

# Savannah River Environmental Sciences Field Station

## Engineering Program - 2025

The Savannah River Environmental Sciences Field Station (SRESFS) is conducted by South Carolina State University, University of South Carolina Aiken, and Savannah River National Laboratory. It seeks to increase recruitment and retention of Minority Serving Institution students in science, engineering, cybersecurity, and environmental career professions. Coursework and extensive interactions with Savannah River National Laboratory scientists and engineers emphasize current mission driven areas of the Department of Energy Environmental Management Office and introduces students to the work environment of a National Laboratory. This course driven summer program provides education and research opportunities that will help prepare you for graduate and professional careers in the areas of environmental science and engineering and management of natural resources.



Interns Visit H-Tank Farm at SRS.

### ABET ACCREDITED PROGRAM ENGINEERING COURSES:

#### Session I (Late May to Late June 2025)

[Instrumentation, Measurements, and Statistics \(3 credits\)](#) Principles of measurement, analysis of data, experimental planning. Correlations of experimental data, experimental variance, and uncertainty analysis. Prereq: Mechanics, Physics I, or equivalent.

[Engineering Materials \(3 credits\)](#) Structure and properties of engineering metals, ceramics, and polymers; atomic bonding, crystalline structures and microstructures; mechanical behavior and deformation mechanisms; processes for controlling structures and properties; corrosion. Prereq: Mechanics.

#### Session II (Late June – Late July 2025)

[Topics in Engineering: Introduction to Robotics, Remote Systems, and AI Applications \(3 credits\)](#) Fundamentals of robotic and tele-operated autonomous devices and AI of both fixed and mobile configuration, and the application of technologies including nuclear environments. Design concepts, perception, sensors, computer vision, navigation, position sensing, actuation, manipulation, mobility and intelligence. Prereq: Intro to Circuits.

[Engineering Research Methods in Environmental Management \(3 credits\)](#) Design, collection and analysis of data, scientific writing, literature review, methods for presenting findings and an overview of research methods including experimental and non-experimental and the review and integration of each approach. Prereq: Junior standing.

#### BENEFITS:

- Stipend of \$3125/session
- Tuition and fees
- Housing
- Course credits

#### ELIGIBILITY:

- Rising Sophomore, Junior, or Senior attending a Minority Serving Institution with a GPA of 2.5 or better
- Must be a U.S. citizen



Engineering Interns at the Applied Research Center.

#### TO APPLY:

We are accepting applications through March 15, 2025 at <https://sresfs.net>

Applications accepted through March 1 on Handshake

Program questions? Email Chris Walker at [cwalker3@scsu.edu](mailto:cwalker3@scsu.edu)

