I’m a freshman from Lovett college. I haven’t declared my major yet, but I’m pretty sure that I will go for mechanical engineering. My parents both work in the automotive industry. My mom works for VW, and my dad works for GM. Since I was a child, I have had the chance to visit the factories in VW Shanghai with an engineer friend of my mom introducing me to both manufacturing vehicles and vehicles themselves. That’s when I first developed my interest in mechanical engineering. As I grew up, I began exploring deeper into the mechanical engineering field, and finally found two areas that I would mostly like to work in—robotics and fluid dynamics. Honestly, these two areas are very advanced in mechanical engineering, and I don’t expect that I will take courses related to these two areas in my freshman year, not to mention implement these professional knowledges into ENGI120. However, as a mechanical engineering student, I must get familiar with the process of designing and prototyping, not only for the engineering design minor but also for capstone design project in the future, and this course so far has been very informative in introducing the concepts and steps of designing and fabricating a new product, such as confirming the design criteria, using the morph chart, and do low- and medium-fidelity prototyping before the final manufacturing. I really enjoy following these steps in the designing process because the right order of considering different aspects makes problem-solving much clearer. Before this course, when I wanted to design something, I often get ahead of myself to think about manufacturing even when the design criteria haven’t been finalized, which makes the whole thinking process so messy. Now that I have already learned the designing process, I think this course has already helped me build a solid foundation for engineering projects, which brings me confidence in my future mechanical engineering path.

Upon graduation, my plan for now is to work in the industry for two to three years and then apply to graduate school. One of the most important things that this course has taught me is teamwork. I used to be the engineer who wants to do everything by myself in a group work, but now I realize that it is impossible for me to know every detail I need to develop a project. In such a simple project as our incubator, I can do very limited things for the group. I still need to rely on my teammates in coding and control system. Indeed, I will acquire these skills in the future, but as I learn more, the projects will become more complicated as well, so it is just unrealistic to do everything on my own. In the industry, there is no doubt that I will also work in an engineering group, so the group working experiences I acquired in ENGI120 are very helpful in preparing me for my future career.

My definition of being an engineer is to utilize engineering knowledge in problem-solving to create better lives for human being. For this particular project, the incubator is used to test water quality for drinking for under-developed regions, which is a goal that aims to improve people’s living conditions, so I consider myself fitting in my definition of being an engineer, though far from a skillful one. There are still so many things to learn before I can call myself a competent engineer for the industry, but I believe ENGI120 has set a solid foundation for me by providing me a chance to think and work as a real engineer for the first time.