

Dr. Tameshia
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Hello. My name is Dr. Tameshia Baldwin, and I am an assistant teaching professor in the College of Engineering at North Carolina State University. In this short presentation, I'm going to highlight an exciting new project that we will be launching soon at your school called Project DeSIRE, which stands for Developing STEM Identity in Rural Audiences through Community-based Engineering Design. Project DeSIRE is a four year project funded by the National Science Foundation. It represents a collaboration between the NC State College of Engineering, the NC State Friday Institute for Educational Innovation, the North Carolina Mathematics and Science Education Network pre-college program, Edgecombe County Public Schools, the Strategic Twin Counties Education Partnership, as well as local industry.

Our hope is that your participation in this project will increase your knowledge of STEM content, as well as your interest in STEM careers. We will do this by working with teachers and principals at your school and our industry partners to create real world STEM design experiences within the context of advanced manufacturing. In addition, through this program, we will make you aware of the career opportunities available in STEM in your hometown and beyond. Our goal is to help you begin to see yourselves as scientists and engineers, and to consider those as viable career options.

As part of the DeSIRE program, we will create three STEM focused elective classes for grade levels six through eight. What that means for you is that you will take one of these STEM focused classes as a sixth grader, one as a seventh grader, and the final one as an eighth grader. And in these classes, you will learn about STEM and advanced manufacturing in the food, pharmaceutical, and energy systems industries. I don't know if you're aware of this, but the advanced manufacturing industry is the largest employer in your part of the state. As a result, we thought it would be advantageous to target companies in this industry to partner with us on this project. Now, I will talk more about who those partners are in the next slide.

In these classes, you will have the opportunity to use Lego robotics, raspberry pies, and Arduinos to design and build simulated manufacturing lines. In doing so, you will learn how to apply the engineering design process through hands on STEM project based learning. You'll also get a chance to meet and interact with STEM professionals and be mentored by college students in the minority engineering program at NC state. And once we get past COVID and the world opens back up again, we hope to schedule visits to our industry partners' manufacturing facilities.

So I've been talking quite a bit thus far about the industry partners working with us on this project. Here is a list of those partners, which includes Poppies International, Pfizer, Cummins, LS Cable, Kaba Ilco, and Kehein. All of these great, world renowned companies have manufacturing facilities in Edgecombe and Nash counties. What a huge advantage that is for you all. Through this project, we hope to connect you with these companies and allow you to explore the variety of STEM career opportunities available to you right in your neck of the woods. If you want to learn more or have questions about Project DeSIRE, feel free to reach out to me.

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My contact information is provided here. And on behalf of the entire Project DeSIRE team, we are extremely excited to start this project and look forward to working with all of you. Thank you.