

## FACULTY SPOTLIGHT

### DR. KELLY CRITTENDEN

By Eva Dickenson, Mechanical Engineering '20



The E&S Magazine is honored to feature Dr. Kelly Crittenden, associate professor and chair of mechanical engineering at Louisiana Tech.

Dr. Crittenden grew up in a rural community called Oak Hill near Many, Louisiana. Even before college, he was no stranger to fixing things—having helped his father restore cars in his spare time. In 1992, he began attending college right here at Louisiana Tech and received his bachelor's and doctoral degrees from the University. Soon after graduating in 2001, he accepted a teaching position at Tech.

When asked what he likes most about Tech, Dr. Crittenden explained that he appreciates the modest size of Tech's campus and student body. The school is small enough to allow him to offer unique and interesting engineering courses—and large enough to have a good number of students who want to sign up for these courses.

Dr. Crittenden helps develop STEM (science, technology, engineering, and mathematics) courses on campus. He is a versatile professor, and despite his degrees being in biomedical engineering, Dr. Crittenden has taught classes ranging from introductory cyber engineering to upper-level mechanical engineering such as Basic Measurements and Machine Element Design. He also teaches a mechanical engineering elective, Additive Fabrication Methods, in which he shows students how to 3D-print. Dr. Crittenden encourages students in this course to independently explore their own interests in 3D-printing, often using their own machines.

One of his students might print a zany figure found on a site such as Thingiverse, and the next day they might print practical and useful parts that make their engineering projects easier.

Additionally, Dr. Crittenden teaches a multidisciplinary capstone design course with Debbie Inman from the College of Business. In this course, engineering students work with business students to form startup companies. The class counts as credit for the senior project capstone for the engineering students, who develop a product for the team to sell. These teams go on to participate in the New Venture Championship on campus, present their products at the College's Senior Projects Conference, and even sometimes go on to develop startups outside of college. Dr. Crittenden works closely with these students to develop, critique, and encourage the engineering side of their projects. For example, he assists students in creating engineering documents for the product to qualify for a U.S. patent. Students come out of this course with an entrepreneurial spirit and a passion for their work.

Outside of teaching, Dr. Crittenden is a family man. He enjoys spending time with and being there for his two sons. He also helps his wife, Amy, with the children's choir at First Baptist Ruston, where he is an active member. He also plays the guitar for the early church service. His personal motto comes from his mother: "Nothing lasts forever, so enjoy the good things and don't spend too much time on the bad things."