



## *Profiles of Engineers*

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### **Advice to Students:**

If you can, I would recommend joining at least one engineering extracurricular activity in High School and College. These really help your resume stand out and will hopefully give you some good networking opportunities with professional engineers...

### **Interview:**

#### **What are the day-to-day responsibilities for someone in your position?**

My daily responsibilities include working on design concepts for new products, validating design changes requested for existing projects and assisting with quality problems that may be related to design issues. I use a lot of problem solving skills; every day presents new and different challenges.

#### **Can you tell us about a cool and interesting project that you have worked on?**

At my last job I was able to work on designing a sensor to work for a customer's specific application. This gave me the opportunity to travel to Detroit and get a backstage pass to visit one of the big "Detroit 3" automakers multiple times, which was pretty cool. One of the perks of an engineering degree is that many of the jobs have opportunities for travel to meet with some of the biggest brands in the world. Even if you don't actually work for one of the "big names", you will probably work for someone who makes parts for them. In my current position I have had multiple opportunities to attack problems that had been plaguing the assembly lines without an obvious solution, and using my engineering skills I was able to identify and fix the issue.

#### **When did you know you wanted to become an Engineer?**

I realized in High School that my interests and hobbies up to that point in life had all been about building new things. From playing with Lego's as a kid to enjoying my advanced physics class in high school I saw that what I enjoyed doing aligned pretty well with an engineering career.

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**What's the most rewarding thing about being an Engineer?**

Being able to design and build something that you can then see other people use and enjoy. Products I worked on at the start of my career are now out in the market, and being able to have a friend pop the hood of their car and see a part I made is rewarding. The company I work for now makes lawn mower transmissions, and it is fun to walk into a Lowe's or Home Depot and look under the John Deere mowers and see something that I am working on.

**If you had to do it all over again, would you still become an Engineer?**

Definitely yes. Being an engineer is not easy, but it is satisfying knowing that I help contribute to products that keep the modern world moving.

**Did you think that school (your major) prepared you for the way the work gets done in the real world?**

I think my school (Worcester Polytechnic Institute) did a pretty good job of preparing me. In fact at my first job I thought that having a real job was way easier than the stress of engineering school! We had a big emphasis on project based learning and good professors who pushed us to always do better.

**What should students be doing to prepare themselves to take on those roles?**

I think there will always be a need for new mechanical engineers. People are always going to want new products to touch and use. To prepare yourself make sure you get proficient with the latest versions of 3D CAD and any simulation or modeling programs as early as you can. This technology is constantly changing so it is essential to stay up to date. Being able to run your own simulations saves you lots of time and gives you the ability to make a much better product. Whenever you have a "spare time" engineering project, document it and use it to build a portfolio demonstrating your love for engineering over a long period of time.

**What other advice do you have for students?**

If you can, I would recommend joining at least one engineering extracurricular activity in High School and College. These really help your resume stand out and will hopefully give you some good networking opportunities with professional engineers. Also in High School (and College) you should absolutely ask any working engineers you know if you can shadow them at their job for half a day. This will give you an opportunity to see what being an engineer really looks like. Also as soon as you start college make sure you start reading job descriptions for what companies expect new engineers to know. This will help you plan what you need to learn and what is important in the market, and help you keep your goal of getting a job at the end of school in the forefront of your mind.

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