

STEM SPOTLIGHT

Amber Trickett

Quality Engineer
Bioventus LLC

Currently pursuing Master of Business Administration
University of Memphis
Bachelor of Science in Mechanical Engineering
Kettering University



Q How did you select your college major?

A When I was younger I wanted to design cars. In my free time I would draw current models as well as concept cars. So when it came time to decide on colleges, it was a toss-up between an art school and an engineering school. I ultimately chose Kettering because of the small school appeal and the work experience (through the Co-op program) I would gain prior to graduation. Once I was accepted to Kettering, Mechanical Engineering fell into place because it was broad enough to go anywhere (including switching from automotive to biomedical).

Q What was the biggest influence in your selection of major/ career?

A After graduation, I was ready for a new challenge, so on a whim I decided that exploring the biomedical field would be fun. Since working in the field I've been a Project Manager, Manufacturing Engineer and now a Quality Engineer. I believe that having a well-rounded resume is very beneficial for anyone's career.

Q If you could go back to high school and select any elective course to take that would have better prepared you for college, what would it be?

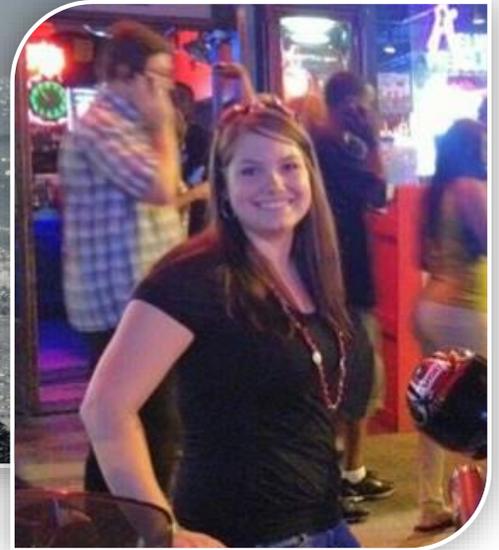
A If they had such a course, I would take a course on how to study. This may seem mundane and pointless, but for me I didn't need to study in high school and frequently completed my assignments in class. College was a completely different ball game and having to learn how to study, and study effectively, was one of the most challenging things.

Q What is your favorite aspect of your job?

A I get to travel to a lot to various suppliers to complete supplier quality audits. These are audits based on how the manufacturer conducts its manufacturing processes and all the systems supporting it. Being that this is my first role that is removed from the daily manufacturing process, I truly enjoy visiting these plants and seeing how things are made. No two facilities are ever alike which keeps me on my toes.

Q How do you/ your company make a positive impact on society/ our community?

A My company produces a bone growth stimulator that helps heal bone fractures which wouldn't otherwise heal on their own. The device helps to heal these bones so that people can return to their original way of life. It's frequently used on the elderly where sometimes breaking a bone can be completely devastating. I think that one of the most rewarding things in a career is knowing that you are helping others live a better life.



Q What is the most interesting thing you have been able to do in your career?

A I put a pig heart on bi-pass while working at a company that made heart and lung machines (these are the life support machines while you have open heart surgery since your heart technically has to be stopped). I was able to participate in a lab that taught me how surgeons put the cannula and catheters in the heart during a bi-pass surgery.

Q What makes you get up each morning excited about your profession?

A Knowing that what I am doing is actually making a difference, even if it is a small one. I have a friend who is currently using my company's device due to a sports injury. Being able to see her recover first-hand and knowing that I was a part of that is marvelous.

Q How does your career incorporate STEM (Science, Technology, Engineering, and Math)?

A Science – The biomedical field relies on research and new advancements in medicine. Although I do not personally do the research, I am continuously reading about it to help incorporate and bring in new ideas to my company.

Technology – My life is in a spreadsheet - I make spreadsheets for just about everything. I also would consider myself pretty tech-savvy and am currently in process of redesigning a software program to fit my company's needs, just because I can.

Engineering – A common misconception about engineering is that it is doing a type of task like designing. Engineering is so much more than that, it's a way of thinking about things and problem solving. I am constantly coming up with ways to troubleshoot this problem or the next.

Math – all of those spreadsheets are formulated to compute so many different things!

Q What advice would you like to share with K-12 students who are considering your profession?

A Don't ever listen to someone who says you can't do something, because you can do anything you put your mind to. Einstein couldn't tie his shoes, yet look at all he was able to accomplish. Dream big and strive to achieve those dreams.