

I've had an unusual undergraduate experience at Iowa State University. I started here in fall 2013 after completing one year at a community college. When I started, I was an electrical engineering student who loved building circuits and doing a bit of programming. However, as the semesters went by, I realized that my true calling was the field of embedded systems, so in Fall 2015, I switched to computer engineering.

Many of my classes have prepared me for the real world by giving design projects. For example, the circuits classes (EE201, EE230, EE330) all involved at least one partner design project. On the computer side, classes like CPRE281, CPRE288, CPRE381, and CS309 all involved significant design projects as well. Thanks to the fact that these classes are spread out throughout the 4-year program, I had a lot of project experience leading into my final project-based class: senior design. In senior design, we work with interdisciplinary groups of ECpE students to plan, implement, and test a significant design project over the course of two semesters, and I felt very prepared for this class thanks to all of the previous project work.

I've made many friends and colleagues during my time at Iowa State. In many lab classes, we are required to join forces with another student, which helps us build our interpersonal communication skills, and helps us find new friends to work on engineering projects with. I've also joined study groups with other students and particularly enjoy giving other students advice and assistance on projects.

While the curriculum is focused on group participation, the ethics of doing our own work is very important as well. In addition to the obvious warnings about academic fraud and dishonesty, we are also taught about professional and personal ethics in the required seminar classes. In one of those classes, we investigate real-world engineering events where questionable ethics lead to very bad consequences. Thanks to our lessons on such ethics, I'm confident that I will never find myself in such a situation.

I'm a very hands-on learner, so the majority my learning has been through extra-curricular projects. I've done a large number of personal projects involving things from circuit design and PCB fabrication, to embedded systems design, to PC application development and app design. I've also participated in several clubs on campus. I was the Vice President of Critical Tinkers for 2 semesters, and I've participated in Cyclone Space Mining for the past year and a half. I've also participated in undergraduate research with Dr. Jones and Dr. Zambreno. Additionally, I've worked as an Electronics Technician at ETG for the past three years, which allows me to provide project assistance and advice to students of all levels.

I've definitely had an unconventional undergraduate experience, but if I had the chance, I would do it the same way again. I've learned so much from my personal and group projects, had the chance to work with some amazing professors, and have learned to take risks and dive deep into projects that I don't know anything about. All in all, I feel that the ECpE department has given me a great set of skills, both in the technical sense, as well as skills such as teamwork

and better relating to people of other cultures. I look forward to the next stage in my collegiate career.