

# Sophie Harker

## Aerodynamics engineer at BAE Systems

### How did you get to where you are now?

As a child I had always been good at, and enjoyed, maths but didn't know what I wanted to do with this skill. That was until I went to the Kennedy Space Centre when I was 16 years old and decided I wanted to be an astronaut! A few years later I got the opportunity to meet Dr Helen Sharman, the first Briton in space, and it was Dr Sharman who first introduced me to the world of engineering. Up until that point I genuinely thought that an engineer was someone who came to fix your washing machine or check the boiler, as that was the only exposure to the word 'engineer' I'd ever had. I don't come from a science or

engineering background (my mum is a teacher's assistant and my dad a carpenter) so that one moment with Dr Sharman dispelled the myths I held about engineering and gave me the inspiration I needed.

After finishing my A levels in Maths, Further Maths, Physics and History, I went to the University of Nottingham to study an integrated maths master's degree. Here I focused on applied maths topics, such as fluid mechanics and electromagnetism, to help me transition into engineering once I had graduated. Between my third and fourth years at university I decided I needed some real-world engineering experience to make sure that engineering really was the career for me and so I applied for an internship at BAE Systems. For three months I worked on developing an app for the armed forces.

I had such an amazing time as an intern for the company that I decided to apply for the graduate scheme after completing my master's degree. On the graduate scheme I completed four 6-month placements across the company, including a secondment to Reaction Engines Ltd working on the Skylon spaceplane. When I finished that scheme I stayed with BAE Systems as an aerodynamicist working on future concepts for military combat

"Engineering is a vast, open career space that **can take you anywhere.**"

