## Melissa (Swager) Adkins (B.S. Mathematics, 2010)

elissa (Swager) Adkins has never backed away from a challenge. She knew overcoming them was necessary to accomplish her dreams. Growing up in the small farming town of Goodland, Kansas, Adkins tackled challenges both on the softball field where she played as the team's catcher and in the classroom.

In fact, a challenging class is what motivated Adkins to major in mathematics when it came time to select a college major. "I was a good student and enjoyed most subjects, so it was hard for me to figure out what to study in college," said Adkins. "However, high school geometry was the only class I ever got a 'B' in while in high school. So I took it as a challenge and decided to study math." Her father had been a high school math teacher, so she decided to follow in her father's footsteps.

Adkins decided to attend Emporia State University for several reasons. "It was a great teaching school, so it seemed like an ideal choice," said Adkins. ESU also gave her the opportunity to continue playing softball. "ESU has a very good softball team, so not only would I get a good education, but I had the opportunity to play on a nationally ranked team right there in my home state. The choice was natural and easy. That's how I knew it was the right one."

Soon after arriving at ESU, Adkins realized mathematics was what motivated and challenged her more than anything, so a small change was in order. "I actually changed from a math education major to a straight math major just so I could take more math classes," she said.

Adkins graduated from ESU with a B.S. in Mathematics in 2010. She took her math knowledge from ESU to Colorado State University where she earned her M.S. and Ph.D. in mathematics in 2015. She said ESU prepared her for the challenge of working toward a Ph.D. in mathematics. "ESU provided me with all of the fundamental knowledge I needed to move forward with my studies. I spent many hours studying in the math building with my fellow classmates and getting lots of help from professors, both whose influence literally guided my career and life."

One of the professors that most impacted her was Dr. Betsy Yanik, her advisor. "She (Yanik) had a big impact on my career choice and in getting a Ph.D.," said Adkins. "She showed me, just by observation and example, that it was possible to be a good doctor, mother, wife and kind person. I wasn't convinced I could do it, but by seeing her actively succeeding in these areas gave me great hope that I could do it."



The small and friendly feel of the mathematics department was something Adkins felt like was an asset to her that helped her succeed. "I wasn't scared to ask questions or be incorrect," she said. "The skill of asking questions really helped me succeed." That close-knit feeling even transpired outside of the department for her. "The campus was so great, not too big and not too small. It felt like I knew everyone on campus—or at least recognized their faces."

For the past two years Adkins has worked for Northrop Grumman Corporation in Aurora, CO, as an R&D Engineer. She works in a classified environment so she couldn't give specifics on what she is currently doing, but 40% of her work hours are filled doing budgets, forecasts, scheduling and tasking for her current program. The other 60% is filled doing technical work such as building software prototypes, mathematical modeling and data analysis. "I use most, if not all, of the skills/knowledge I learned in my math and computer science classes at ESU," she said.

When she is not working, Adkins enjoys spending time with her husband, Jon, who works as a mechanic at Rawhide Energy Station and her 18-month-old daughter, Agnes. She is glad she took on the mathematics challenge at ESU. "I was a small town girl with great big dreams, and ESU helped make my dreams reality."





She now challenges others to do the same. Her advice to incoming and current ESU mathematics students are two-fold. The first is to take computer science classes. "You will most likely have to program something at some point so be prepared." She said she uses the skills she learned in Dr. Chuck Pheatt's computer science classes daily. The second is take advantage of the knowledge ESU has to offer while you are there. "Never again will you be in the atmosphere and around people whose purpose is to teach you whatever it is you want to learn," said Adkins. "Embrace it, ask questions, search for answers and don't stop until you have found them."