

Patrick Bush

Savannah River Nuclear Solutions

(839) 290-0748, patrick.bush@srs.gov

For Immediate Release

A Pipeline in Criticality Safety Engineering: SRNS Partners with North Carolina State University

AIKEN, S.C. – (May 22, 2025) – Savannah River Nuclear Solutions (SRNS) has partnered with North Carolina State University (NCSU) to address the ongoing need for specialists in the field of Nuclear and Criticality Safety Engineering (N&CSE) at the Savannah River Site. This partnership has led to the creation of the SRNS N&CSE University Pipeline Program course, a one-semester, three-hour elective course which launched in the Fall 2024 semester and is offered to both undergraduate seniors and graduate students.

SRNS N&CSE personnel recently visited the North Carolina State University campus to promote the pipeline course to the students within the American Nuclear Society. The missions of the Savannah River Site were promoted and discussed with the hope of recruiting future employees and students for the pipeline course. The event attracted 18 students, both undergraduates and graduate students, in nuclear engineering as well as industrial engineering, physics and aerospace engineering.



NCSU students with interest in the pilot program attended the promotional event

“Roles such as criticality safety engineers and nuclear accident analysts have traditionally been challenging to recruit and retain,” said Tracy Stover, Criticality Safety Program Manager. “These are niche, high-demand experts, which are typically recruited from nuclear engineering or related programs.”

News from Savannah River Nuclear Solutions

SAVANNAH RIVER SITE • AIKEN • SC 29808

The Department of Energy approved the start of the SRNS N&CSE University Pipeline Program course to assist the company's needs by training potential future talent for the specialized roles.

Curriculum is developed and taught by SRNS personnel to prepare students to support N&CSE at SRS. This is supplemented by technical lectures, examinations, and a group project intended to challenge the students' accumulated knowledge.

NCSU was selected from nine regional universities for the pilot program due to its nuclear engineering programs, their operation of a research reactor, and their partnership with South Carolina State University (SCSU). This partnership allows SCSU students to attend senior level reactor courses at NCSU. Those students are also eligible to enroll in the Pipeline Program course.

The results of the NCSU pilot program will determine if course expansion will be explored for South Carolina State University and the Georgia Institute of Technology. The Fall 2025 semester has so far attracted six undergraduate students and two graduate students to register.

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.

SRNS-2025-1627