Routes into engineering (Wales)

Where am I now?

LEVEL 1

- GCSE (D-G)
- Engineering Learning Programme Level 1 (LP1)
- WJEC Level 1 Vocational Award in Engineering (Technical Award)

LEVEL 2

- Learning Programme Level 2
- Foundation Apprenticeship: Engineering, IT, construction, built environment, manufacturing
- Pathway to Apprenticeship
- GCSE/IGCSE A*-C: Maths, English/ Welsh, science, D&T (engineering design)
- Welsh Baccalaureate Intermediate
- BTEC Level 2 / NVQ 2
- WJEC Level 2 Vocational Award in Engineering (Technical Award)

LEVEL 3

- Learning Programme Level 3
- Apprenticeship

- AS level: engineering design
- A level: Maths, physics, engineering design
- Welsh Baccalaureate Advanced
- TEC/NVQ/WJEC Level 3 Engineering

Further education

Advanced / Higher Apprenticeship

- Combine workplace training with study
- Typically 3 to 4 years
- Can include vocational qualifications or a degree
- Available in a variety of industries:
 - Aerospace
 - Advanced manufacturing
 - Built environment
 - Civil
 - Construction
 - Computing and digital
 - Electrical and electronic
 - Mechanical
 - Software

Higher National Certificate (HNC) / Diploma (HND)

- Vocational higher education qualifications, often taken whilst in employment
- 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
 IEng registration

Higher education

Degree Apprenticeship

- Combine workplace training with studying towards Bachelor's or Master's degree
- Typically 3 to 6 years
- Available in a variety of industries

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 be followed by a 1-year MEng/ MSc to register as a Chartered Engineer

Master's Degree (MEng / MSc)

- 4 to 5 years
- Can lead straight to registration as a Chartered Engineer (CEng)

Progressing to...

Engineering
Technician (EngTech) or
ICT Technician (ICTTech)

Incorporated Engineer (IEng)

Chartered Engineer (CEng)

Professional Registration

Useful subjects for engineering:

- maths, science (triple)
- physics, computing, design & technology, electronics, chemistry

Other relevant subjects:

- geography, art & design, creative media, languages, psychology

Prilliant Inspiration