

# Top 10 careers by Yr. 11

## No.3 Engineering Careers

Areas of work include:

- aerospace/aeronautical engineering
- automotive engineering
- building services engineering
- chemical engineering
- civil engineering
- communications engineering
- computer engineering
- electrical engineering
- electronics engineering
- engineering construction
- land-based engineering
- manufacturing engineering
- marine engineering
- mechanical engineering
- medical engineering
- mining/minerals engineering
- power and energy engineering.

### Education and training

There are opportunities for people of all backgrounds, at various entry levels. Apprenticeships are available.

### What it takes

You need to enjoy maths and science. Whatever area of engineering you choose, teamwork is an important feature.

### Prospects

According to EngineeringUK's report, *Engineering UK 2016: The state of engineering*, the engineering industry needs skilled and qualified employees. The report states that to meet future demand, the number of graduates who enter engineering occupations needs to double by 2022. There also needs to be a two-fold increase in the number of apprentices qualifying at level 3.

### For further information

**SEMTA** - tel: 0845 643 9001. The employer-led skills organisation for the engineering and advanced manufacturing technologies sectors.  
[www.semta.org.uk](http://www.semta.org.uk)

**Engineering Council** - tel: 020 3206 0500. Regulates the engineering profession.

[www.engc.org.uk](http://www.engc.org.uk)

**EngineeringUK** - tel: 020 3206 0400. Promotes engineering as a profession in the UK.  
[www.engineeringuk.com](http://www.engineeringuk.com)

**Women's Engineering Society (WES)** - tel: 01438 765506. A supportive network for female engineers and students.  
[www.wes.org.uk](http://www.wes.org.uk)

**WISE Campaign** - tel: 0113 222 6072. Promotes female talent in science, technology, engineering and maths. For news and information on events etc, see:  
[www.wisecampaign.org.uk](http://www.wisecampaign.org.uk)

### ***Professional engineering institutions***

There are currently 35 licensed professional engineering institutions; they can offer advice on careers in their specialist areas and most have careers information on their websites. Some of the bigger bodies are listed below but you can find a full list with contact details at: [www.engc.org.uk/about-us/our-partners/professional-engineering-institutions](http://www.engc.org.uk/about-us/our-partners/professional-engineering-institutions)

**Institution of Chemical Engineers** - tel: 01788 578214.  
[www.icheme.org](http://www.icheme.org)  
[www.whynotchemeng.com](http://www.whynotchemeng.com)

**Institution of Civil Engineers** - tel: 020 7222 7722.  
[www.ice.org.uk](http://www.ice.org.uk)

**The Institution of Engineering Designers** - tel: 01373 822801.  
[www.institution-engineering-designers.org.uk](http://www.institution-engineering-designers.org.uk)

**The Institution of Engineering and Technology (IET)** - tel: 01438 313311.  
[www.theiet.org](http://www.theiet.org)

**Institute of Healthcare Engineering and Estate Management (IHEEM)** - tel: 023 9282 3186.  
[www.iheem.org.uk](http://www.iheem.org.uk)

**Institution of Mechanical Engineers** - tel: 020 7222 7899.  
[www.imeche.org](http://www.imeche.org)

### ***Publications***

The following publications may be available for reference in careers libraries:

*Working in Science, Technology, Engineering and Maths (STEM)* - published by Prospects Education Resources, £9.50. Includes profiles on various engineering roles.

*Working in Engineering: A practical guide to engineering careers for graduates* and *Getting into Engineering Courses* - both published by Trotman, part of Crimson Publishing, £14.99 each.

*Engineering in Society* - published by the Royal Academy of Engineering with the Inter-Disciplinary Ethics Applied Centre. Aims to provide engineering students with an insight into the engineering profession beyond the technical aspects of the work. Download at: [www.raeng.org.uk/publications/reports/engineering-in-society](http://www.raeng.org.uk/publications/reports/engineering-in-society)

*TARGETjobs Engineering 2017* - published by GTI Media Ltd. Can be viewed at:  
<https://targetjobs.co.uk/careers-products>

For information on graduate job vacancies, internships and employers in engineering, see:  
<https://targetjobs.co.uk/career-sectors/engineering>

### ***Careers information and initiatives***

There are a number of organisations and websites that provide information on careers in engineering, some of which are given below.

**Tomorrow's Engineers** - led by the engineering community - provides information and resources and runs in-school workshops etc to inspire young people to think about engineering as a career. The website has a career finder based on interests, includes blogs by engineers and lots of other information:

[www.tomorrowsengineers.org.uk](http://www.tomorrowsengineers.org.uk)

**Future Morph** encourages young people to study STEM subjects and provides lots of useful advice, articles, resources and links:

[www.futuremorph.org](http://www.futuremorph.org)

**Gradcracker** is a careers website for engineering and technology students. It provides information on graduate opportunities, work placements, events etc:

[www.gradcracker.com](http://www.gradcracker.com)

**The Big Bang** aims to show young people the opportunities available to them in science, technology, engineering and maths. The organisation runs local, regional and national events including The Big Bang Fair (in 2017 being held on 15th to 18th March at The NEC, Birmingham). For more details, view:

[www.thebigbangfair.co.uk](http://www.thebigbangfair.co.uk)

**The National Engineering & Construction Recruitment Exhibition** will be held at The NEC on 31st March and 1st April 2017. For information, see:

[www.engineerjobs.co.uk/engineering-exhibitions/spring-exhibition-2017](http://www.engineerjobs.co.uk/engineering-exhibitions/spring-exhibition-2017)

For information on Apprenticeships, see:

[www.getingofar.gov.uk](http://www.getingofar.gov.uk)

[www.careerswales.com](http://www.careerswales.com)

[www.apprentices.co.uk](http://www.apprentices.co.uk)

To search for higher education courses, view:

[www.ucas.com](http://www.ucas.com)

For job vacancies and advice on applying, see:

[www.engineerjobs.co.uk](http://www.engineerjobs.co.uk)