## Reflection on General Education

## Ryan Pals

Computer Engineering
Iowa State University

"Part of what made the Macintosh great was that the people working on it were musicians, poets, and artists, and zoologists, and historians. They also happened to be the best computer scientists in the world. But if it hadn't been computer science, these people would have been doing amazing things in other fields."

-Steve Jobs

As engineering professionals, it is important to be well rounded. We cannot rely solely on technical expertise to create a meaningful impact on the world; we need to draw on knowledge from diverse fields of knowledge in order to have the greatest impact on the world. With this in mind, I will reflect on my General Education classes at Iowa State. To provide context, I will begin by explaining my academic and professional goals.

My primary academic goal for this year is to finish my undergraduate degree in December with at least a 3.0 GPA. This is important to me because it will mean that I have finished my undergrad a semester early with a good GPA, which will allow me to get into the workforce earlier and jumpstart my career. In the near future, I plan on returning to school to obtain at least one graduate technical degree.

My short term professional goals are to excel at my internship this summer, to contribute measurable value to the company and to expand my breadth of knowledge by becoming skilled in several technologies I haven't used yet. My long-term career goals are to become an expert in an important field and make important contributions to any team or organization that I am part of. By doing this, I hope to eventually develop a reputation of excellence in my niche.

My preferred work environment is one where I am constantly challenged, working on interesting technology. I want to be in an environment where I can constantly improve my skills and make worthwhile contributions to the organization. I hope to be in an organization where I am relied on to make important design choices and technical decisions. I intend on having a good relationship with my peers and superiors built on mutual trust and respect.

In order to achieve these goals, I will apply what I've learned in school. In addition to the technical courses in the computer engineering curriculum, I was required to take some general education classes. These included one International Perspectives class, one U.S. Diversity class, and two other electives. For these I chose Spanish, American Religions and two Entrepreneurship classes, respectively.

The business classes I took really help me understand the important economic and business factors that go into product design. Most of the time, a good product is not dictated by

what is most technically impressive, but whatever product can get the job done with the lowest associated financial, environmental, intellectual, or time costs.

I think my Spanish and Religions gen-eds have given me a better understanding of people with different cultures. This is becoming increasingly important in engineering as the profession becomes more globalized and companies hire more foreign workers: we need to consider that the lifestyles, traditions and morals of the people we do business with -- whether they are clients or coworkers -- can be very different than our own. By empathizing better with our coworkers, we can work together better and create higher quality products. By empathizing with our users, we can better understand what they need, what they want, and what they value culturally and ethically. This will allow us to create a more effective product.

My general education classes have provided an important supplement to my education. While I greatly value the technical skills that I have built throughout my education, the non-technical are important as well. Studying these subjects has made me more well-rounded person and a more knowledgeable professional.