UK Electronics Skills Foundation

Dr Carol Marsh OBE

About me

I am an Electronics Engineer with over 40 years' experience in digital electronics and satellite systems. As **Engineering Director** at **Celestia UK**, I have led the development of the Celestia Gateway, a new technology transforming satellite communications.

My inspiration

At school, I enjoyed maths and originally planned to become a maths teacher. In my final year, being introduced to computers and programming changed everything, showing me **how mathematics could be used to create real, working systems** and leading me to study Electrical and Electronic Engineering.

Discovering logic gates during my studies was the defining moment - seeing **how simple building blocks could create complex systems** is when I knew electronics was where I belonged.

My strengths

I'm a strong problem solver who enjoys breaking complex ideas into simple steps. I'm curious about how things work and enjoy learning as technology changes.

I'm also a good communicator and team player, and I enjoy supporting and mentoring others.

Fascinating tech

Two technologies that have fascinated me during my career are Field-Programmable Gate Arrays (FPGAs) and Low Earth Orbit satellites.

FPGAs are re-programmable electronic chips that have evolved from performing simple tasks to **running entire systems on a single device**. Low Earth Orbit satellites are transforming global communications, with the goal of **connecting people everywhere on Earth**.

What excites me about the future

Electronics is changing faster than ever, with a growing impact on healthcare, transport, and global communications. What excites me most is not just the technology, but the opportunity for **a more diverse and inclusive generation of engineers to shape what comes next**.

My aspirations

As I near the later stages of my career, I would love to see Celestia's Gateway become a successful product that changes the way we communicate with satellites for years to come. **Knowing that technology I've helped develop could have a lasting impact** - and be built on by the next generation of engineers - is incredibly rewarding.

Be curious and don't worry if things feel challenging at first — that's part of learning. Focus on the basics, ask questions, and get hands-on experience whenever you can.

Engineering is about problem solving, and a career in Electronics can take you in directions you might never expect — that's one of the most exciting parts.