Engineering students learn to budget their time. The intense academic demands of professors, along with any extracurricular activities, show a student that their time is precious and fleeting. Especially for John Tiemeier, who has had to balance a bachelor’s degree in mechanical engineering with a position on the Case football team. For an engineer, the challenge in problem solving is not to solve a problem completely. Instead, they acknowledge that there are an incredible number of factors to be explored in solving any realistic problem. The challenge then, is to recognize what is the most effective way to use their time; understanding that time is one of their most valuable resources.

The co-op program represents a big investment for engineers. It entails a full year of singularly dedicated work. Two semesters (separated by a year of regular study) are spent working at an engineering firm, alongside engineers. So the realistic engineer should ask, is this the most effective way I can invest my time?

Tiemeier was not sure about the answer to that question. "I thought I’d get out of here, I’d have a degree from Case, and I’d be untouchable," he said. He initially was not sold on the idea of a co-op. An engineering degree from Case Western is a powerful asset by itself. Though he did admit, "When I started off, my GPA wasn’t that special."

But the staff who oversees the co-op program are persistent. Mary Rose Tichar, the Director of Case’s cooperative education, took a personal interest in recruiting Tiemeier. "She just kept selling it whenever she saw me," he said. So Tiemeier agreed to participate in the co-op program’s preparatory programming.

If it were not for Mary Rose’s persistence, he might not have attended the co-op program’s regular meetings, which prepare students not only for their co-op, but for entering a competitive workplace. The co-op office did everything from having him prepare a resume, which Mary Rose would review, to having him participate in a mock interview. Even if he had stopped then, Tiemeier’s time would have been well spent.

Of course, if Tiemeier had not continued, he would not have found himself being interviewed by recruiters for the Ceramics Group of PCC Airfoils. "They seemed to really connect with me when I interviewed with them," said Tiemeier.

If Tiemeier had not taken the chance to form that connection, he might not have found out how much faith employers have in Case co-op students. "I thought it was really cool. They gave me a lot of big responsibilities. " The first of those responsibilities was developing an early alert manufacturing program to alert engineers of problems in their manufacturing process. When an engine requires weeks of labor to assemble, it is important for staff in engineering and manufacturing to work together to spot and prevent problems in the building process.
If Tiemeier had not been assigned to the early alert manufacturing program, he might not have experienced the pride of heading a truly unique and independent project. Tiemeier’s first assignment was not only new to him, but also new to the company. "So it was like I could become the expert at it." Collaborating with the IT department, he was able to implement his program on the company network. He observed the problem solving process of engineers, in collaboration with manufacturing, and adapted his program to it.

If Tiemeier had not been optimizing manufacturing processes, he might not have been able to see how a plant operates day to day. He had the opportunity to "see how a plant or business operates from day to day. Knowing what goes into it. How the different parts work, like the plant managers, the main workers on the floor, and the engineers." He found out how "the difference that you can make is one of the greatest things. Improving how other people work, improving parts, and seeing that difference day to day. Actually putting that stuff into practice is a lot different when you get down to it." He had thought he would go into manufacturing after college. But now he had proof that he was on the right track.

And if Tiemeier had not been heading down the right track, he might not have been at work on his 21st birthday. The same day that he was offered a job at PCC Airfoils. The same day that his coworkers invited him out to celebrate after work.

Of course, before he can begin working full time with his coworkers, Tiemeier does have to come back and finish his degree. "It’s pretty nice having that back and forth," said Tiemeier. He enjoys being able to switch between having no homework and being able to sleep in.

Upon his return, Tiemeier was able to enjoy even more benefits from his time well spent. The Mechanical Engineering department currently accepts projects done on co-op for senior projects. This means that Tiemeier had already completed a semester’s worth of work, but unlike his peers, he was paid to do it.

So Tiemeier’s time investment brought several dividends. He gained confidence and skills, confirmed that he was on the right track at Case, and perhaps most importantly, he was promised a position at a company where he knows he likes the work. A job offer is no small prize, at a time when "hiring freeze" is becoming a cliché. An engineering degree from Case Western is a major commitment. But a co-op is the one of the surest ways to make sure that commitment is the right one, and to turn that commitment into a promising future. "I’m extremely glad I did it, if not, I don’t know if I’d have a job right now," said Tiemeier.

So now that Tiemeier invested some of his time in the co-op program, he is already almost done with his time investment at Case. And he is starting to get restless. "I’m enjoying school, but I’m ready to get back to work now."