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SRNS Fire Protection Engineers Spark Talent Pipeline with USCA Capstone Project Graduates Turn Full Service at the Savannah River Site

AIKEN, S.C. – (August 25, 2023) – Three recent graduates from the University of South Carolina Aiken (USCA) hired on full-time at the Savannah River Site (SRS) after completing their Science, Technology, Engineering and Math (STEM) Capstone project sponsored by Savannah River Nuclear Solutions (SRNS) fire protection engineers (FPEs).

“Partnering with the University of South Carolina Aiken contributes to the growth of our engineering department and our continued involvement in the local community,” said Rich Zaharek, SRNS Senior Vice President, Chief Engineer and Nuclear Safety. “This project gave SRNS engineers the opportunity to mentor/coach students to promote the work and safety culture at SRNS and identify individuals who could successfully transition into full-service roles.”



University of South Carolina Aiken Capstone graduates Tucker Rayfield, left, Andrew Kricke, middle, and Noah Chancey, right, received a certificate of completion before transitioning into full-service roles at SRS.

The USCA Capstone project is a culminating experience related to the student’s major that aids in professional development, portfolio growth and job experience. This senior project simulated a glovebox

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environment and was designed to test three different flame detectors' ability to identify fires through multiple configurations of glass. In June, Industrial Engineer Noah Chancey and Mechanical Engineers Tucker Rayfield and Andrew Kricke, transitioned from USCA into their permanent assignments in FPE groups at SRS.

"The commitment from Mr. Zaharek, my mentors and SRNS sent a powerful message to me as a new engineer," said Andrew Kricke, SRNS Associate Fire Protection Engineer. "This company cared about my development and success, making it an easy decision to seek employment here after completing my senior project."

SRNS Fire Protection Engineers Eric Johnson, Rob Hanson and John Antignano served as sponsors and mentors to the students and shared a glimpse of real-world engineering experiences. The students conducted research, contacted manufacturers, completed live burn tests and presented their experimental findings.



Andrew Kricke, SRNS Associate Fire Protection Engineer, tests various types of glass and their impact on the accuracy of flame detectors during his University of South Carolina Aiken Capstone project.

"Our goal for the Senior Capstone course is for students to participate in design experiences led by industry leaders," said Dr. Bethany Fralick, Instructor, USCA Capstone. "We hope students learn

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practical skills beyond the classroom in engineering environments that are similar to full-time positions. The capstone partnership with SRNS has proven invaluable in developing engineering thinking for our students through outstanding projects and mentor support.”

In addition to student sponsorships, SRNS has grown its talent pipeline through a recent partnership with South Carolina State University to increase the number of FPEs joining the workforce. The critical skillset is in great demand at SRS and this new concentration will prepare students to use their knowledge of fire protection engineering concepts to positively impact the Site’s missions.

“Historically, it has been difficult to recruit and retain fire protection engineers due to the low number of graduates from FPE programs coupled with the increasing need for FPEs throughout the industry,” said Eric Johnson, Manager, Fire Protection Engineering. “By providing academic knowledge, identifying talented individuals, and working with them through the qualification process, SRNS is ensuring the availability of qualified FPEs to meet the needs of our industry.”

The partnership between SRNS and USCA Capstone will continue in the 2023-24 school year as the university aims to identify a total of 10 capstone senior projects and collaboration opportunities between faculty, students and the engineering department.

“The preparedness, knowledge and support that I received from my capstone team was enough to have me back at SRS as a full-time employee,” said Kricke. “I would highly encourage students to work with this group of fire protection engineers and to add SRNS to the top of their list of potential employers.”

Click [here](#) for more information about career opportunities at the Savannah River Site.

Savannah River Nuclear Solutions, a Fluor and HII partnership company, is responsible for the management and operations of the Department of Energy’s Savannah River Site, located near Aiken, South Carolina.

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