



**East Cooper Center for Advanced Studies**  
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## Media Release

### **East Cooper CAS Students Selected as NASA TechRise National Finalists**

*Innovative Self-Healing Spacecraft Device to Fly on Virgin Galactic Suborbital Rocket This Summer*

**Mount Pleasant, SC (January 29, 2026)** – Students from the East Cooper Center for Advanced Studies (ECCAS) have been named national finalists in the prestigious FutureEngineers.org [NASA TechRise Student Challenge](#), joining 60 winning teams from across the nation selected to launch experiments into space.

On January 20, 2026, NASA announced the winners of its fifth TechRise Student Challenge, selecting teams from the highest number of entries and greatest geographic participation in the program's history. The ECCAS team joins more than 370 students representing 52 states and territories who will build experiments to autonomously operate and collect data during NASA-sponsored flight tests this summer.

The student team developed an innovative self-healing device designed to repair external damage on spacecraft. The technology features a groundbreaking approach: a device that can be placed over surface cracks on a spacecraft, using a substance that transforms from a solid to a liquid gel when excited by an electrical current, effectively filling and sealing the damaged area.

The ECCAS experiment will fly on a suborbital spaceship operated by Virgin Galactic of Tustin, CA, where it will experience approximately three minutes of microgravity and the unique accelerations and conditions of spaceflight. Other winning teams will fly experiments on high-altitude balloons operated by World View Enterprises of Tucson, AZ.

As national finalists, the students earned \$1,500 in funding, a starter kit including a flight box, and technical support from Future Engineers advisors. Working alongside NASA engineering mentors this spring, the team will construct a prototype of their device. The completed experiment will be shipped to NASA in May for integration and flight testing. Following the flight, students will retrieve their experiment and analyze the data collected during its journey to space.

"I am incredibly proud of the team for their accomplishments," said Chris Sjolander, team coach. "They conducted a lot of research before developing this proposal, and it took skill to keep the experiment within the scope of the contest. Well done to our entire team!"

This is the third time in five years that the East Cooper Center for Advanced Studies has earned recognition in the NASA TechRise Student Challenge, with previous winning submissions in the

2021-2022 and 2023-2024 school years, establishing the school as a consistent leader in aerospace innovation education.

The NASA TechRise Student Challenge provides students nationwide the opportunity to design, build, and launch experiments that use sensors and various types of hardware to gather data in stratospheric and microgravity environments, preparing the next generation of scientists and engineers for careers in aerospace.

For more information, please contact Chris Sjolander at [chris\\_sjolander@charlestoncountyschools.gov](mailto:chris_sjolander@charlestoncountyschools.gov).

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#### **About the Charleston County School District**

Charleston County School District (CCSD) is a nationally accredited school district committed to providing equitable and quality educational opportunities for all its students. CCSD is the second-largest school system in South Carolina and represents a unique blend of urban, suburban, and rural schools spanning 1,300 square miles along the coast. CCSD serves approximately 51,000 students in 90 schools and specialized programs.

CCSD offers a diverse portfolio of educational options and specialized programs delivered to the students of CCSD through neighborhood, magnet, IB (international baccalaureate), Montessori, and charter schools and programs. Rich educational opportunities for students include programs in science, technology, engineering, and mathematics (STEM); music and other creative and performing arts; career and technical preparation programs; military; dual credit; and many more.