

Civil Engineer

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What does a Civil Engineer do?

A civil engineer is involved in the planning, design, reporting and maintenance phases of the project life cycle. Every structure you see in society, has been designed and articulated by an engineer, in a way which decreases social, environmental and financial risks. They aim to produce the most efficient solutions in the shortest time possible, spending the least amount of money.



What do you work in and what is your specialty?

I'm currently completing my Final year project (Industry Affiliates Program) at GHD with the Materials Technology Team. I'm integrating photogrammetry and laser scanning with Building Information Modelling (BIM) to assess the condition of bridges; basically using modelling software to detect cracks and deterioration in bridges over their life span. I attained a graduate position at GHD in the Tunnels, Dams and Geotech Team for next year, so I'm really looking forward to that.

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

My Uncle and Cousin are both engineers, so I grew up exposed to their projects and constantly listened to what they did and how they solved problems. At the same time, I've always held a big interest in mega structures and been intrigued in the processes behind them, so studying engineering was inevitable.

What study path have you taken to get here?

In year 12, I completed Maths B, Physics, Engineering, Chemistry, Modern History and English. I really enjoyed these subjects and I had a huge passion for design and construction. However, I chose to ignore this and started off doing a Bachelor of Biomedical Science; this was to try and get in to Dentistry. Though after two years I still had this burning desire to do engineering, which resurfaced from time to time. So I finally enrolled in to a Bachelor of Civil Engineering and will be graduating this coming December.

During second year I started looking into work experience, and completed vacation work at ADG Engineers, with the Brisbane structural team. A couple of months later I started at Condev Construction as a Cadet, where I began to learn about the construction industry and work with project and construction managers. I currently work there part-time during uni and full-time during the holidays. I also completed vacation work at ADG Engineers Gold Coast Office at the start of this year, in their structural division.

What do you like most about your job?

Studying civil engineering at uni sees you looking at a variety of topics likes fluid mechanics and hydraulics, materials, geotech engineering, transport, traffic, concrete design and analysis. Having worked for both a construction company and engineering firm, it has been fascinating to see the two differing perspectives of how a project comes together.

Do you have any particular career highlights?

I am yet to graduate, but I think designing one of the roof slabs for Parklands, for the Commonwealth Games was one of my first achievements as an undergrad. Also, I've spent much of this year on one of Condev's Luxury penthouse apartment project's in Palm Beach.

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

If you're interested in a career in engineering, definitely do some work experience, get a feel for the industry to be sure it's what you want. If you're female, don't be disheartened, it's fine! Just do what you enjoy and you will excel.