



Total Building Design

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Reflection

Participating in the AEI Student Design Competition has prepared me for working in a collaborative environment that is similar to the professional building industry. It allowed me to not only apply electrical knowledge gained throughout my education in Penn State's Architectural Engineering Program, but also to collaborate with and apply my knowledge of mechanical, structural, and construction management disciplines.

Through this team environment, I have learned a lot about BIM and integration, as well as roles and responsibilities of disciplines in an IPD environment. I am grateful to have been exposed to design challenges that I probably would not have experienced if I participated in individual thesis. Our team, TBD, had a great team dynamic, creating a successful and realistic schedule to easily manage time and deliver the project effectively, as well as creating an environment to bounce ideas off each other judgment-free.

Many lessons were learned the hard way, however. In hindsight, we spent a lot of time researching greenhouse systems, which were foreign to us, and this left less time to optimize our design. Unfortunately, I probably will not come across a project like this in my professional career, but I was able to develop myself as an engineer and apply myself to learn new things.

This project was definitely the most difficult and most time-consuming project I have completed in my education at Penn State, and I definitely could not have finished without the help of my very supportive team. Ultimately, I am very proud of our design and grateful for the friendships I have made in my team and lessons I have learned.