



SFA Alumni Profile

Dan Shephard – Chartered Structural Engineer

What do you do in your job?

I am a Chartered Structural Engineer. Typically, I work on buildings (new and old) to ensure they are structurally suitable. For new buildings this is primarily making sure they stand-up, and the form of construction used is suitable to the scenario, environment, and intended use. We typically work in design teams, in design offices, with other consultants such as Architects and other Engineers to ensure the building is appropriately designed. Typically, an Architect will make it look pretty, while a Structural Engineer will make it stand-up! This will involve producing hand calculations, complex 3D design models and producing relevant reports.

How did you get to where you are?

I studied at St Francis of Assisi for both my GCSEs and A-Levels. I left in 2013. During Sixth Form I completed further work experience to try out the construction industry. After deciding that structural engineering was for me, I applied to university for a 5-year Master's sandwich course in Civil Engineering. I completed a year in industry in the middle of the course, where I worked for a structural engineering firm for 15 months.

What has been your proudest achievement or what do you enjoy most about your job?

My proudest achievement is achieving my Chartered Engineer status. This is a prestigious status recognising excellence. I am also proud of the projects I have worked on, including many in Birmingham City Centre, and in the surrounding areas.

What school subjects do you think are the most useful to the job you do?

Maths, Physics and DT. These are skills I use every day in my job: from Pythagoras, to basic differential equations. From Newton's laws of motion, to the theory of Elasticity. These describe how the world works and is paramount to a career where you need to calculate how materials and elements within a building work under the loads applied to them.

What advice would you give to our students to help them in their career journey?

Find out what interests you, then work hard for it. Always accept help and criticism, most people only want to help.