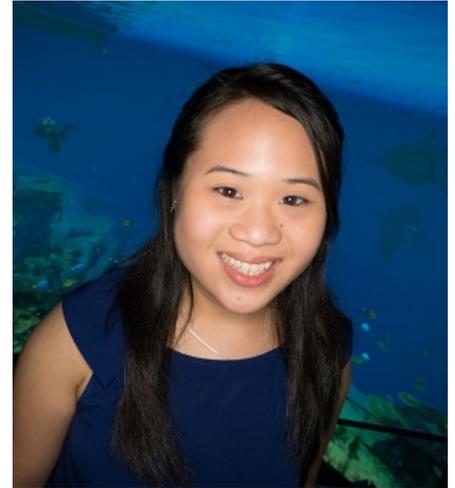


# Civil Engineer

Brigitte Yap

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## What does a Civil Engineer do?

In short, a civil engineer solves problems whether that is through planning, designing, constructing, maintaining or operating to be available now and in the future. A civil engineer looks holistically at a project to ensure all facets are not greatly affected. Sometimes this cannot be avoided; we then look at solutions to try and mitigate the impacts.

## What do you work in and what is your specialty?

I work for Arup, a multi-national civil engineering consultancy. My role is a Civil Engineer in the Queensland Transport and Resources division looking at improving and upgrading the existing road infrastructure to meet the needs of the future.

## How did you become interested in this area and when did you first start?

Growing up, I had, and still have, a strong passion for Mathematics and Graphics; Science subjects were closely followed behind. In my senior years at high school, I sought advice from family, friends and my career advisor who suggested that I might want to consider engineering. Delving deeper into what engineering is and also considering my interests and personality, I thought I would give it a go. Civil engineering interested me the most as I found it to be the most versatile, especially since I was unsure of what career path was for me.

I started at Arup as a Vacation Student at the end of my second year of university. I worked full-time during the university holidays and part time during the semesters. It was great to maintain the work during the semester as I got to maintain contacts and link with industry. As a Vacation Student I was able to rotate to the different teams within the firm; I gained experience in the following teams: Aviation, Highways, Flooding, Sustainability and Water. Fast forward 4 years of study and 3 years in the workforce here I am...and am still interested in this industry.

## What study path have you taken to get here?

At high school I studied English, Maths B, Maths C, Graphics, Physics and Chemistry. These subjects all interested me whilst at school and I believe gave me a head start when I started engineering at university.

After high school, I went onto complete a Bachelor of Engineering majoring in Civil and Construction and a Masters of Project Management; both at QUT and as part of the Dean's Scholars Program.

## What do you like most about your job?

I like the variety of work engineers are exposed to on a day-to-day basis. This can range from technical and site work through to project management. No one day is the same and there are a lot of opportunities to keep you interested should you ever get bored in one area.

## Do you have any particular career highlights?

Since graduating university, I have had many highlights. Each project I have worked on has been memorable and challenging. I look back and see that each experience is unique and has shaped who I am today, both professionally and personally.

In the first 18 months of graduating university, I was fortunate to work out on site on the Gold Coast light rail Stage 1 project. This was a fantastic opportunity for me to see how a design and construction come together. Following the completion of Gold Coast light rail Stage 1, I relocated over to the UK to work at Hertfordshire County Council (HCC). The experience I gained at HCC is something I would not have gained until much later on in my

career. At the Council, we planning, designing and implementing projects to further benefit the community. My responsibilities ranged from technical work through to project management.

**What advice would you give to someone interested in working in this area?**

Engineers are problem solvers; solving problems to improve the community. As an engineer, it is your chance to think outside the box and do something unique and different. There are no boundaries as long as you can make what you want work and conform to relevant Standards and requirements. If you are a problem solver, I would highly recommend delving deeper into a career in engineering.

And, as I have shown, a career in engineering can take you anywhere whether that is here in Australia or elsewhere around the world!