## Sloan Career Cornerstone Center

## **Profiles of Engineering Students**



**Jessica Ewing** 

**Engineering Student California State University Northridge Northridge, CA** 

**Education in Progress:** 

Senior, B.S. Mechanical Engineering (emphasis: Environmental), California State University, Northridge

## **Advice to Students:**

"Be prepared to study a lot. Taking advanced math and science courses may help."

## Interview:

- Q: When did you know you wanted to become an Engineer?
- ▶ Ewing: I knew I wanted to be an engineer when I was in high school. I had always been interested in a career that would benefit the environment. I also excelled in math and science. I thought becoming an engineer would give me an opportunity to combine my love of math and science, and be able create designs that were environmentally friendly.
- ▶ Q: What is your college experience like in terms of the amount of time you find you need to study each day?
- ▶ Ewing: Engineering courses require A LOT of studying. I spend about 2-3 hours per day studying.
- ▶ Q: Are you incorporating any work experiences while you are a student? (include both internships/co-ops and any other jobs you may be holding while in school)
- ▶ Ewing: I got an internship my sophomore year with a utility company. I have been there for 4 years now. Having an internship allows you to see firsthand what you are learning in school. It also reinforces the fundamentals, and can help you in understanding future courses before you even take them.
- Q: How did you prepare for your college experience?
- ► Ewing: I prepared for college by taking as many Advanced Placement courses as I could. For engineering, it is especially helpful to take calculus, physics, chemistry, and some computer science courses.

- ▶ Q: Did/do you have a mentor that has helped guide you thus far? (If so, describe the impact of this person on your education and career plans)
- Ewing: Not really. However, it would have definitely helped make things easier.
- ▶ Q: Is there a specialty area you have focused on in engineering? If so, what is it, and how did you decide on this specialty? Also, at what point in your college experience did you decide?
- ▶ Ewing: I focused on Mechanical engineering with an emphasis on environmental. I made this decision after my freshman year. I think Mechanical engineering is a broader field than Civil or Electrical. It gives you a better view of all engineering disciplines, which you really need when designing any sort of machine or mechanism. This broad outlook is what attracted me to Mechanical engineering.
- ▶ Q: Is it hard to balance your engineering studies with other college activities (entertainment, travel, having fun)?
- ▶ Ewing: Being an engineering major is not easy. You do have to sacrifice a lot of time and energy for your class projects and your homework. However, with working in teams, you will find that you build friendships, and sometimes the work ends up not really feeling like work.
- ▶ Q: Do you find yourself studying more in a team situation or alone? Do you have a preference?
- ► Ewing: Both. It helps me to study alone first, then with a team so I can get any questions answered.
- ▶ Q: What's the hardest thing you have found about your college experience working toward a degree in engineering?
- Ewing: The hardest thing is realizing that your ideas don't always work. You may have a great idea for a project, but it can turn out to be more complicated than you thought. You have to work so much harder to get it done, and then in the end, it might not even work!
- ▶ Q: What's the most rewarding aspect about working toward a degree in engineering?
- ▶ Ewing: The most rewarding aspect of working toward and engineering degree is knowing that you will have the skills and knowledge to contribute to innovations that can directly help or influence society.
- ▶ Q: Do you think you'll continue studying engineering, or do you think you'll switch to another area? Why?
- ► Ewing: I think that I will continue to study engineering because technology is always evolving, and you have to keep up in order to continuously achieve better designs.
- ▶ Q: Do you have any idea what sort of industry or work you'd like to do when you graduate? If so, how did you find out about this industry or field?
- ▶ Ewing: I always wanted to go into the environmental field. As a graduating senior, I already have a position lined up for that. I found out about the position through my university's career center.

- ▶ Q: Do you think you'll want to pursue additional degrees after you complete the one you are working on? Why or why not?
- ▶ Ewing: Not right away. It took me six years to finish my degree, so I think I would like to work in industry for a while. However, I may go back later to pursue a Master's degree in Environmental Engineering.
- ▶ Q: Did you think that school will prepare you for the way the work gets done in the real world?
- ► Ewing: Yes. You usually work in teams on class projects, and this prepares you for working with future coworkers.
- ▶ Q: How many engineering schools did you apply to? How many accepted you?
- Ewing: I only applied to one school, and was accepted.
- ▶ Q: Did you have a "first choice?" Were you accepted into your "first choice?"
- Ewing: Yes and yes.
- ▶ Q: How did you decide which college/university to go to?
- ▶ Ewing: I researched the engineering program online. Also visited the Mechanical engineering department at the university for a tour of the facilities, and to have questions answered.
- ▶ Q: What should high school students be doing to prepare themselves to take on the work that engineering students do?
- ▶ Ewing: Be prepared to study a lot. Also be prepared for a lot of late nights in the lab. Taking advanced math and science courses may help with this. Students usually discover whether or not they can handle engineering after their freshman year.