

Kathryn Waring
Chartered civil engineer



Hi there! I am Kathryn Waring - a civil engineer



Where do I work?

I work at SLC Rail, a consultancy who help deliver rail projects. I look after a team of engineers doing lots of different things each day.

What did I like doing when I was at school?

From 6 to 16 years old, I wanted to be a dentist, but I changed my mind. I enjoyed maths and physics, so engineering seemed a good choice.

What do I like doing in my spare time?

I like exercising and eating chocolate. I am a trained gym instructor. I like travelling and have lived in Australia. I love watching reality TV!

What do I do as a Chartered Civil Engineer?

I work in teams creating, planning, designing and building roads, railways, tram systems, bridges, stations, pipelines and lots of other things you see every day. I am a problem solver, and I work out costs for jobs and talk to lots of different customers.



How does what I do make the world a better place?

Civil engineering is everything you see that's been built around us: things we take for granted but would find very hard to live without, from the water in our taps to railways. My job connects people so we can travel to see our families, get to school, get our shopping delivered, and much more!

What I like about my job

I like seeing things being built that I've been involved in creating. I like working with our clients to ensure we construct a bridge or a station within time and money limits. And it is great making something easier and safer for the public to use.

Challenges I have faced

Working as an engineer, where there have been few girls, has not been easy at times. But I decided I wanted to be a good engineer so I worked hard to get lots of experience and become the best engineer I could be.



If you want to be a chartered civil engineer, you need:

- * to **like problem solving** and coming up with solutions: where to put a new station, how to design a bridge, how to stop earthworks collapsing
- * to be good at communicating, as engineers need to explain what they are doing to lots of different people
- * to **be a team player**, as engineers work in teams to create solutions to problems
- * to **enjoy planning** as engineers need to be organised, logical thinkers





Discussion time

* Would you like to be a chartered civil engineer like Kathryn Waring?

Why? Why not?



- * What skills and interests do you already have that would help you become a chartered civil engineer?
- * What new skills and knowledge would you need to develop?



Kathryn Waring is a STEM ambassador. Click <u>here</u> to access free STEM Ambassador support and resources.

Free supporting resources for civil engineering

Science at Work – see 'Isambard Kingdom Brunel' and 'Meet two engineers'

<u>Engineering Our World</u> — a series of activities for children aged 7-11 which use famous scientists and engineers as a spring-board for group-based engineering activities

Challenge Chasers Club – a series of challenges to solve for children aged 7-11

<u>I bet you didn't know...</u> articles use cutting-edge science research as a context for learning. Teacher Guides describing the research and activities and investigations for children can be used a classroom presentations. See:

Toilets in the future may charge your mobile phone

Created by the Primary Science Teaching Trust