Creating environmentally conscious engineers of the future

Case study: Emma Shavick
Mechanical engineer - clean manufacturing

Emma looks at manufacturing processes and works out how to make them more sustainable and efficient.

The great thing about my job is that no two days are the same because of the huge range of projects that I work on. Sustainability means making every day better for people and the planet through how we innovate and how we act. I make sure that no manufacturing waste is sent to landfill by looking at innovative new solutions to turn waste into something useful.
This includes creating truck-wash out of scrap washing-up liquid and sending good products that we cannot sell to charity. I am proud to be a small part of this, contributing towards reducing the carbon footprint and building a supply chain that is sustainable from raw material to finished product.

I had no idea about what I wanted to do when I left school. I applied for summer internships to try out different job roles and chose mechanical engineering because I enjoyed science, maths and practical projects in design and technology. I also wanted to keep my career options open and I knew that a degree in engineering would lead to good job opportunities. I love the practical, hands-on side of engineering and working as part of a team to solve a problem.

My advice to a young person who is considering a career in engineering would be to follow the subjects that you enjoy most, because that will lead you towards a career that you’ll enjoy. Don’t worry if you don’t know what you want to do as a career yet.

Engineers rarely work on their own, so being a ‘people person’ is important. You should enjoy working as part of a team and be a good communicator as well as a good listener. Being a creative and passionate person and enjoying problem solving is useful too. Stereotypes about engineering being a subject for men are becoming a thing of the past, so go for it!