

General Education Elective Course List

ECON	101	Principles of Microeconomics
GER	320	Germany Today
GER	378	German Film and Media Studies
HD FS	276	Human Sexuality
POL S	215	Introduction to American Government

Reflection

The software engineering field is not all about programming. It is certainly a big part of the job, but in my opinion, the biggest factor is the people. Software engineering is all about working with people to create new products. My engineering coursework has been wonderful in teaching me the technical skills I need to be successful, but not all my courses include the human component. That is where the general education courses come in.

My general education courses have taught me several important skills that serve as a foundation for my engineering work. For instance, English 250: “Written, Oral, Visual, and Electronic Communication” (Not listed above) greatly improved my communication skills. Communication in the engineering world is vital. As software engineers, we need to be in constant communication with our team, our management, our clients, and our stakeholders to ensure that our projects are headed in the right direction. This can be very difficult if one does not have the basis for good communication practices. A later course, English 314: “Technical Communication”, further refined those skills, which will serve me well when it comes to communicating with non-technical clients and stakeholders. These skills have reframed engineering problems for me: Instead of simply asking, “How can we solve this?” I’ve learned to ask, “How can we solve this in a way that is valuable and useful to our customers?”

My human sexuality course has also shifted the way I think about engineering problems. A major theme in the course was inclusivity. As engineers, we create solutions for all kinds of people. We will never meet all of our users. Thus, it is important to take inclusion into consideration when solving problems. A software-related example might be a user interface. If we choose certain colors, the interface may look great to most people, but we need to consider those who have various forms of colorblindness or who have poor sight. Engineering courses teach us how to make user interfaces, general education courses teach us how to make them accessible.

I have a second major in German through the Languages and Cultures for Professions (LCP) program at Iowa State. Throughout my German courses—both those listed above and others—I have, of course, improved my German language skills, but also my global agility and competency. I would describe global agility as being both able to and comfortable in interacting with people from around the world. Global competency is the

recognition of the inherent differences between cultures and the appreciation of those differences as the things that define who we are. In today's global society, possessing these two traits is extremely important. As software engineers, we work to create software that people use. That may seem like an obvious statement, but the key word is "people". "People" is such a broad term. It encompasses everyone from all cultures and all countries who speak all sorts of different languages and have all manners of traditions, beliefs, and customs. As such, it's vital that we understand that people are really at the center of our work and that if we are to work with people, we need to be prepared to work with all kinds of people. My German courses have exposed me to a new language and culture. Having lived and studied in Austria for a year, I got firsthand experience with that language and culture. I feel like I can navigate them well and that I could understand how a German or an Austrian might view a particular problem and how they might place value on certain solutions. That is not something that can be taught in an engineering course.

In the future, I hope to find a job that lets me utilize not only my technical skills, but my soft skills as well. I want to have the opportunity to work with clients to create a new product that is unique and impactful on people's lives. I also hope to eventually end up working in a German-speaking country, where I can demonstrate my global agility and competency every day.