

Ever wanted to° design buildings?

It's not just architects who design buildings. If you enjoy finding solutions to technical problems, mechanical engineering could be the job for you



Buro Happold's Richard Walder tells Lydia Coelho at 360° why he loves his job and what inspires him

What qualifications do you need to be a mechanical engineer?

"I did a degree in mechanical engineering, but I could have studied building services engineering at university. To get on to either of these courses you need A-levels in physics and maths."

How do you expect engineering to change in the future?

"We are always looking for ways to help make buildings more sustainable, so it will become more important to tailor solutions to individual structures. There is no point installing a biomass boiler if the area doesn't have enough wood to fuel it."

Describe your most exciting project

"Working with Foster and Partners to build the Khan Shatyr entertainment centre in Kazakhstan. The building will be a tent filled with retail and exhibition spaces and a tropical park with waterfalls. The biggest obstacle is that winter temperatures drop to -35° and summer hits 40°, so the building needs to be responsive to its environment."

Careers in the built environment professions appeal to people who:

- care about their communities and want to improve them
- care about the environment and want to work towards a greener future
- are creative, practical and enjoy solving problems
- are good communicators and enjoy working with people
- are curious about the natural or built environment and how it can be protected, shaped and designed.

Is this you?

What initially interested you in engineering?

"I have always liked to know how things work, looking at things from a technical point of view."

What's the money like?

"As a graduate you can expect to earn about £22,000. Once you work your way up to a senior engineer your salary increases to about £45,000."

What do you enjoy most about your job?

"The variety of work keeps the job interesting. You get the chance to work on a range of projects from The O2 to Emirates Stadium."

What does a normal day look like?

"Often I need to go on to site to meet with the client or the architect. A lot of time is also spent sitting in the office doing mathematical calculations, making sure our plans are as accurate as possible."

Ever wanted to is a guide to careers in the built environment. It is published by CABE as a poster with its education magazine 360°. For further information please visit www.cabe.org.uk or email education@cabe.org.uk



Commission for Architecture and the Built Environment

Picture above, Richard Walder © Buro Happold/Tomlinson Above right, The O2 © Buro Happold/Tomlinson Right, The Khan Shatyr © Foster + Partners