

Civil engineer

Civil engineers design and manage construction projects, from bridges and buildings to transport links and sports stadiums.

Your day-to-day duties may include:

- planning with the client
- analysing surveys, testing and mapping data
- creating blueprints using computer aided design
- judging if projects are worth doing by looking at costs, time and labour
- checking risks and the effects on the environment
- managing and checking progress at each stage
- making sure sites follow health and safety rules

Watch this video from a student studying Civil Engineering

<https://cdn.unifrog.org/video/ub4rrp6v8k/480.mp4>

Working hours, patterns and environment

You'll usually work 35 to 40 hours a week. You may work evenings and weekends.

You'll spend time in an office and on project sites

East Midlands growth: 13.2% from 2014 to 2024, creating 15,460 jobs

Derby jobs: 3,167

East Midlands median earnings: £43,427

These university subjects are related to this career:

[Architecture](#)

[Building, Planning and Property](#)

[General engineering](#)

Qualifications and grades

Level 2 (eg GCSEs)

Many universities will expect a minimum of Grade 4 in English and Maths. Universities particularly favour applicants with strong grades in Maths and Physics.

Level 3 (eg A-Levels, BTECs)

Many universities require that you have studied Mathematics and Physics to this level. Many universities will expect 3 A-Levels or the equivalent.

You can also enter this career by doing an apprenticeship. Click on this link for more info:

<https://www.unifrog.org/student/know-how/featured/engineering-apprenticeships>

Skills You'll need:

- excellent maths, science, and IT skills
- the ability to explain design ideas clearly
- the ability to analyse large amounts of data
- project management skills

