

Hands-on experience for high schoolers in STEM-related fields at UMES

[47 wmdt.com/2022/02/hands-on-experience-for-high-schoolers-in-stem-related-fields-at-umes](https://wmdt.com/2022/02/hands-on-experience-for-high-schoolers-in-stem-related-fields-at-umes)

February 24, 2022

PRINCESS ANNE, Md. – To get more workers in the field of STEM, colleges like the University of Maryland Eastern Shore are engaging students as early as high school. The UMES Engineering and Aviation Science Department hosted young students and showed them what their future could look like with STEM-related fields.

Science, technology, engineering, and mathematics, also known as STEM, a field engineering professors say needs workers. That’s why during National Engineers Week, UMES is making sure young minds on Delmarva get a STEM crash course. “Once you get in and kind of get your foot in and you get to realize the magnitude of what’s already here,” says Jaylah Easter, a third-year mechanical engineering student at UMES.

Dr. Yuanwei Jin, Professor, and Chair of the Dept. of Engineering and Aviation Science, says this is their third time hosting this interactive learning experience. He tells us, early engagement is the most important piece of their work at the university. “Community engagement is one of the missions of the institution so our department, the Department of Engineering and Aviation Sciences is at the center of STEM education,” says Dr. Jin. He adds, “We wanted to promote stem education to attract more people, homegrown talents from the local counties to STEM professional workforce.”

High school students had two hours to explore digital circuits, robotics, water droplet motion in digital microfluidics, virtual reality, flight simulation, and air traffic control. “I feel like today just opened a bunch of new doors and new opportunities and things that we probably won’t ever forget,” says high school junior, Jenna Demaus. Another high school junior Carmen Cordell, adds, “I am one of the students that don’t know what they want to do so actually having people that are willing to help kids is very nice.

Students also got to chat with and learn from, both professors and current STEM students. “There are no boundaries, the only boundaries are the ones you set for yourself and so being able to share that with students and to share my journey to tell them it’s all about the initiative you take, you can do anything you put your mind to,” says Easter.

Undergraduate students like Easter showed high schoolers the intricacies of some of the work there. “I’ve done work with electrical circuits and figuring out how to use certain components to come up with specific and certain outputs,” says Easter. She says she didn’t have that experience in high school, so she enjoys reciprocating all that she’s learned. “Instilling that into students while they’re in high school before they come to college is really

a passion of mine.” Easter adds, “So it starts with minority students who are experienced and have diverse backgrounds and are willing to have that open an honesty with people and then you fill those positions with those students and that openness and that honesty kind of shines through their position so hopefully we won’t have situations like this again.”

The experience even sparked interest in students like Dameus whose sky-high career goals, just got more ambitious. “Seeing how they drive it, how they use the radars and stuff like that, maybe I want to take a step up from flight attendant and actually be a pilot,” says Dameus. Cordell adds, “We can also bring more attention to have more students get the experience from UMES that some people can’t get from other colleges.”

Both the high school and college students agree this experience is beneficial for the future of the program. “Take the initiative, there is a space for people like you out there, you just have to have the drive to go get it,” says Easter. She adds, “So really getting to draw back that curtain and see how engineering is the foundation for everything.”

Students also got to hear from Donya Douglas-Bradshaw, a Wicomico High School graduate who enrolled in UMES and currently works for NASA at the Goddard Space Center.

Dr. Jin also tells 47 ABC, they’re hoping to inspire more women to enter the world of engineering.