

#### **JOB OF THE WEEK**

What is it?

# **Civil Engineer Also called: Engineering consultant**

Civil engineers design, manage, and maintain construction projects.



#### Day to day tasks

## You could work in these areas of engineering: structural (dams, buildings, offshore

platforms and pipelines) transportation (roads, railways, canals and airports) environmental (water supply networks, drainage and flood barriers) maritime (ports, harbours and sea defences) geotechnical (mining, earthworks and construction foundations)

#### You'll be:

planning with the client

analysing surveys, testing and mapping data using computer modelling software creating blueprints using computer aided design (CAD) judging if projects are worth doing by looking at costs, time and labour checking risks and the effects on the environment preparing bids for tenders, and reporting to clients and government agencies managing and checking progress at each stage

#### Qualifications

You'll usually need an engineering degree (BEng) or a Master's degree (MEng) in civil engineering.

You could start as a technician and study part-time for an HND or foundation degree, leading to a degree in civil engineering. You could get into this job through an <u>apprenticeship</u>. The <u>Institution of Civil Engineers</u> has information on courses.

#### Salary

Civil engineers: UK annual median: £44,341

**Engineering professionals**: UK annual median: £43,829, North East annual median: £40,581; Top 3 regions: London (£48,464), Scotland (£46,458), East of England (£45,443)

#### Jobs and labour market

### Science, research, engineering and technology professionals

UK growth: +9.1% from 2017 to 2027, creating 159,466 jobs North East growth: +7.3% from 2017 to 2027, creating 3,577 jobs

### Routes into the industry

You'll need excellent maths, science, and IT skills, the ability to explain design ideas clearly, the ability to analyse large amounts of data, and project management skills.