

Sloan Career Cornerstone Center

Profiles of Engineering Students



Renee Dorsey

**Electrical Engineering Student
Drexel University
Concentration: Digital Signal Processing**

Education in Progress:

Drexel University
Working toward Bachelor of Science
Electrical Engineering
Concentration: Digital Signal Processing

Advice to Students:

"It is not necessary to have everything figured out before you start college, particularly if you will be an engineering student. Deciding what field of engineering or what job you want are decisions that can be made later on. One thing I have found out is that you cannot go wrong with a degree in engineering."

Interview:

► **Q: When did you know you wanted to become an Engineer?**

► **Dorsey:** I began my studies in physics. I enjoyed the classes I was taking at the time and I started working in a physics lab at a university where a lot of interesting research was taking place. It was there I realized that, although I was fascinated by the field and by the research, my education (primarily in graduate school) would be mostly theoretical and extremely specialized. I made the switch to engineering because the topics covered are much more diverse and the options I would have upon graduation would be greater. Becoming an electrical engineering student was the right choice for me. I am still able to satisfy my curiosity of the physical world around me, especially in regards to electricity and magnetism that interested me the most in my physics classes, but I am also able to work on a variety of interesting projects from design to completion.

► **Q: What is your college experience like in terms of the amount of time you find you need to study each day?**

► **Dorsey:** The amount of time I need each day to study varies and each student has a way that works best for him or her. For me, it is most helpful if I devote approximately 3 to 4 hours each day in order to keep up with the class material. During exam time, I spend a little more. Doing

well in a class means more than scoring high on exams. Sometimes, simply cramming toward the end of the term can do this. However, I find that it is much more fulfilling to have the best grasp on the material as I can and I do this by preparing what will be covered in each class ahead of time and then spending time after class reviewing what was discussed. This can get a bit overwhelming when taking the typical 5 to 6 classes per term. But it is definitely a better way of retaining the information and being able to recall it long after the class is over.

► 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)

► Dorsey: Since I have been in school, I have had several jobs and co-ops. These include working in labs doing research and doing co-ops in industry. I have worked in some type of lab doing research since the beginning of my school career and I am currently doing a co-op at an architectural engineering firm in their electrical department.

► Q: How did you prepare for your college experience?

► Dorsey: I did not begin college immediately following high school. When I did decide to go, I started at a local community college that had a great transfer program with several universities in my area. It was there that I began my studies in physics. Before I transferred, I decided I wanted to study engineering so I transferred a school in the area that is known for having an excellent engineering program.

► 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)

► Dorsey: I have not had a mentor, but I have developed relationships with several professors and graduate students that have greatly benefited me. It is helpful to have someone to talk to regarding recommended classes, research opportunities, field of study and personal challenges as a student. For me, I do not have one person that has guided me in all areas, but several that I have received direction from in specific areas.

► 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?

► Dorsey: I am studying electrical engineering with a concentration in radio frequency electronics and digital signal processing. I decided on these specialties during my third year (out of five) due to the fact that I found these classes the most interesting and careers in these fields seem like a good fit for me.

► Q: Is it hard to balance your engineering studies with other college activities (entertainment, travel, having fun)?

► Dorsey: Sometimes it is difficult to find balance as an engineering student. I think it is usually most difficult in the first two years of school since the classes are focused on a wide range of fundamentals. The college experience is also new and there is a lot to learn about yourself as a student and what works best for you. For me, I had catching up to do since I did not take the preparatory classes in high school and did not plan on studying engineering. The first two years were difficult and I spent a lot of time studying and making sacrifices like spending less time with friends and not being involved in extra-curricular school activities. It was worth it to me, though, and I was so excited about everything new I was learning. Now I have a lot more balance. I am entering my fourth year (out of five) and although the classes are actually more difficult, I have learned ways to study and to learn that are more effective and time efficient. I

- ▶ Q: How many engineering schools did you apply to? How many accepted you?
- ▶ Dorsey: I only applied to one and I was accepted.

- ▶ Q: Did you have a "first choice?" Were you accepted into your "first choice?"
- ▶ Dorsey: I only applied to one and I was accepted.

- ▶ Q: How did you decide which college/university to go to?
- ▶ Dorsey: The school I chose had a reputation for being an excellent engineering school and is involved in a lot of interesting research.

- ▶ Q: What should high school students be doing to prepare themselves to take on the work that engineering students do?
- ▶ Dorsey: I would suggest taking any college preparatory calculus, physics and chemistry classes offered at the high school (most importantly any math classes that are available). These classes will give a student a huge advantage in the first year of engineering studies at a university. Also, a lot of universities offer summer programs for high school students where they can take classes, participate in laboratory assignments and talk with college students and professors in various fields.

- ▶ Q: What other advice do you have for high school students?
- ▶ Dorsey: It is not necessary to have everything figured out before you start college, particularly if you will be an engineering student. Deciding what field of engineering or what job you want are decisions that can be made later on. One thing I have found out is that you cannot go wrong with a degree in engineering. An engineering education is extremely diverse, creative and rewarding and prepares you for many other fields if you change your mind altogether. However, should you remain in engineering, there are an unlimited amount of careers to choose from ranging from more technical positions to project management. And right now, engineers are in such high demand that there are many options waiting for you when you graduate.