Jason Van Clark’s journey into the world of computer-aided design and three-dimensional modeling began by chance.

“I was choosing classes for my junior year [at high school] and needed one more class,” says Van Clark, now a senior mechanical designer at Doerfer Companies. “My counselor suggested that I take technical drawing/drafting.”

It was a two-semester course and involved drawing on the board and also on computer using AutoCAD, a software application for 2D and 3D computer-aided design and drafting. Van Clark whizzed through the nine-month course in two months, and went on to complete the coursework for the two follow-up courses by the end of his junior year.

That posed a problem for Mr. Miller, the new drafting instructor in his senior year. “He needed something to fill my time as I already had the coursework done,” Van Clark recalls.

“He set me up with a company called CemenTech in Indianola where I’m from,” he adds. “That led to a summer job and real work experience at an industrial manufacturer.”

Mr. Miller was also the one to tell Van Clark that he had a natural talent for CAD and 3D modeling, and that he should focus on these in college.

“I didn’t even know I could get a job doing this sort of thing,” Van Clark recounts. “I talked to a counselor and decided UNI had the program that best fit what I thought I wanted to do. I didn’t want to be an engineer but I wanted to run CAD programs.”

In the fall of 1999, he was enrolled in the University of Northern Iowa as a Manufacturing Technology major.

Life at UNI was challenging as well as rewarding.

“My undergraduate coursework covered a wide range of topics,” Van Clark says. “Some of the courses were very challenging and those were the ones that were the most rewarding.”

He remembers a course that he took early on in his UNI days. The course “included hands-on time in the shop, running mills and lathes” and “laid the foundation of an understanding of how manufacturing works.”

He took several classes that focused on CAD and 3D modelling that helped him develop skills that he uses daily in his work at Doerfer.

Some of the information that he learned in Statics and Strengths of Materials then also helps him to evaluate the strength of his designs at Doerfer now.

Van Clark’s journey into the world of Doerfer also began by chance.

“I had never heard of Doerfer before and needed an internship to go towards my graduation requirements at UNI,” he says.

It was the fall of 2002. Doerfer was located in Cedar Falls then.

“I happened to be passing by and decided to stop in and inquire about any opportunities they might have,” Van Clark recalls. “I ended up getting a two-hour interview, on the spot.”

His interviewers were impressed with his initiative and his willingness to do whatever they needed, he adds. “I got a phone call a few days later, offering me a position.”

After graduating from the Department of Technology at UNI in the spring of 2003, Van Clark worked for another company for a year before Doerfer called and offered him a full-time position; he has been there ever since.

His position at Doerfer affords him the opportunity to a wide range of work. “I design machines, tooling and fixture for use in industrial settings,” he says. “I have worked on fully-automated assembly lines, large
“College is a great period in life when you can job-hop, take time to study a variety of subjects and talk to people about anything you want. It doesn’t seem obvious but a lot of those opportunities disappear after you graduate.”

Jason Van Clark

articulating weld fixtures and assembly tools. I was also the primary designer for our Wheellift product for many years.”

Van Clark has also had the opportunity to venture into computer programming. “I write custom programs with SolidWorks to streamline our workflow. In addition to design and programming, I also maintain our CAD templates.” He believes his academic training continues to help him as he progresses in his career. “There is a lot of intrinsic knowledge I gained in college,” he says. “One of those skills is being resourceful. Having confidence that I can face challenges and overcome them is another.”

“The curriculums at UNI, both gen-eds and course-specific classes, cover a wide range of subjects,” he adds. “Those courses force you to consider topics from other perspectives. In many cases, they force you to consider topics that are completely new to you.”

“I have found that I have been doing that nearly every day since I graduated,” he states. “The world is constantly changing, requiring us to learn new things, relearn old things and to change our views and opinions constantly.”

That is why Van Clark believes students should “take as many different courses as possible, especially ones they don’t know anything about.”

“That is a great way to find what they are passionate about; what they want to do for the rest of their lives,” he says.

He also believes that students should “take jobs in as many different industries as possible.”

“It is good to work in retail, food service, construction, whatever they can find,” he says. “Every job they have will give them more tools and knowledge that they can use later in life. Those jobs will also expose them to careers they may be interested in.”

“College is a great period in life when you can job-hop, take time to study a variety of subjects, and talk to people about anything you want,” he adds. “It doesn’t seem obvious but a lot of those opportunities disappear after you graduate.”