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# Newsroom

Georgia Southern University

# Georgia Southern University launches NASA-funded engineering mentorship program with Savannah-area high schools

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Savannah-area high school students are getting a first-hand look at engineering concepts through the Eagle Engineering Ambassadors (EAA) program, a new NASA-funded mentorship program that partners students in Georgia Southern University's Allen E. Paulson College of Engineering and Computing with teams of high school students.

The new program, much like its predecessor the Engineering Design Challenge (EDC), introduces high schoolers to engineering concepts through hands-on projects and mentorship from Georgia Southern students. Led by Priya Goeser, Ph.D., professor of mechanical engineering, and Thomas Murphy, Ph.D., associate professor of electrical and computer engineering, the program is funded through a grant from the Georgia Space Grant Consortium.

*Savannah-area high school student works on 3D printer in preparation for EDC 2022.*

"Historically, we had an outreach program on the Armstrong Campus in Savannah that was called EDC," said Goeser. "This year, our approach is to have a program where the schools are not competing against each other. Instead, we're meeting them where they're at. This gives us flexibility in training teachers, training students and giving them the tools that they need to connect with engineering and STEM-related topics."

Goeser also hopes that the shift in program format will help participants build on their engineering knowledge through increasingly difficult tasks, rather than once-a-year, standalone projects. The program, which began in August and will continue through the spring semester, already boasts eight Georgia Southern mentors from the Armstrong Campus and 22 Savannah-area high school student participants. Goeser hopes to expand the program to the Statesboro Campus and to Statesboro-area schools in the future.

"Participating in this program has made me appreciate the early education of engineering in local high schools," said junior mechanical engineering major Emma Kurtz. "I was part of the team who delivered 3D printers and trained staff on their use. I got involved because I was excited to be involved with the community, but this program has also impacted how I understand engineering and how I explain it to others."

Other student mentors in the program shared similar sentiments to Kurtz. Tyler Nagy, an electrical engineering major with a military background, initially joined the program to help distinguish himself from fellow engineering students.

“With my background in the military, I spent a lot of time training and managing a small team, so EEA was a really natural place for me to start outside of my schoolwork,” Nagy said. “But working with EEA also forced me to improve my skills as an educator, gave me valuable experience managing a project on a tight timeline and helped me gain a deeper understanding of additive manufacturing.”

Nagy’s favorite part of participating in the program had little to do with coursework and everything to do with the ingenuity of the high school teams.

“By far, my favorite part of EEA is seeing the creativity and problem solving from all of the teams,” Nagy said. “The high school students have an inspiring level of motivation, along with an assortment of problem analysis methods. Their varied experiences and approaches let everyone leave with a new perspective, which is really an invaluable aspect that would be hard to get any other way.”

*Tyler Nagy works with a student from a Savannah-area high school during EDC 2022.*

Goeser hopes that experiences like this continue to come from the EAA program for high school and Georgia Southern students alike.

“We want students to know that studying engineering is not unreachable,” Goeser said. “Math and physics are important, but there are also skills like spatial visualization and design that involve creativity, and that can make the difficult pieces more workable and fun. You just need to find the resources to help you get there, and we are here to help.”

EEA is expected to be hosted each fall and spring semester. Learn more about EEA at GeorgiaSouthern.edu/EEA.

Posted in Press Releases

# Center for Business Analytics and Economic Research evaluates local manufacturers' response to COVID-19 pandemic

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Georgia Southern University's Center for Business Analytics and Economic Research (CBAER) reported in a recent study that despite employment and production challenges, manufacturers in the coastal region are recovering from the COVID-19 pandemic.

CBAER, a unit of the University's Business Innovation Group (BIG), began the study in January 2021 at the request of the Coastal Regional Commission of Georgia (CRC), which works to promote and provide comprehensive planning services for the 10 counties and 35 cities that it serves across coastal Georgia. The goal of the study was to utilize data collected by CBAER to understand key economic trends in the manufacturing industry between late 2019 and early 2022.

In total, manufacturing employment in the coastal region reached 25,643 jobs in the fourth quarter of 2021. While this figure is 3.6 % below the starting point of the analysis in the fourth quarter of 2019, it also shows an increase of more than 1,800 jobs in the coastal region, which is a significant improvement since the lowest point of employment in the third quarter of 2020.

Data reflected that small manufacturers in the coastal region – classified as those with less than 50 employees – saw their workforce shrink by 129 direct jobs from the fourth quarter of 2019 to the fourth quarter of 2021. CBAER estimated that the economic impact of these losses created a decline of more than $68 million in direct manufacturing output over those nine quarters. On the other hand, large manufacturers, which support more than 50 jobs, saw a decline of 833 direct jobs. This loss resulted in a decrease of $515 million in direct output.

Through the study, CBAER found that these declines were attributed to shifts in demand for goods rather than a loss of manufacturers in the area. While production needs changed, the local industry lost only three manufacturing establishments overall.

Assistant Director of CBAER Ben McKay noted just how crucial the coastal area's recovery effort is to the state and local economy.

"Our report illustrates that the manufacturing industry is one of the most important sectors in the coastal region's economy," McKay said. "Coastal manufacturers service clients across the United States, and that range shields our region from some of the fluctuations of local business cycles, which trail a quarter behind state and national trends."

Identifying these trends was the goal of the CRC when their team requested the study in early 2021, as the data focuses on the 10 counties the commission serves, including: Bryan, Bulloch, Camden, Chatham, Effingham, Glynn, Liberty, Long, McIntosh and Screven.

“Our region must prepare for the growth and development coming to our expanding and new industries,” said CRC Chairman Jason Coley. “Our communities must utilize every tool available to effectively manage anticipated growth, and this report is a must-have implement for the region’s planning toolbox.”

In reference to long-term strategy, CRC Executive Director Allen Burns noted the importance of collaboration to keep the region moving forward.

“It’s necessary that we collaborate regionally to successfully absorb growth, maximize benefits and confront challenges,” said Burns. “The CRC is proud to be a close partner with Georgia Southern’s CBAER team, and their work on the manufacturing study is a prime example of the regional approach needed.”

Georgia Southern University, a public Carnegie Doctoral/R2 institution founded in 1906, offers approximately 140 different degree programs serving nearly 26,000 students through 10 colleges on three campuses in Statesboro, Savannah, Hinesville and online instruction. A leader in higher education in southeast Georgia, the University provides a diverse student population with expert faculty, world-class scholarship and hands-on learning opportunities. Georgia Southern creates lifelong learners who serve as responsible scholars, leaders and stewards in their communities. Visit GeorgiaSouthern.edu.

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