

PODCAST TRANSCRIPT – ENGINEERING MAJOR

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Mitchell

Hi, I'm Mitchell, your host for this podcast focusing on majoring in Engineering at San Diego State University. Today I am going to talk to two undergraduate students from the College of Engineering, Katie and Blake. Katie is a senior majoring in Mechanical Engineering, with a minor in Mathematics, and Blake is a senior majoring in Mechanical Engineering. And me, I am currently a senior majoring in Civil Engineering. We are very excited to share our experiences with you and hope that this podcast will give you some good information about the engineering program here at SDSU. Let's begin. Hi Katie, hey Blake, how are you guys today?

Katie

Hi Mitchell!

Blake

What's up, Mitchell?

Mitchell

Let's begin by talking about the benefits to majoring in engineering at San Diego State University. Personally, I think if prospective students, like our listeners, are seeking out a challenge, then they should strongly consider majoring in Engineering. Katie, why would you recommend majoring in Engineering at SDSU?

Katie

For a number of reasons, Mitchell. For one thing, graduating with a degree in any field of Engineering allows you to acquire a high paying desirable job right out of college, without having to attend graduate school. Employers respect someone who has achieved success in the field of engineering, because it shows that you possess a level of commitment and intelligence. Also, other slightly more competitive programs encourage an atmosphere of rivalry among students, which makes them unwilling to help each other out. But at SDSU, we are a really tight knit group and enjoy studying together. Rather than competing against each other, we have an atmosphere of give and take, where each student provides help where they can and feels comfortable asking for it in subjects they understand less well. As a result, we are all close with each other and enjoy hanging out, whether it's in class, in the lab, or after class at Louie's.

Mitchell

Well said! That is one characteristic that I have really enjoyed about the program is the feeling of being part of a close knit family. Blake, how about you...what do you consider the benefits to be?

Blake

I enjoy the hands on experience. SDSU has the machine, you get the tools, you put in the time, you build it, it's up to you.

Mitchell

Our listeners have probably heard this many times before, but college truly is what you make of it and how hard you choose to work. I decided to take a leadership role in Chi Epsilon, which is a Civil and Environmental Engineering honor society. And this single experience has helped me to grow as a student engineer. I have been able to work on skills that are needed in the professional world.

Katie, can you recall a time in your academic career that was a turning point in your life?

Katie

During my third year in the engineering program, I had just started to tackle my upper division requirements and was somewhat nervous about being able to achieve the same level of success that I had in the relatively easier lower division classes. One of the first upper divisions I took was a materials course. After the first exam, the professor announced to the class that we had pretty much all done horribly. When he passed back the exams, not only had I gotten an A, but I had set the curve. Being shown that I could succeed, despite my own self-doubts, was a turning point for me. From then on, I believed that I was capable of understanding difficult concepts and doing well, in even the toughest of classes if I worked hard enough.

Mitchell

It's amazing how some of those toughest exams can often times be the most rewarding. Our listeners are probably curious about what types of careers that a degree in engineering can provide. So let's talk a little bit about what [your] career plans are...Blake, you want to take the lead?

Blake

I see two choices in my future, inventing and education. I have enjoyed tutoring students, families, and friends in mathematics and science...so I may go that route. I also love to build, trouble-shoot and reverse engineer. Through engineering classes, I have learned many things in the field of science and mathematics and am now teaching myself how to apply them. I don't know if I am ready for the professional career yet, but I may go into the masters program.

Mitchell

And Katie, what are your plans?

Katie

After taking a course in biomechanics last semester, I know that I want to work in that field. Up to that point, there were various subjects that I found interesting, or that I

thought I'd be good at, but the combination of interesting material and a great professor won me over. And now I know that I want to have a career in biomechanics.

Mitchell

That's really interesting. Can you briefly describe what biomechanics is and what types of things you can do as a professional [in] biomechanics?

Katie

Sure! Biomechanics is applying what we've learned in mechanical engineering to biological applications. You can be involved with new medical technology that can really help people. For example, engineers are currently working on technology that will allow people with prosthetic limbs to control them as if they're real limbs by implanting a chip in their brain. Being able to create things that can really help people is really exciting to me. What about you, Mitchell?

Mitchell

Well, after graduation, I hope to get a job as a civil engineer within the San Diego area. After gaining a few years of experience, I hope to get my professional engineering license and continue to practice engineering. The engineering program here at SDSU has prepared me to see outside the box. There are some aspects of engineering that are not taught in a book. SDSU has taught me to identify those aspects and excel at them. I look forward to being able to apply what I have learned to real life situations.

I wanted to talk a little bit about our concerns before entering the major of Engineering; what they were and how we overcame them. For example, one concern that I had was if I could succeed within the program. What I discovered was that engineering is hard and nobody can do it alone. Being involved in student organizations has allowed me to meet people and form study groups. Working as a team is essential to becoming a successful engineer. Katie, what were some of your concerns?

Katie

Similar to you, Mitchell, my biggest concern was that it would be too hard. People actually told me not to do it, because they thought that I wouldn't want to commit the time that is required of engineering students. It's true that there is a significant time commitment involved if you want to be successful. But eventually it becomes a way of life. We not only study together, but we have a lot of fun too. It's all about finding a balance between working hard and playing hard.

Mitchell

Blake, when comparing the Engineering program at SDSU to other universities, why would you recommend earning an Engineering degree at SDSU rather than somewhere else?

Blake

SDSU has excellent professors, great machine tools, affordable prices and fantastic weather. Sure, other schools are more prestigious and have better facilities, but none have all four combined.

Mitchell

All right, I would like to discuss one more topic before we wrap it up. Let's talk about some advice that you would give to our listeners. What is some advice that you would give to a prospective or newly admitted student about the Engineering program? Katie, what advice do you have?

Katie

I'd say one of the best ways to prepare is to make sure that you have a solid foundation in the basics of math and physics, so that it's easy to build on those concepts as you progress through the program. Also, make sure to meet with an advisor during your first semester to get your schedule laid out. There are lots of prerequisites that need to be taken in order, and if you miss any, it could delay your graduation. So it's important to get things figured out from the start.

Mitchell

That's a great piece of advice. Blake, how about you?

Blake

Research everything that you do. The future is unpredictable, but by looking into the past, you can predict what will happen. You need to research whenever possible. For example, even when you are trying to decide where to go to college, go and visit the campuses, take the tours, [and] learn everything you can before committing to a college. Also, take lots of mathematics courses; know it and understand the reasoning behind it. Math is a tool; know how it works and why and then maybe you can even use it for things you never imagined it would work for.

Mitchell

Well said, Blake. In closing, I just want to stress the importance of getting involved early. In high school, take math and science classes. If your high school has a pre-engineering program, take advantage of it. SDSU is a great school. Take advantage of all the great opportunities and programs that are available to you and enjoy your time here at SDSU. Katie and Blake, thank you for being here today and taking part in this podcast.

Katie

No problem, Mitchell.

Blake

It was fun, man.

Mitchell

I want to thank our listeners for listening today and if you haven't already done so, I encourage you to check out the "Top 10 Reasons to Attend SDSU". You can find this link by clicking on the "Top 10 Reasons" button located on this page. Go Aztecs!

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