chemical, Process and Energy Engineering	+281%	+95%	+55%	+39%	+24%

Provisional estimate based on UCAS 9 July 2013 figures and annual data sets



EPC 2013/14 enrolments survey: response

86 departments from around 50 universities responded (83 usable responses), representing around half of universities in the UK with UG and/or PGT students registered as studying at least one of the engineering disciplines. (83 responses last year).

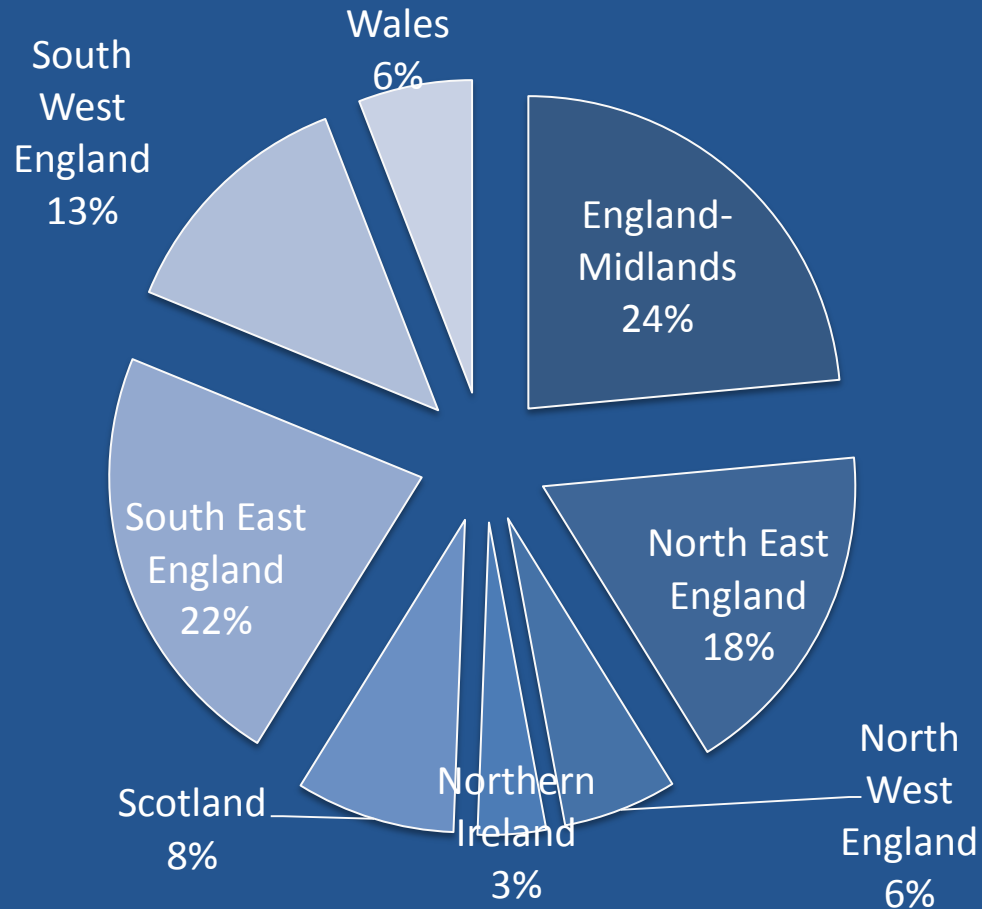


Engineering Professors' Council membership
=78 universities



EPC 2012/13 enrolments survey: response

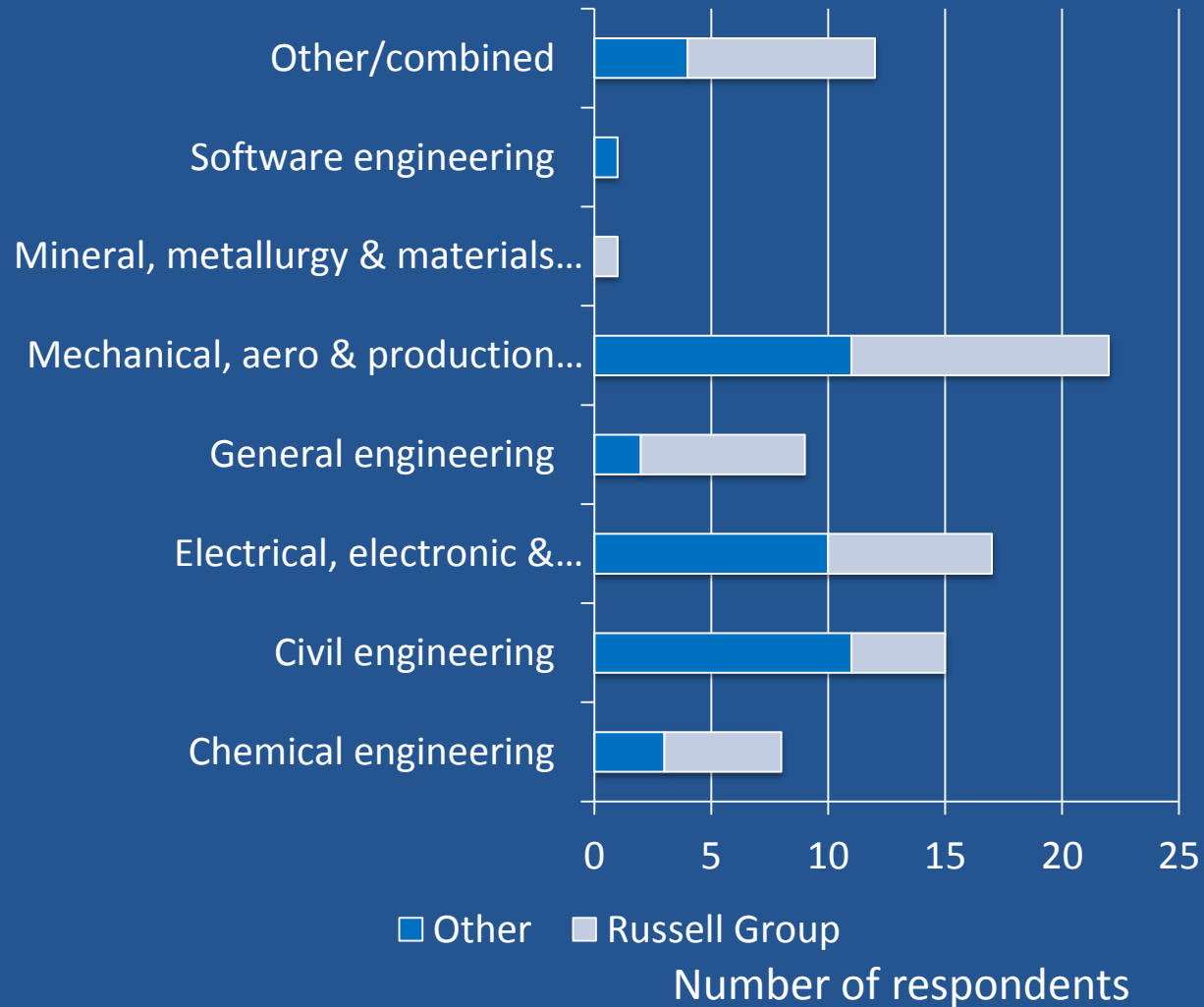
...from across the UK



Mix of survey respondents

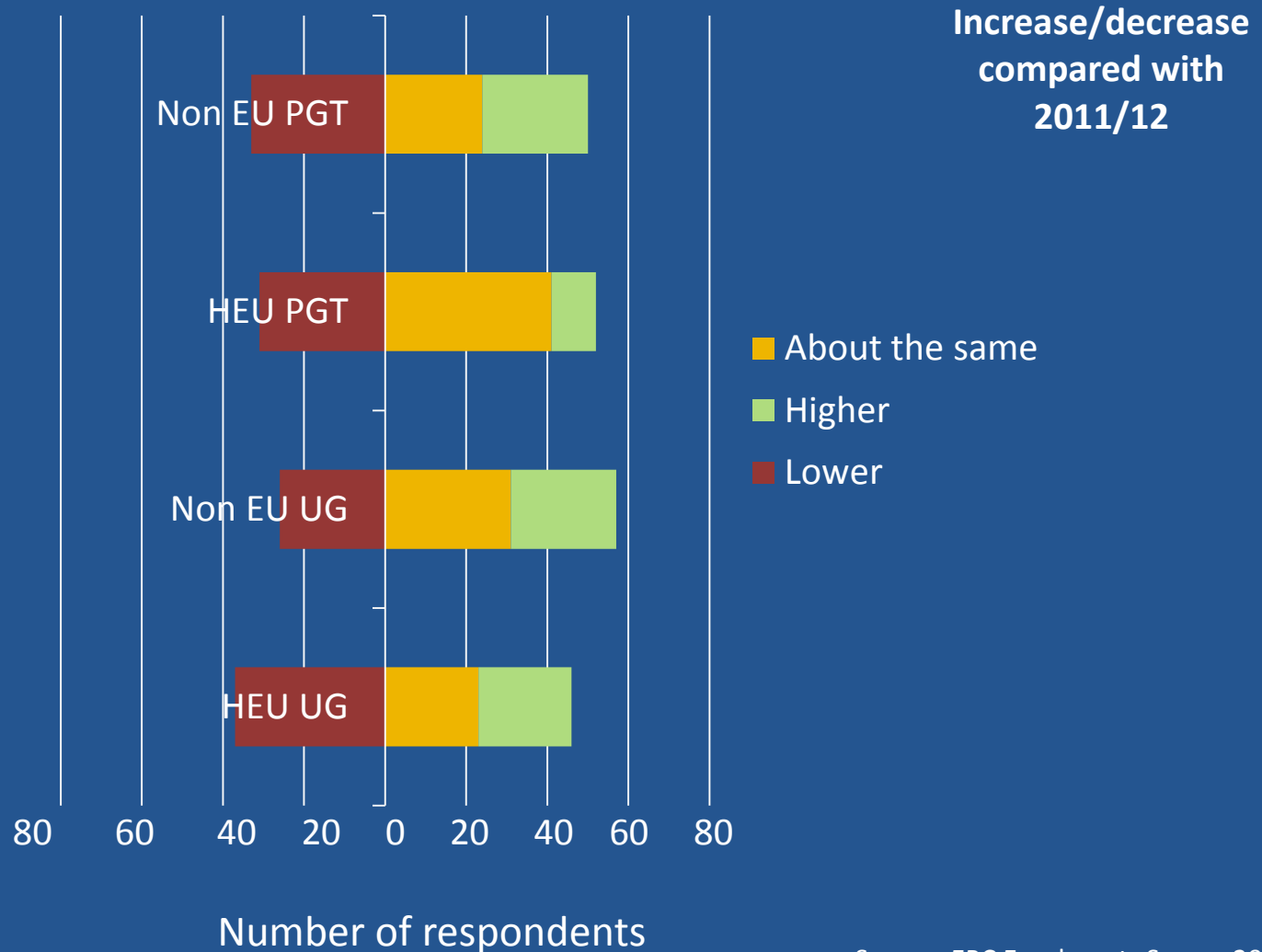


EPC 2012/13 enrolments survey: response





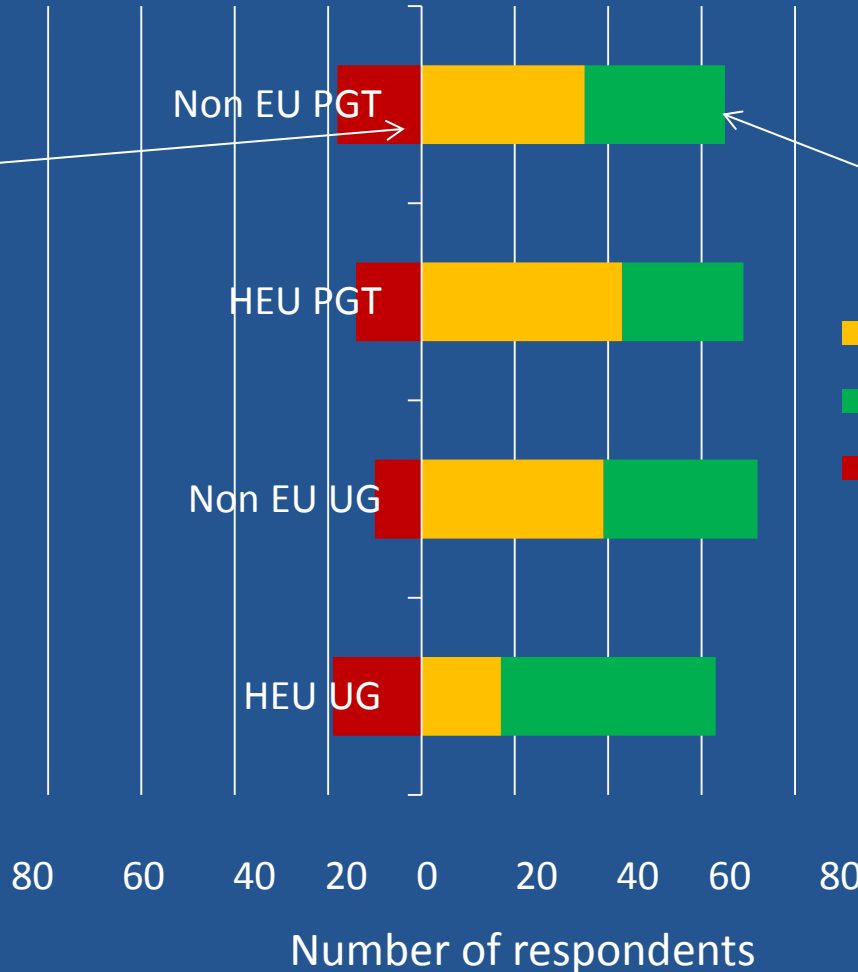
Position in 2012/13: last year's survey





EPC 2013/14 enrolments survey: summary

72% of those reporting "lower" enrolment reported a decrease of more than 10%



Increase/decrease compared with 2012/13

- About the same
- Higher
- Lower

46% of those reporting "higher" enrolment reported an increase of more than 10%

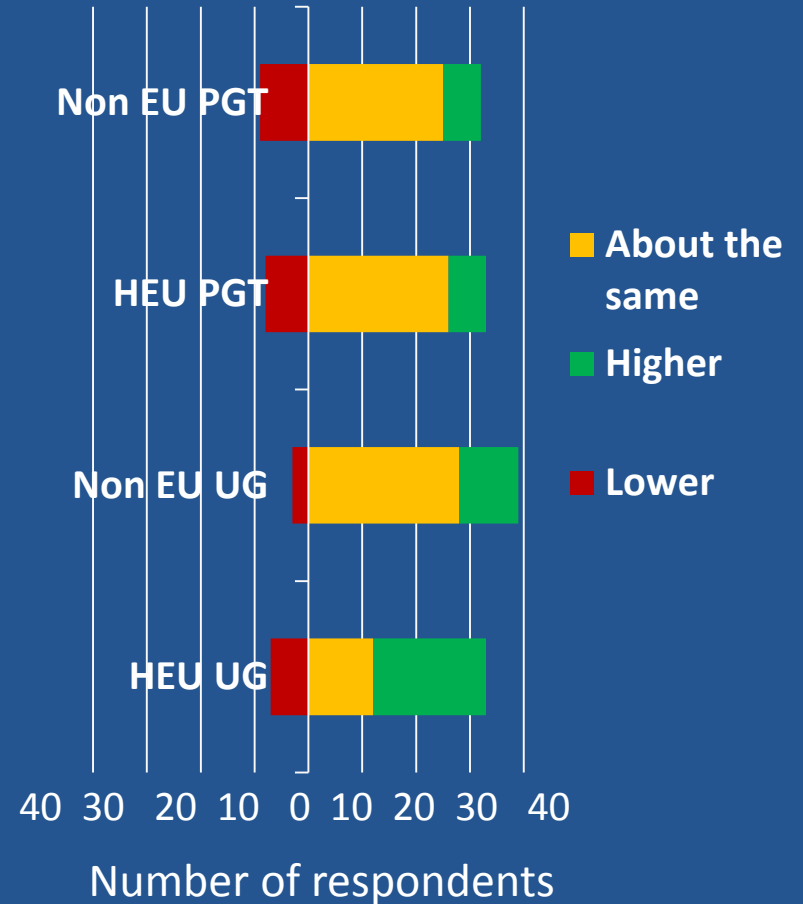
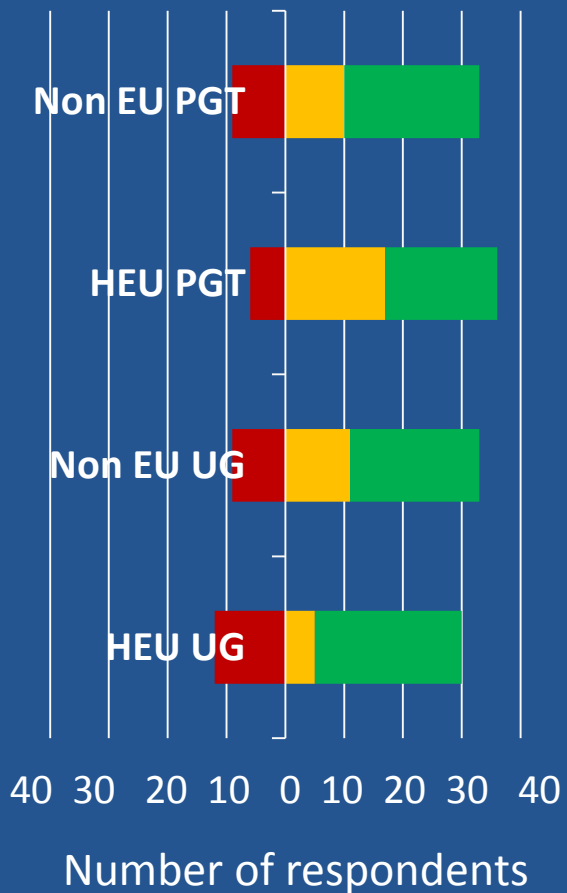


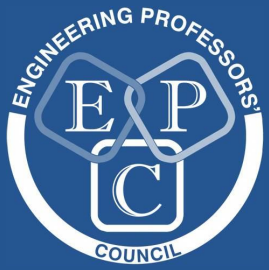
By Mission Group

Increase/decrease compared with 2012/13

Russell Group

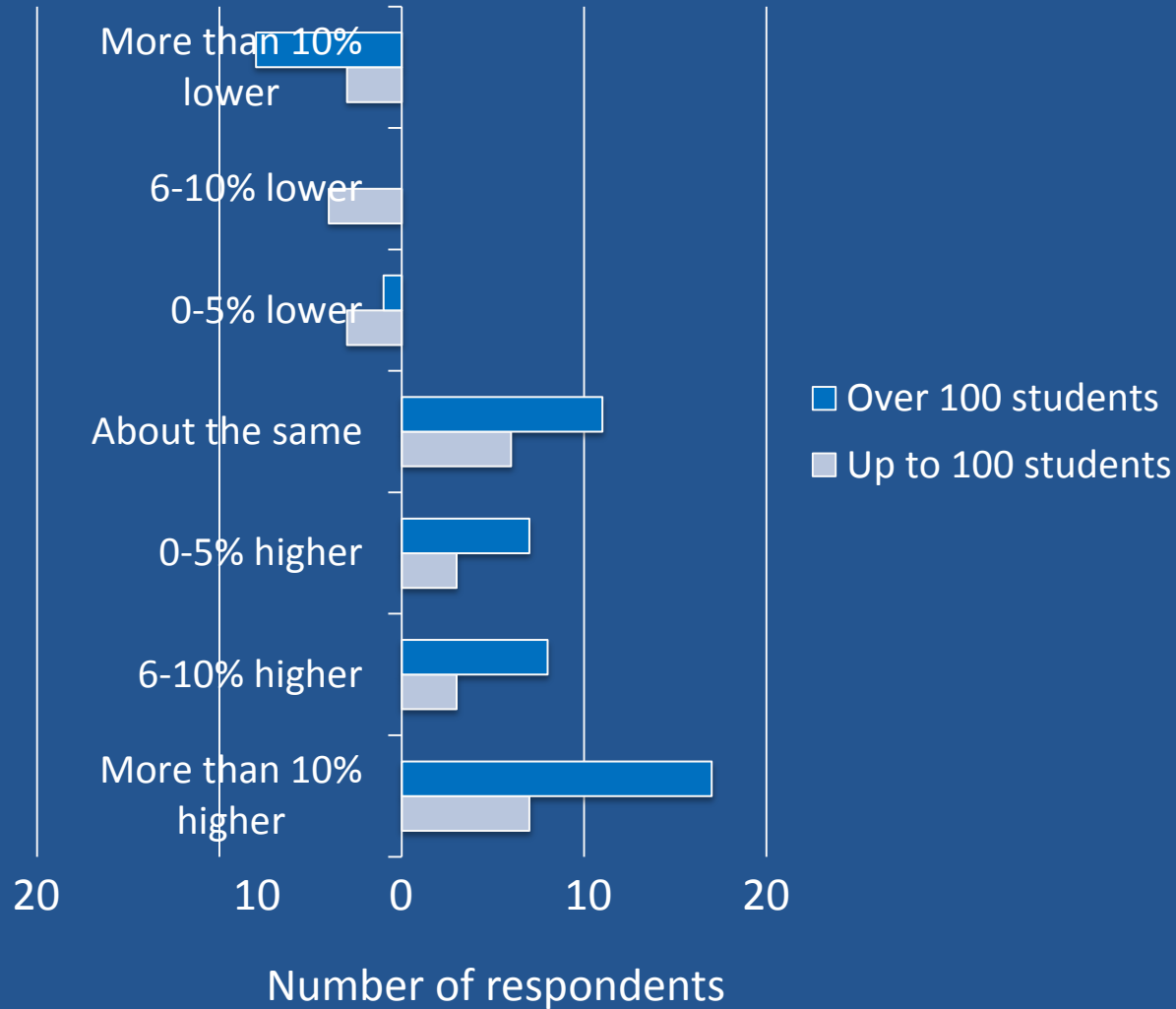
Other





By size of dept: HEU undergraduates

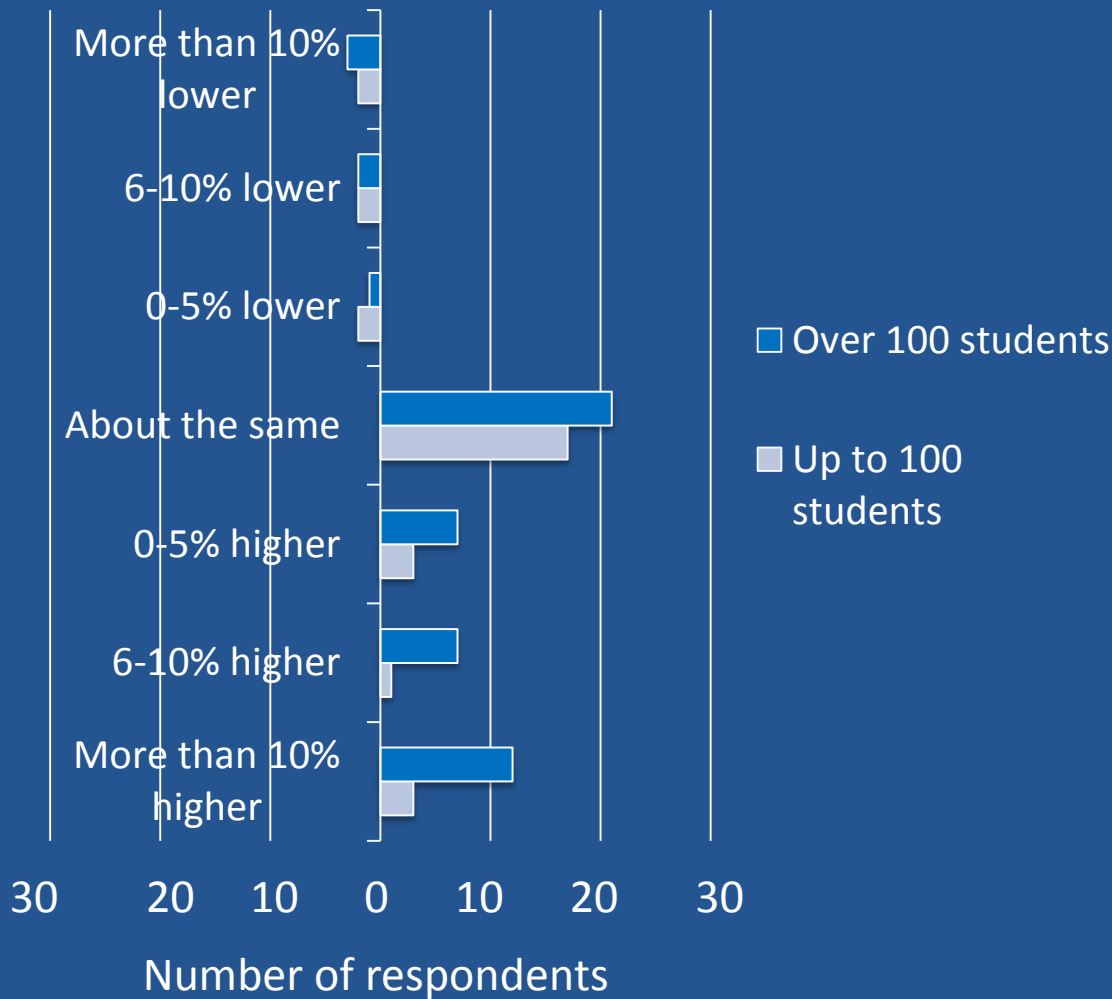
Increase/decrease
compared with
2012/13





By size of dept: Non EU undergraduates

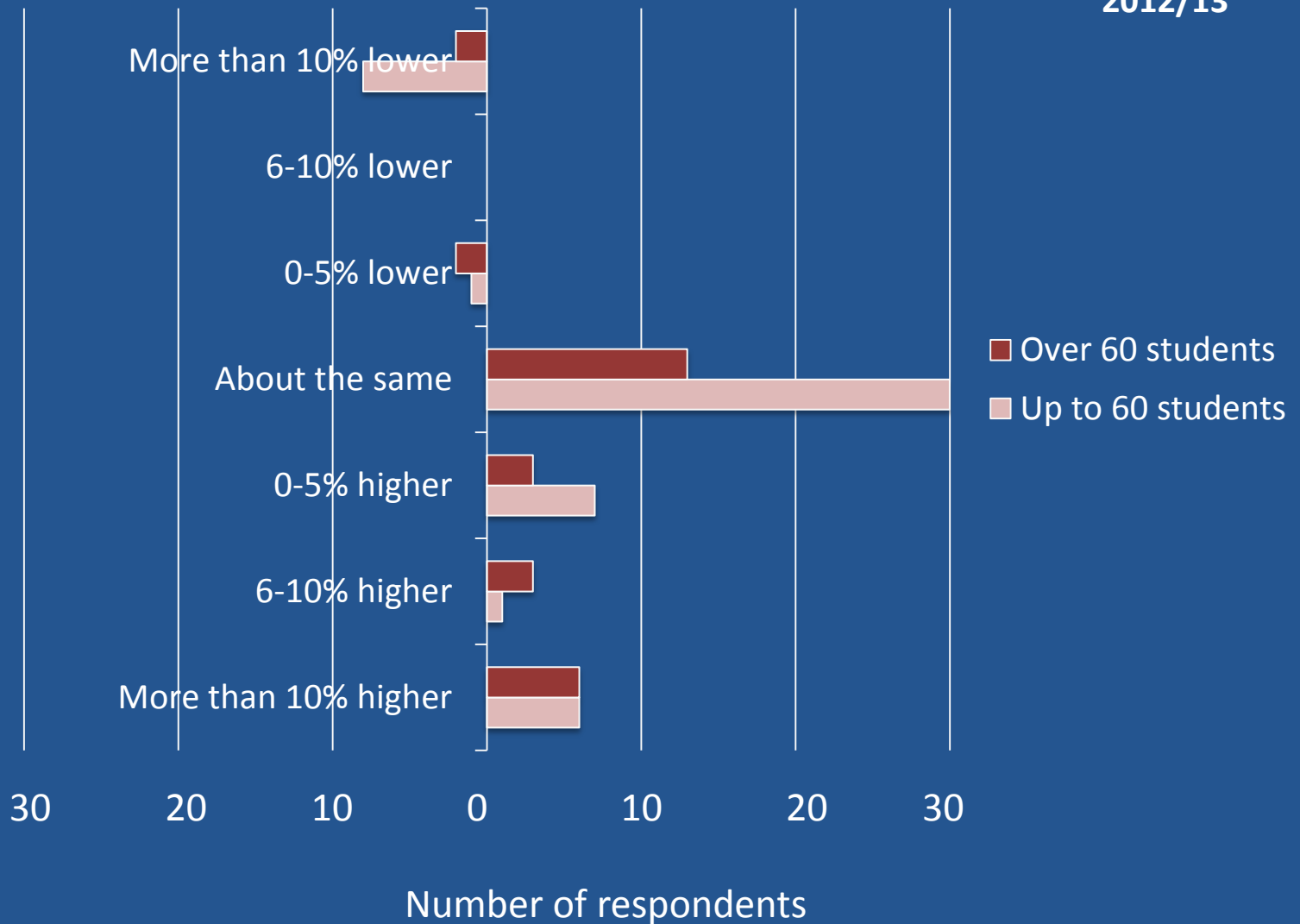
Increase/decrease
compared with
2012/13





By size of dept: HEU postgraduate (taught)

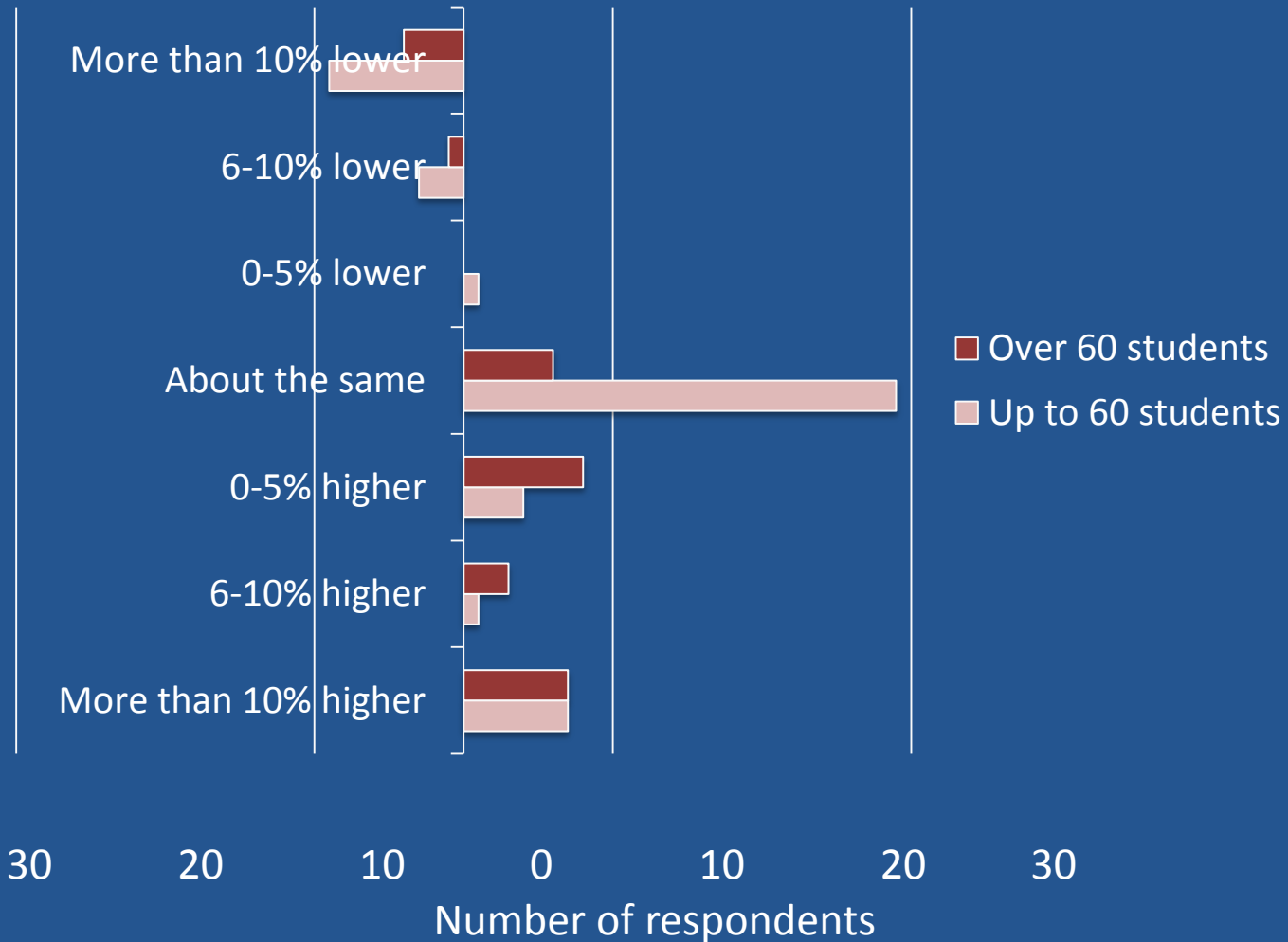
Increase/decrease
compared with
2012/13





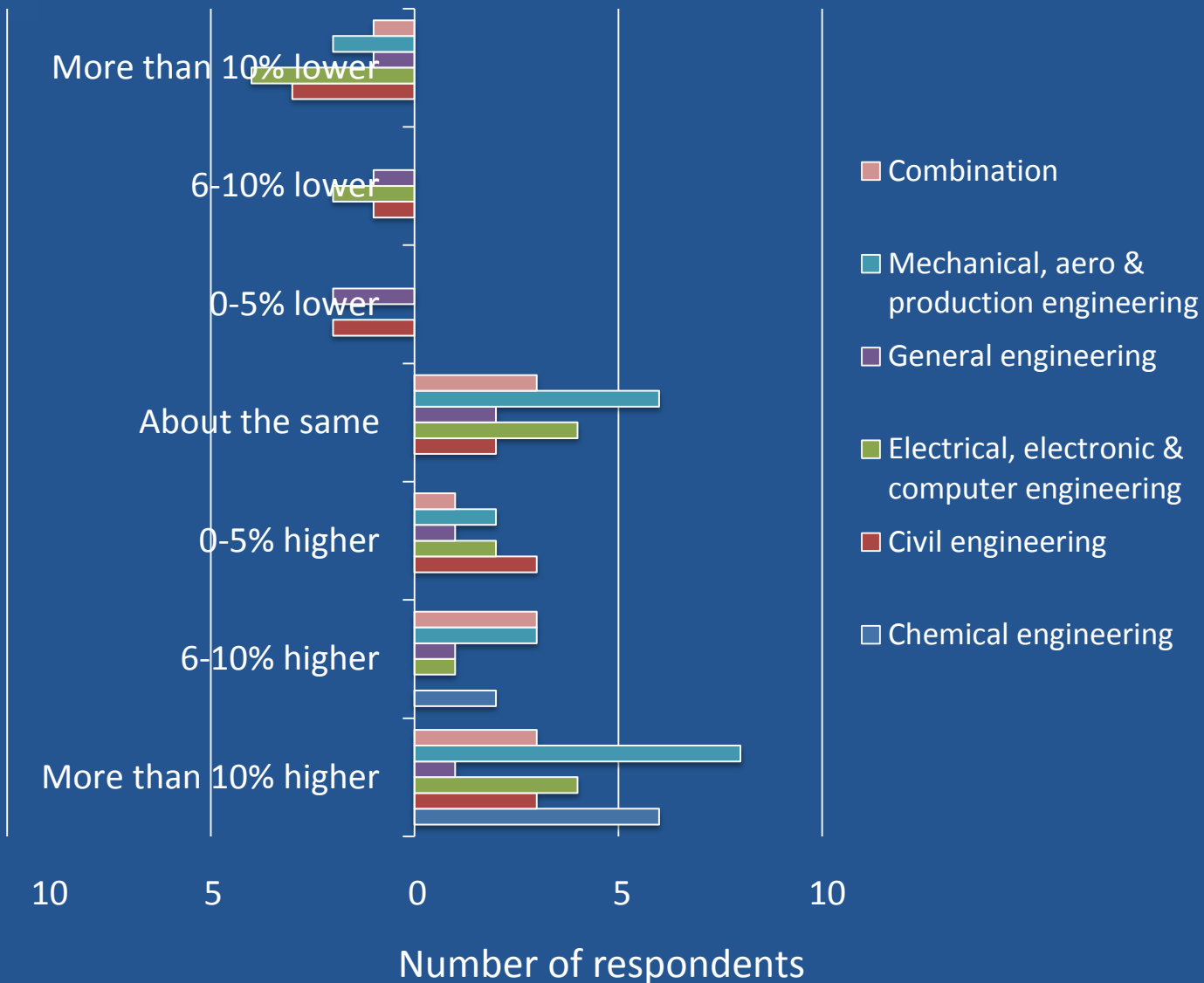
By size of dept: Non EU postgraduate (taught)

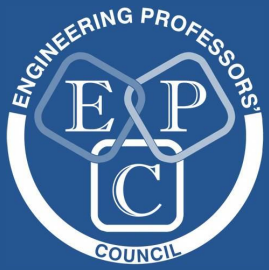
Increase/decrease
compared with
2012/13



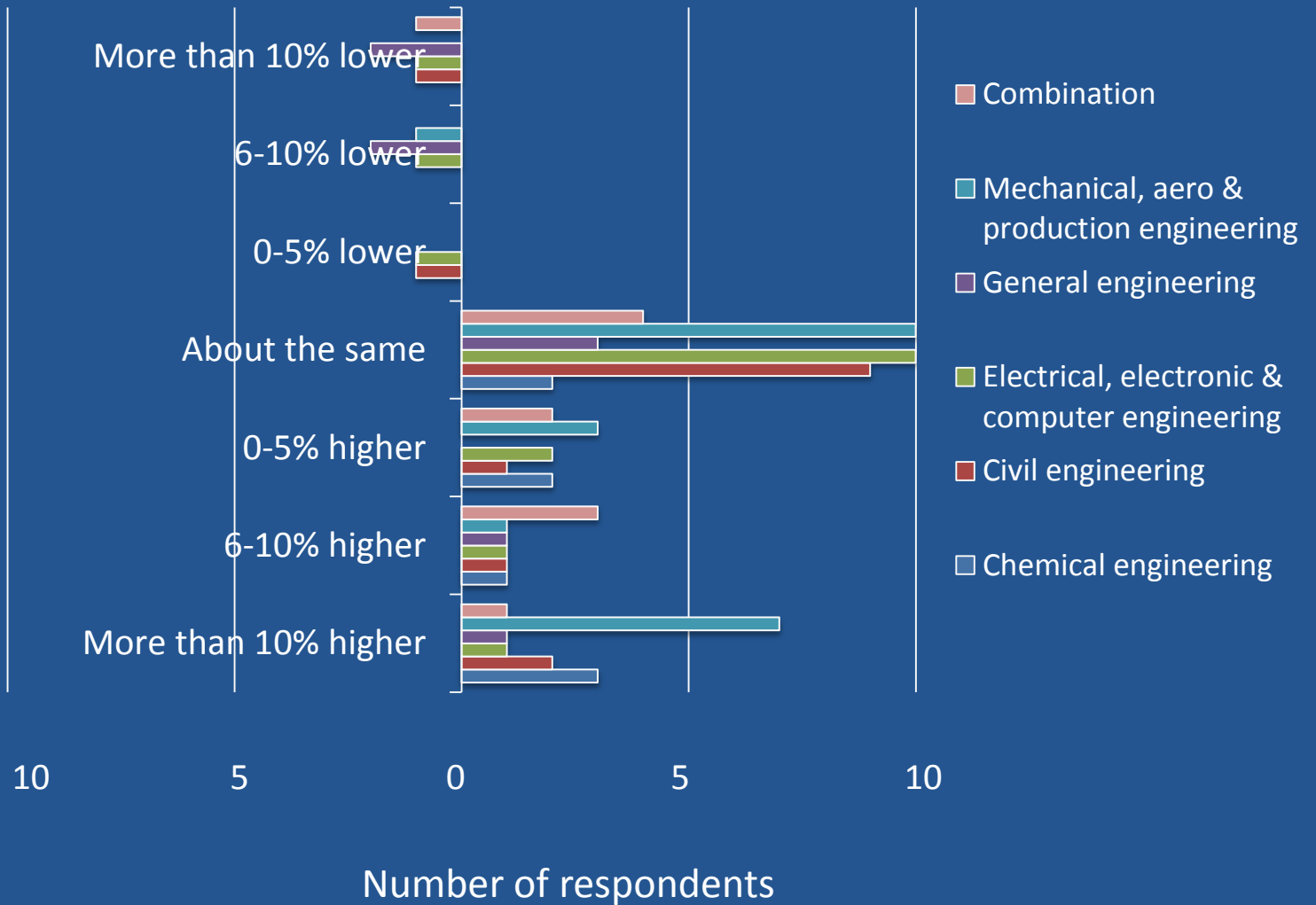


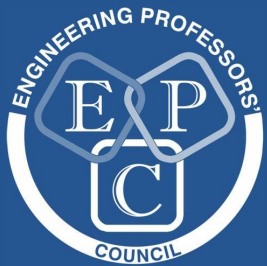
HEU undergraduate: all respondents, by discipline



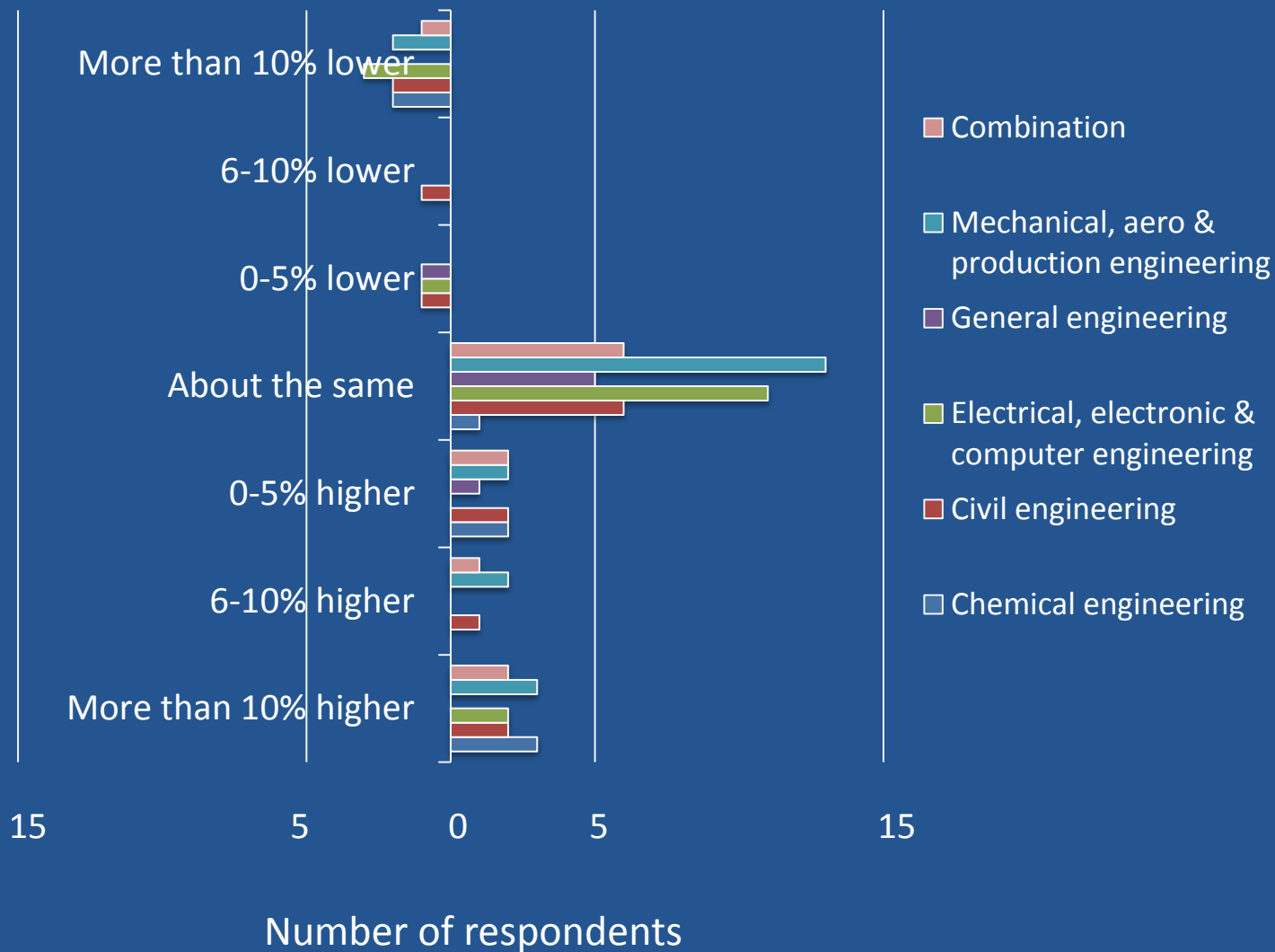


Non EU undergraduate: all respondents, by discipline



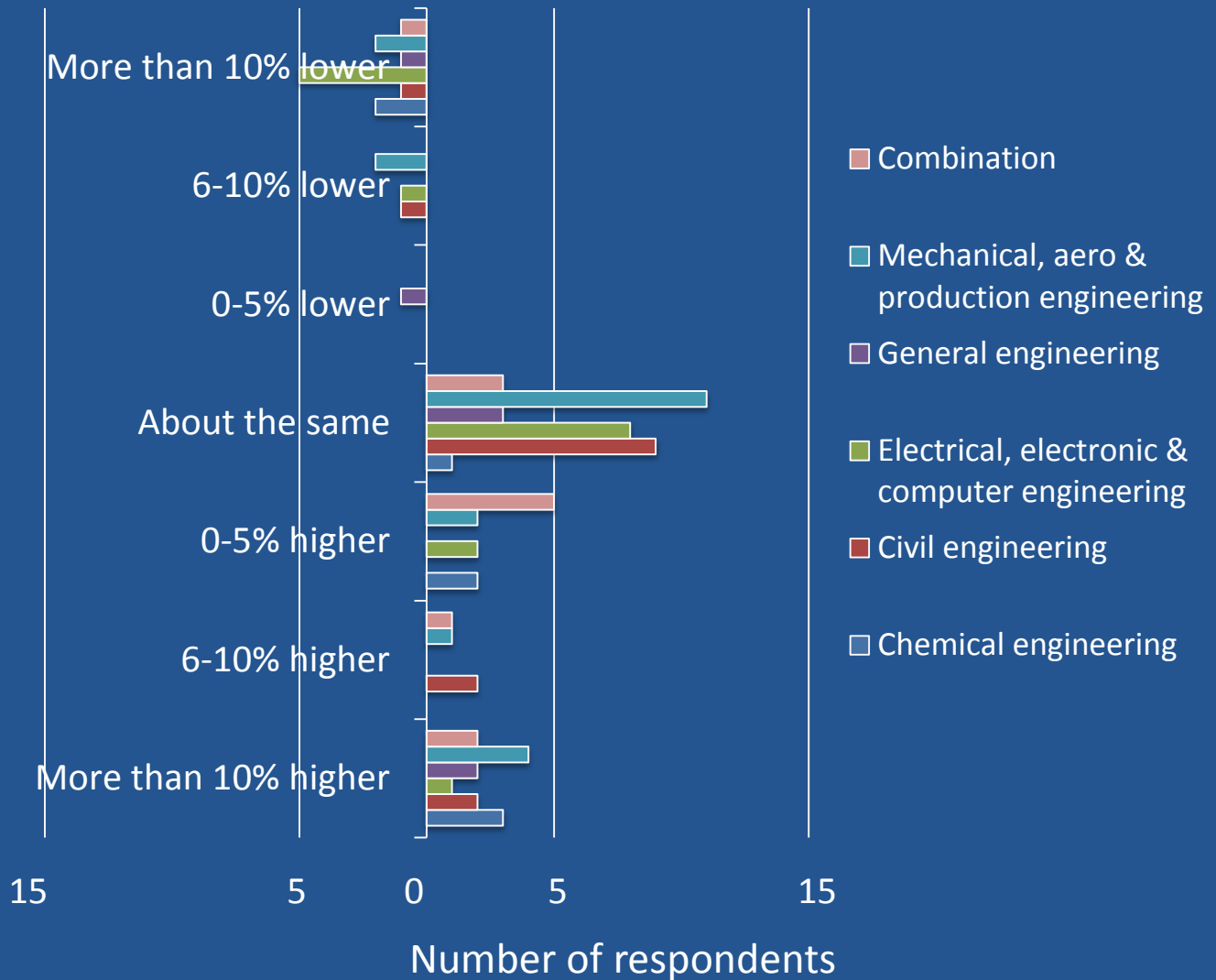


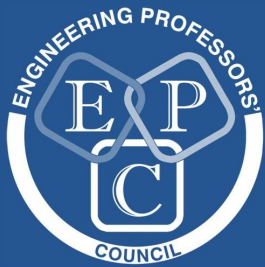
HEU postgraduate (taught): all respondents, by discipline





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





Further information on student number and applications trends

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



- Home
- About us
- Our network
- Join us
- Events
- EPC people
- EPC publications
- Members' area
- Forum

Datasets and analysis



The datasets and analyses provided here are available to members only. A password is required. If your institution is a member and have forgotten your password, please [contact us](#).

Click on the links in the right hand menu to access the datasets. The descriptions and sources may be found in the drop down boxes below.

Much of the data to be found here is provided by the Higher Education Statistics Agency Limited (HESA). HESA does not accept responsibility for any inferences or conclusions derived from the HESA Data by third parties. HESA shall not have any liability (however caused) for any loss of profit, business, contracts, revenues, increased costs or expenses or any indirect or consequential loss arising from the use of its Higher Education Information Database for Institutions (HEIDI) or its unavailability.

Committee resources

Members' portal

Datasets-home

Academic staff numbers a

Applications

Completion

Degree classification

Destination of leavers from higher education (DLHE) survey

Datasets and analysis

Event downloads

Opportunities to influence

Toolkit

Useful policy papers and other publications

▸ Academic staff numbers

▸ Applications



Further information for members

Promoting excellence in engineering in higher education

- Home
- About us
- Our network
- Join us
- Events
- EPC people
- EPC publications
- Members' area
- Forum

Protected: Recruitment and admissions toolkit



The following provides links to a range of resources and information to help university admissions tutors and those working in recruitment and admissions roles.

And each year, the Engineering Professors' Council organises a Recruitment and Admissions Forum so that all of those involved in the recruitment and admission of students to engineering programmes in UK higher education

have the opportunity to get together and share experiences and best practice, as well as hear the latest from policy makers, the funding agencies and Government.

- Accreditation
- Applications trends
- Employability of engineering graduates
- Student finance
- Promoting the study of maths
- Other useful links
- Obtaining student visas

Committee resources

Members' portal

Datasets and analysis

Event downloads

Opportunities to influence

Toolkit

Useful policy papers and other publications

Recruitment and admissions toolkit

Follow us



Latest infoDigests

- 31 October 2013
- 18 October 2013
- 1 October 2013

Datasets and analysis

Datasets and analysis Benchmark data, applications trends, graduate employment analysis and a host of other information is available to members here.

Event downloads

Event downloads Presentations and information from EPC events other than



Upcoming events

**Annual Congress:
8/9 April 2014
at the University of Glasgow**

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

<http://epc.ac.uk>

Follow us on

