

To me, a university education serves two basic roles. In the discipline of engineering, specifically, a university education will provide me with the necessary technical knowledge to build and improve upon the “structures, machines, apparatus, or manufacturing processes” (ECPD) that humans use every day. This education consists of all the relevant science related to the engineers chosen area of study, which in my case is Aerospace Engineering. For example, this includes Newtonian physics and calculus, which are the fundamentals of science and mathematics and have not significantly changed since the 17th century. What this also includes are the current programming languages and material technologies, which are constantly changing. As a result, not only does a higher-level engineering education provide me with the knowledge of the current technologies and science, but it provides me with the tools needed to establish a career in learning and applying modern technologies as they are discovered. In a way, this allows me to keep my knowledge current and relevant as I progress through industry.

One thing that I am certain about in my life is that I want to have a career involved in the design and engineering of aerospace vehicles or structures. To accomplish this goal, a prerequisite is a college degree in engineering. Therefore, I have chosen to obtain an engineering degree; not because my family required it of me, but because it is a crucial step to obtain the career that I desire.

In regard to the specifics of an engineering education, I put an extremely high value on experiential learning. While it is certainly important to learn all the prerequisite sciences, this knowledge is useless if it cannot be applied. A university setting is the perfect place to gain this experience under the supervision of professors that have this experience. My goal with my engineering education is to participate in engineering projects throughout my four years. This will require me to proactively search for relevant projects at my university.

All-in-all, I have set very high expectations for my university education, but I feel that with enough effort, I can get everything I desire out of college. I will need to maximize my time and absorb as much coursework as possible, while also developing a strong work ethic that will better prepare me to enter the workforce.