

# Why I Want to Be a Professional Engineer

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The field of engineering is no ordinary field. It spreads the globe, even out into space, transcending cultural, religious and socio-economic status. It offers innovations to improve your life, and that of all those around you, and one can travel in it for years without ever finding a limit. The importance of engineering is often overlooked but we should not dismiss it so readily, simply as an area for people in socks and sandals, replete with a calculator proudly displayed in their shirt pocket. Let's face it, something that helps provide us with fast cars, fast planes, fast entertainment and slow internet can't be all that bad.

So, you may be asking where I fit into all this, a teenage girl who has, to be honest, never given the mechanics behind all the revving motors in late night Courtney Place a second thought. Well this is a question I too have had to think about myself this year, when engineering appeared as a possible career choice. Having always been someone without any clue what job area I would like to enter, it was a surprise to find myself 'enlightened', decided and committed to engineering in the space of just one day. At the time I was not entirely sure I knew why engineering really appealed, just that I was excited about doing it. However looking back now, I am rather amazed that I did not see it as the right choice all throughout my senior school years.

For a start it seems I am genetically coded to follow this line of study since both my dad and granddad also did so. This is not to say I had no control in my path, seeing when the inch-thick science book gifted to me by my dad on my 10th birthday promptly found its way to the back of the shelf, (odds are it still remains there unless decayed into a pile of educational dust). However maths was always one of my favourite subjects and science too one of my strong points - I can remember honestly liking the basic-facts maths quiz book I had in primary school and my rudimentary (it consisted of three plastic planks and nails) construction play set. Something I only recently realised was that both of my chosen school science fair projects involved engineering - earthquake testing model houses and crash-testing car bumpers, chosen because they seemingly offered more fun than starch testing potato shards. I doubt now that either was scientifically sound but I enjoyed them and this helped to persuade me that engineering is not the boring science-fest it can appear to be.

Of course a tendency towards physics and the like in childhood does not necessarily translate into the desire to make it your career. There are numerous aspects to this field that attract me, including the mixing of the practical and creative, the possibility to help people, its diverse and challenging nature and the ability to transfer skills to all areas of life. Firstly it is not just calculations and paperwork. Logarithms do not have to become your life. The design component can also be important and particularly interests me because it brings a creative element to the job. Being able to understand the functionality behind the aesthetics appeals because I like having knowledge of the whole system I am working with. You also find the need for creativity when faced with difficult or unique tasks where the standard procedure may not apply. Such challenging situations are great and something I would enjoy in a job as, needless to say, spending your time in repetitive work can become boring. One of the major strengths of engineering is the consultation

component and I really like being able to combine that with problem solving in real-life situations.

At its heart engineering exists to make our lives better. Transport and communication systems, medical advances and city and building infrastructures all depend on the people behind desks and in the field working out the logistics of such vital parts of modern life. Whether you are building a bridge in Burma, working with 'Engineers Without Borders' or making sure that Gore residents have running water, you know that your efforts are of use to many people. This is another of the reasons why pursuing university studies in engineering is exactly what I want to do in 2008.

A pivotal moment in my decision to study engineering came while attending the Rotary National Youth Science Forum at the beginning of 2007. The program was great in allowing us to experience a huge range of jobs in the science industry, however personally I found it perhaps most useful in showing me that a purely laboratory based career was not the way I wanted to go. The mad scientist who blows something up every three seconds is sadly not the reality. But seriously, engineering allows you to work in or out of the lab; you can even design the whole thing if you please. It is incredibly versatile and also has the benefit that you can be working on completely contrasting projects one week to the next. As a person who is not a fan of repetitive jobs this is perfect.

Lastly there is the basic excitement of being part of such a dynamic and evolving profession. 150 years ago people were amazed by the telegraph whereas now it is possible to chat with a friend back home while voyaging through Northern Alaska. Even just 15 years ago video phones were portrayed as some futuristic device alongside flying cars and vacation homes on Mars. Engineering is a field that offers infinite ways to take part in improving our constantly developing world and it is impossible to know what projects I will be working on in four years time. Climate change, rapidly developing nations and growing populations ensure that engineers will have plenty to deal with.

Engineering will open doors for me, not only figuratively but also literally, after all how many of us have given a thought as to where hinges come from? It is the sheer universality of engineering that makes me certain I have made the right choice in becoming a part of this extraordinary field.