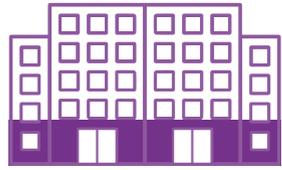


Engineering is of vital importance to UK's economy



27%
of enterprises
in the UK are
engineering-related

Figure 2.6, page 38 Engineering UK 2018 Report



29%
Information and
communication



19%
Manufacturing



26%
Construction



25%
Other engineering

Figure 2.7, page 39

Between 2015 and 2016 the number of **engineering enterprises in the UK** grew by **↑ 5.6%**

Figure 2.4, page 37

Engineering generates

23%
of the UK's
total turnover



Figure 2.12, page 42

Engineering employs **5.6 million** people in the UK

↑ 5.1%

increase in employment
over the last five years

Figure 7.8, page 175



Every time a **new job** is created in engineering, **1.74 jobs are created elsewhere** Page 35

Engineering skills are in short supply

New industries and technologies are emerging, adding to already significant demand for engineering skills

124,000 engineers and technicians with core engineering skills required per year + **79,000** engineering-related roles to arise per year = **203,000** people with Level 3+ engineering skills needed every year to meet demand

Figure 10.21, page 270

Annual shortfall of up to **59,000** engineering graduates and technicians to fill core engineering roles

Figure 10.21, page 270



engineering employers surveyed report recruitment difficulties

Page 20

It is essential more young people - particularly girls - study STEM

129,059 engineering-related apprenticeship starts across England, Scotland and Wales

Page 9

37,335 first year engineering and technology undergraduates in the UK

Figure 6.10, page 145

10% decrease GCSE entries for biology, chemistry and physics between 2012 and 2017

Page 87

Proportion female:

GCSE Physics entrants

50%

Figure 4.4, page 92

A level Physics entrants

22%

Figure 3.20, page 82

Engineering and technology undergraduate entrants

16%

Figure 6.10, page 145

Engineering apprenticeship starts (England only)

8%

Figure 5.8, page 116

Demand and shortfall figures presented here are not directly comparable to previous editions due to the use of a revised engineering footprint.

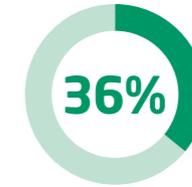
We need to improve awareness of engineering and the different routes into the profession



27%

11 to 14 year olds in 2017 know what engineers do compared to just 15% in 2013

Fig 3.11, page 66



11 to 14 year olds know what to do next to become an engineer

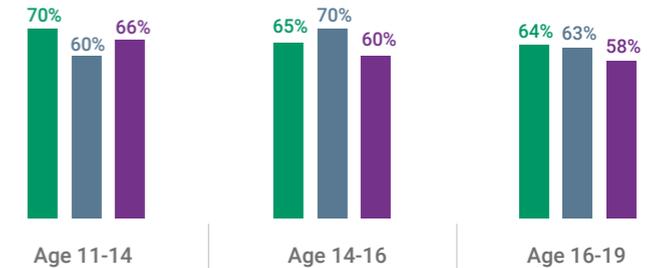
Page 86



11 to 14 year olds know almost nothing or just a little about what apprentices do and the different types of apprenticeships available

Raising understanding among key influencers is critical

Who would you consider going to for careers advice?



● Parents/guardians ● Careers advisers ● Teachers

Fig 3.14, page 68

31% parents know what engineers do



36% of parents and **58% of teachers** feel confident giving careers advice about engineering

Fig 3.11, page 66

Page 86