Career Route Map for Engineering in England

Where do I start?

School / College / Workplace
- GCSE 3-1 (D-G)
- BTEC Level 1 / NVQ 1
- Traineeships: For 16-23 year olds qualified below Level 3

School / College / On-the-job training
- Apprenticeship (Intermediate): Engineering, IT, Construction, Built Environment, Manufacturing
- BTEC Level 2 / NVQ 2: Engineering, Construction & Built Environment, Science, ICT

6th Form / College / On-the-job training
- Advanced Apprenticeship: Engineering, IT, Construction, Built Environment, Manufacturing
- A level: Maths, Physics (Useful subjects: Chemistry, Computing, D&T, Further Maths)
- IB Diploma: Higher Level Maths, Physics, Chemistry – for chemical and biomedical engineering
- Tech Level Qualifications (T-levels), e.g. BTEC Level 3 / NVQ 3: Engineering, Construction & Built Environment, Science, ICT

What next?

Training and Education

Advanced / Higher Apprenticeship
- Available in a variety of industries including: Advanced Manufacturing, Aerospace, Automotive, Power, IT, Construction, Sustainable Technologies
- Combine workplace training with study
- Typically 3 to 4 years
- Can include vocational qualifications or a degree
- Approved by the Engineering Council

Higher National Certificate (HNC) / Diploma (HND)
- Vocational higher education qualifications, often taken whilst in employment
- Can be taken at F.E. colleges and universities
- Typically 1 to 2 years

Foundation Degree (FD)
- Usually undertaken as a part time qualification whilst in employment
- Typically 2 years
- Further learning to Bachelor’s level required for Eng registration

Degree Apprenticeship
- Combine workplace training with studying towards Bachelor’s or Master’s degree
- Typically 3 to 6 years

University Degrees
- In general engineering, a specific field of engineering, computer science, manufacturing or technology
- Accredited by the Engineering Council
- Bachelor’s Degree (BEng / BSc)
  - 3 to 4 years
  - Can include a year working in industry / a year abroad
  - Can be followed by a 1-year MEng/MSc to register as a Chartered Engineer
- Master’s Degree (MEng / MSc)
  - 4 to 5 years
  - Can include a year working in industry / a year abroad

Progressing to...?

Professional Registration
- Engineering Technician (EngTech) or ICT Technician (ICTTech)
- Incorporated Engineer (IEng)
- Chartered Engineer (CEng)

Visit the Engineering Council’s website at www.engc.org.uk

For details of all routes into engineering, go to: www.tomorrowsengineers.org.uk
Where you can also find:
- Case studies, quizzes, careers leaflets, posters, activities and postcards,
and lots more...