

I have a passion for calculus, physics and chemistry. The study and learning of and around these subjects fascinates me. I enjoy these subjects because of a number of specific reasons. A key one is the problem solving element. Applying different techniques, views and strategies to a problem in order to come up with a theoretically sound, yet practically feasible solution is an immense challenge, and one which I look forward to taking on many times in my future career. The logic and thought behind the sciences can be very beautiful to admire and immerse oneself in.

Over my school years, I have found I have a good aptitude with problem solving and the sciences in general. Maybe this understanding comes because I enjoy this field of study, or maybe the enjoyment stems from the success. It seems to be a circular argument, but most probably a balance of both is necessary.

So how does this relate to engineering? In ascertaining the direction and field of study to head for in ones future, some important factors are that the work be enjoyable, challenging and engaging. This will give a feeling of achievement and success. Engineering fits these specifications more than adequately. Not only is it the practical application of the sciences but engineering a huge array of desirable attributes as a field of study that leave me in no doubt that I want to be a professional engineer.

As well as enjoying problem solving, I also enjoy being creative and innovative. Engineering as a career has a huge scope for the elements of design and construction. This contributes to my view of a career as a professional engineer being stimulating and engaging.

Engineers have fantastic opportunities to create tangible results and creations. Not many other careers offer this; that is why I see becoming a professional engineer as an exciting prospect.

There are chances to leave positive and lasting impacts on society. Engineers are held in high regard in the community. New Zealand has a great tradition and record of innovative scientists and engineers. They have created and marketed products that have been successful on a global scale. People such as Bill Hamilton, John Britten, and of course Lord Rutherford inspire me. While the financial remuneration for successful engineers is high, more important to me is the satisfaction and benefits that can be passed on to the population, in order to keep society advancing.

Recently an over-bridge was build just down the road from my home to improve a notoriously and dangerous "black spot" road intersection. During rush hour, there were lengthy delays waiting to get across the intersection which has seen some fatalities over the years. I drove through this construction everyday in order to get to school. This meant I was able to follow the process and note the effect that its completion had on traffic control, numbers and safety. This over-bridge has great benefits for everyone in the community and everybody driving through the intersection. Although it was nearly two years of dust and disruption, the end result is fantastic. This example of civil engineers at work has had a definite and positive impact on me.

My vision is to own a construction company in New Zealand and to build great things. I would like to build up a progressive construction company that can deliver to and satisfy a wide range of customers. A company that completes projects not only on time but quickly, (and by completes I mean with no afterthought fixes), one that gives accurate and

reasonable price estimates with no pitfalls or cost overruns, one that can exceed the customers' expectations and relate well to them at every turn. This may sound over optimistic, or unrealistic, but I would like to try for excellence. I would like to develop a construction company that will influence the industry and how it does business.

For a long time I have been interested in business and owning or managing a construction company would also allow me to combine these interests into a career.

My family also has proud historical connections in the construction industry and I see engineering as an extension to that tradition. My maternal grandfather, George Taylor (now retired, in Tauranga) was the founding Chairman of Directors of Felvins in Fielding and Levin which was taken over by the Fletcher Group. PlaceMakers in Levin was previously Felvins in that town and still occupies the original site. My father works for a building supply company in Napier.

Engineering is a very broad field, with disciplines ranging from civil engineering to electrical engineering and mechatronics. This means that, although at this stage I would really like to be a civil engineer, there is a huge variety of specialisations. The first year of study at Auckland is a general year, meaning I can keep my options open if another discipline seems to be more attractive. The diversity of engineering opportunities is almost unlimited. Engineers can apply their skills to almost any project and in almost any location. This world wide application certainly appeals to me as a prospective engineering student.

I have really enjoyed learning the component subjects at school that will lead on to my engineering career. I have achieved at the highest level in these subjects such as mathematics, physics and chemistry. I look forward to building on these past experiences in the engineering degree I will shortly be undertaking. I hope to then use my engineering skills gained in my tertiary studies to successfully manage an engineering company which will make a valuable contribution to the marketplace. I am very happy to be choosing this career path and will be very proud to be a professional engineer. I hope to carry on achieving as an engineer at the highest level and to become a valued member of the institute.