

# I Am a Systems Engineer and I Do...

## Kate Heathcote



### Why did you choose to be a Systems Engineer?

By continually striving to know more about the context of my work, becoming a Systems Engineer has been a natural progression for me.

After graduating with an Electronics Engineering degree in 2005, my first job role was as a Digital Design Engineer working on detailed ASIC design. Although the work was very interesting, I was increasingly asking for wider reaching opportunities so that I could understand where my 'piece' of the puzzle fitted into the overall system. I quickly came to understand that I like to be involved in all aspects of creating a product, from conception into production, design and test, right through to understanding how the product will be managed through-life. It wasn't until almost 8 years into my career that I came across the term 'Systems Engineer' and finally understood that this was the career role I had been doing without even being aware of it!

### What education/qualifications do you have for Systems Engineering?

Most of my skills as a Systems Engineer have been obtained through practical experience, primarily through a 'T' shaped path; starting with a technical specialism and then broadening into strategic thinking Systems Engineering.

I have, however, re-enforced my confidence in my abilities by becoming a Chartered Engineer through the IET in 2012, showing a level of competence across the UK Engineering Spec. I also took part in the SE Handbook V4 beta exam, becoming an Associate Systems Engineering Professional (ASEP) in 2013, showing a base level of competency in the Systems Engineering Handbook and ISO15288.

Passing the ASEP qualification has now given me the opportunity to apply for the Certified Systems Engineering Professional (CSEP) qualification, which I am in the latter stages of completing.

### What is it about Systems Engineering that you find so compelling?

Having great variety in my day-to-day work and a role where it is my job to ask questions and to continually challenge! I have always been an inquisitive person and unafraid to ask questions; to have a career where I continually take on new challenges and work in an environment where I am actively encouraged to ask questions is great.

Another aspect of Systems Engineering that I thoroughly enjoy is working with a great variety of people - much of my work is about bringing together knowledge from all areas of the company – and my most recent work has given me the opportunity to work with key scientific advisors, senior production staff, material specialists and many more disciplines across my company.

### What is your advice to people considering Systems Engineering as a profession?

There are two pieces of advice I would give. Firstly to build good relationships; as a systems engineer it is often your responsibility to be the glue that brings it all together and by building up good relationships with a variety of people, it can often make a systems engineer's job a lot easier.

Secondly, do not be afraid of failure, by failing you learn! There is no shame in failure; I have learnt some of my most important lessons when things haven't quite gone to plan. At the time it seems like the end of the world, but sometime later when the dust has settled and I have worked back through the problem, I have almost always ended up with a better outcome and the ability to not make the same mistake again!