



Canham
Consulting



HAS – Courses & Careers in Engineering
Civil / Structural



Protected Profession

A protected profession is a profession that is regulated by law where there is a legal requirement to have certain qualifications or experience.

Examples of protected professions: Dentists, Solicitors, Architects, etc...

An engineer is not a protected profession.

On the other hand, chartered engineers are protected.

A **chartered engineer** is a title given to members of professional institutions who are highly qualified in their fields, with appropriate experience & technical knowledge.

Civil Engineer

Institution of Civil Engineers (ICE)

Structural Engineer

Institution of Structural Engineers (IStructE)



Civil Engineering

Civil engineering has a very broad scope of what is covered. For example, main sectors engineering covers are:

- Bridges
- Roads
- Drainage
- Dams
- Retaining Structures

Structural engineering is a specialism of civil engineering and comes under the same banner. Especially at university level, most courses are civil engineering but cover structures as well.



Structural Engineering

Structural engineering is more specialised but still covers a range of different sectors.

For example:

- Small domestic jobs
- Commercial jobs
- Defence projects
- Off-shore energy
- Temporary works
- Larger retaining structures
- High rise buildings

Both civil & structural engineering roles, do not just have to be in the office & in design work. There are site engineering roles to aid the construction process.



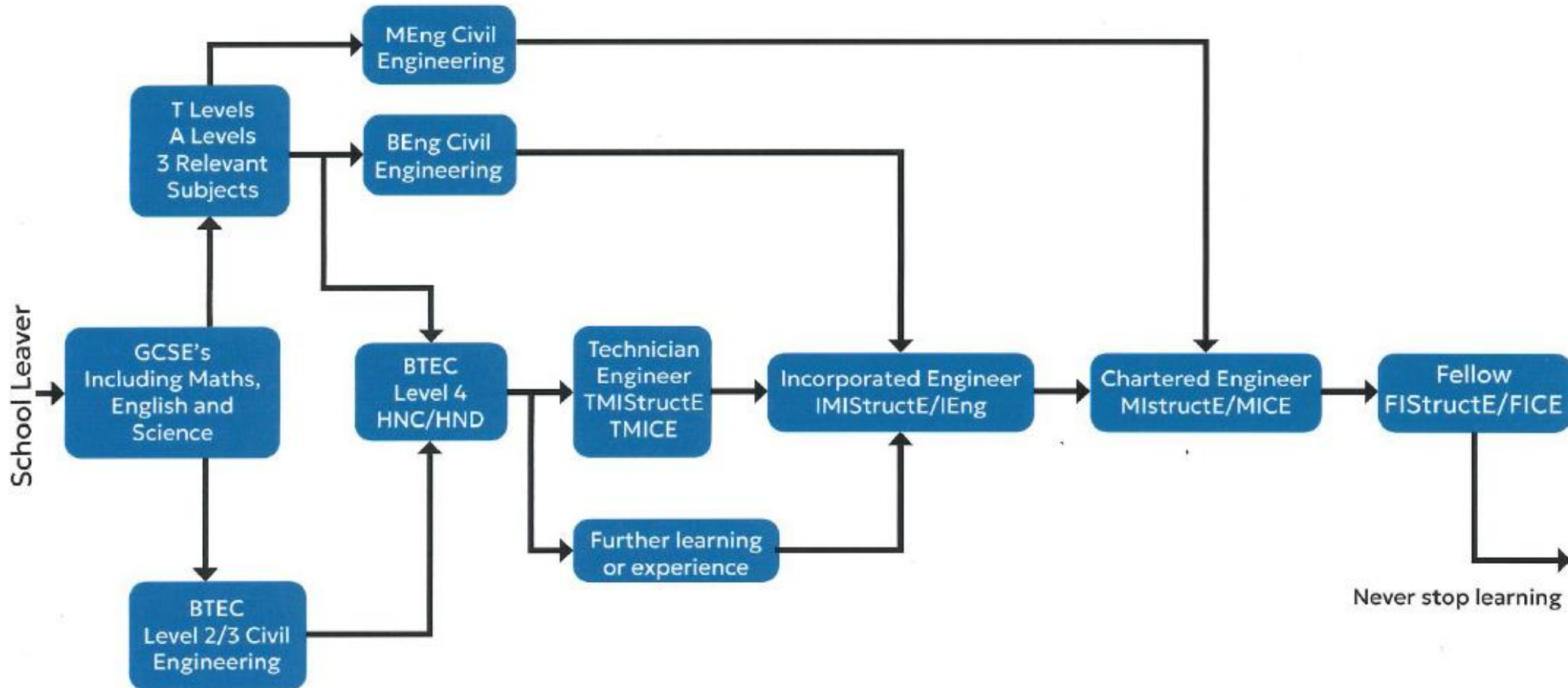
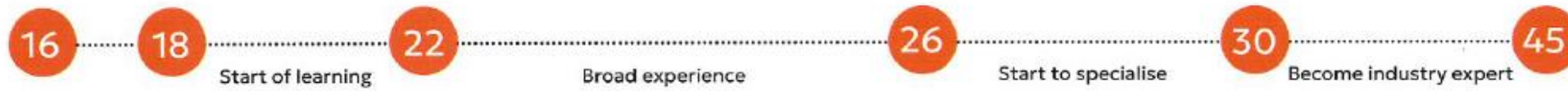
Day to Day as a Structural Engineer:

My day to day can vary depending on the project I am currently working on, but here are the main tasks I do:

- Produce high quality technical drawings showing the existing & proposed structures and how they interact.
- Undertaking calculations to prove the requirements & suitability of structural elements (like beams, columns, lintels, etc...)
- Visiting site to look to determine necessary structure & to gather measurements & layouts.
- Complete risk assessments to ensure my designs limit risk where possible whilst still being effective.
- Learning from colleagues and wider industry professionals.
- Research different design codes & regulations.
- Talking to different professionals within the industry.
- Ensuring projects are completed within the time frame.
- Organising projects, site visits & paperwork.

Routes to Professional Membership

Typical minimum age to achieve level





Thank You



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