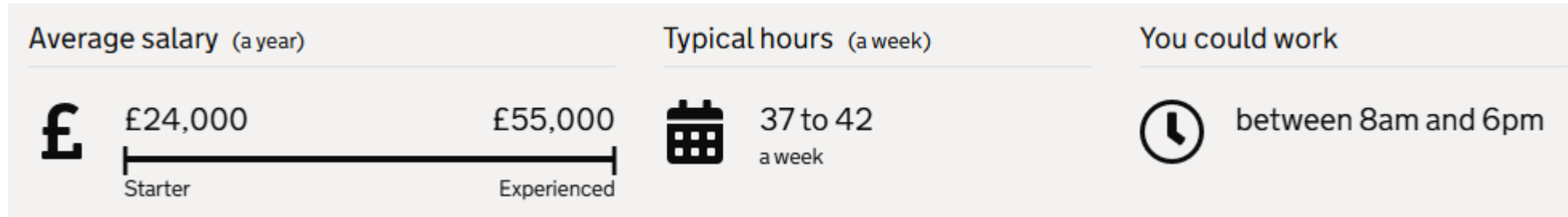


# Structural Engineer

Structural engineers help to design and build large structures and buildings, like hospitals, sports stadiums and bridges.



## Skills and knowledge

- knowledge of engineering science and technology
- maths knowledge
- knowledge of building and construction
- design skills and knowledge
- excellent verbal communication skills
- complex problem-solving skills
- thinking and reasoning skills
- to be thorough and pay attention to detail
- to be able to use a computer and the main software packages confidently

## Different routes to get this job

(check the website for entry requirements)

- a university course
- a college course
- an apprenticeship
- working towards this role

## Day-to-day tasks

- develop engineering plans using computer software
- investigate the properties of building materials like glass, steel and concrete
- work out the loads and stresses on different parts of a building
- use computer models to predict how structures will react to the weather
- inspect unsafe buildings and decide whether they should be demolished
- work out why and how buildings have collapsed

<https://nationalcareers.service.gov.uk/explore-careers>