

## STRUCTURAL ENGINEER

Durham University Palatine Centre © Kristen Mccluskie

Laura Griffiths, Graduate Engineer, quotes the Institution of Civil Engineering.

*"If we think of a structure as a human body, then structural engineers design and maintain the skeleton. They are the guardians of public safety, ensuring that buildings and bridges are strong enough to withstand all kinds of stresses and strains.*

*They are a key part of the design and construction team, working alongside architects to create and maintain all kinds of structure - from houses and skyscrapers to sports stadia and oil rigs.*

*They are creative, trustworthy problem solvers who shape all aspects of our built environment."*

Structural engineers utilise their maths, science and problem solving skills in order to design sustainable, safe and economic structures. We work both on new and existing structures of differing scale, a few examples are:

- Shopping centre refurbishments
- Bridges
- Housing developments
- Retail and leisure centres
- High rise buildings

Structural Engineers work closely with architects giving them guidance about whether their design is feasible. We also work with civil engineers, mechanical and electrical engineers.

Becoming chartered is very important as it shows your commitment and passion in structural engineering. IStructE states that: "Members of The Institution of Structural Engineers are highly-trained professionals. Each has passed one of the most demanding examinations of its kind and is required to continually develop his or her skill-set, maintaining a justified reputation as a world-class engineering specialist."

We are mainly office based with a practical aspect including site visits and meetings to take photographs, meet with clients and the contractors.

We work on jobs both in the UK and globally. We are currently working on jobs in Doha, so there are opportunities for travel.

Recent jobs I have been involved in include: HD One in Huddersfield, Cheshire Oaks in Merseyside and Plot 8, Manchester.



**LAURA GRIFFITHS**

Joined 2015  
Graduate Engineer