

Savannah River Environmental Sciences Field Station



Cybersecurity Program - 2025

The Savannah River Environmental Sciences Field Station (SRESFS) seeks to increase recruitment and retention of under-represented students in science, engineering, cybersecurity, and environmental science career professions. Coursework and extensive interactions with Savannah River National Laboratory (SRNL) scientists and engineers emphasize the current focus areas of the Department of Energy (DOE) Environmental Management Office and introduce interns to the work environment of a National Laboratory. Courses are held at the University of South Carolina Aiken (USCA) and the Savannah River Site (SRS). Apartment-style housing is provided on the USCA campus. This course driven cybersecurity program provides an introduction to cybersecurity, its real- world applications in a National Laboratory environment, and will help you determine whether a career in cybersecurity is for you.



Presenting research at SRNL's poster session

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



Fundamentals of Cybersecurity (3 credits)

Introduction to core concepts, terminology, technologies, and skills associated with Cybersecurity. Major security topics such as vulnerability assessment, virus attacks, hacking, spyware, network defense, passwords, firewalls, VPNs and intrusion detection are covered. Includes hands-on laboratory exercises, term paper and presentation, simulation, participation in speaker series and team work.

Fundamentals of Digital/Computer Forensics (3 credits)

Fundamentals of computer forensics and investigations. Historical and current computer forensic and investigative security issues; systematic approach to computer investigations; digital forensics, email and image file analysis; guidelines for investigation reporting. Various forensic tools will be used during the laboratory portion of the class.

Session II (Late June - Late July 2022)

Introduction to Legal and Ethical Issues in Cybersecurity (3 credits) Legal and ethical aspects of cybersecurity. Privacy, accessibility, security, cybercrime and the social psychological and cultural aspects of cybercrime. Emphasis on the theoretical as well as the practical aspects of issues. Term paper and case study required.

Introduction to Cryptography (3 credits)



Interns preparing for mock cybersecurity audits at a local business.

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

In-person & Virtual Option Available

