Unique University Opportunities

NSA Partnership with Schools

To meet future <u>national security challenges</u>, NSA partners with schools to develop the talent and tools we need by:

- Funding skill development programs like summer camps
- Promoting development of curricula for growing career fields such as cybersecurity
- Sponsoring skills and research paper competitions
- Hosting student interns and co-ops
- o Awarding research grants and contracts; funding research labs and projects
- Awarding Broad Area Announcement (BAA) bid contracts through NSA's Acquisition Resource Center (ARC): https://www.nsa.gov/business/acquistion-resource-center/

These partnerships help cultivate the next generation of experts in science, technology, engineering, math, language and analysis. They broaden the pool of skilled cybersecurity professionals who can protect our nation from cyberattacks. Our academic partnerships foster interest in critical need foreign languages. They also advance science through research and innovation that benefits the country beyond NSA's need to apply emerging technologies to <u>our mission</u>.

We have partnership opportunities at both the college/university level and the kindergarten-12 level. If you are a student, an educator or an academic researcher, check out what we have to offer below.

Get in touch with the <u>Higher Education Outreach</u> team.

Acquisition Resource Center (ARC)

The Acquisition Resource Center (ARC) is NSA's innovative business registry database that provides industry with a one-stop source for acquisition information. The registry also serves as a market research tool for NSA personnel, as well as a means for distribution of acquisition documents to our industry partners.

NSA Contracting Officers, Program Managers, Business Managers, Contracting Officer's Representatives, Technical Directors, Small Business Specialists, and the Competition Advocate use the ARC Business Registry to identify potential sources for satisfying acquisition requirements.

All companies wishing to do business with NSA must be registered in the ARC. To begin the registration process, or for additional information, please visit www.nsaarc.net.

If you have any questions, please contact the ARC Customer Service Team at (866)91-GOARC, (866)914-6272, or via our online form.

• Educational Partnership Agreements

Education Partnership Agreements formalize the relationship between a federal lab and an educational institution. Title 10 USC, section 2194, allows NSA to share its unique experience by providing training to personnel in the science and technology fields at all education levels using

EPAs. More information available at https://www.nsa.gov/What-We-Do/Research/Technology-Transfer/.

Transfer-Program/Types-of-Technology-Transfer/.

• CAE Certifications

Academic institutions with CAE Certifications stand out.

The National Centers of Academic Excellence in Cybersecurity (NCAE) program creates and manages a collaborative cybersecurity educational program with community colleges, colleges and universities that

- o Establishes standards for cybersecurity curriculum and academic excellence,
- Includes competency development among students and faculty,
- o Values community outreach and leadership in professional development,
- o Integrates cybersecurity practice within the institution across academic disciplines,
- Actively engages in solutions to challenges facing cybersecurity education.

Academic institutions may choose from three designations. The designation process is a combination of elements related to the institution focused on outputs for determining academic achievement. This combination assures that the institution meets the desired characteristics of a CAE institution, and that the academic delivery to students is producing the qualified workforce needed by the nation.

- The Cyber Defense Education (CAE-CDE): designation is awarded to regionally accredited academic institutions offering cybersecurity degrees and/or certificates at the Associates, Bachelors and graduate levels.
- The Cyber Research (CAE-R): designation is awarded to DoD schools, PhD producing military academies, or regionally accredited, degree granting four-year institutions rated by the Carnegie Foundation Basic Classification system as either a Doctoral University Highest Research Activity (R1), Doctoral University Higher Research Activity (R2), or Doctoral University Moderate Research Activity (R3).
- The Cyber Operations (CAE-CO): program is a deeply technical, inter-disciplinary, higher education program firmly grounded in the computer science, computer engineering, and/or electrical engineering disciplines, with extensive opportunities for hands-on applications via labs and exercises.

More information is available at https://www.nsa.gov/resources/students-educators/centers-academic-excellence/.

• Research Experiences for Undergraduates (REU) Programs

The National Security Agency partners with multiple Universities/Academic Institutions to sponsor Research Experiences for Undergraduates (REUs).

REUs are intensive summer programs that provide advanced course work. The goal of these programs is to bring undergraduates up to speed for rigorous graduate level programs. Find more information about REUs at https://www.nsa.gov/what-we-do/research/math-sciences-program/ and https://cps-vo.org/group/SoS/

University-Level Research Partnerships

NSA seeks the best technical talent, not only to solve the nation's urgent intelligence problems, but to invent what hasn't been invented and concentrate on what will be needed five, 10, and 15 years down the road. NSA requires a diversity of thinkers who look at things differently. Its academic partnerships play a large role in supporting these mission needs. Some of NSA's academic research partnerships include:

- Science of Security The Science of Security initiative collaborates with academia, industry, and other government partners to create a research community dedicated to building secure cyber technologies. With contributions from the disciplines of computer science, mathematics, behavioral science, economics, and physics, the goal is to discover formal underpinnings for the design of trusted systems.
- Laboratory for Analytic Science (LAS) LAS is a translational research lab based at North
 Carolina State University focused on satisfying the short-term and long-term future
 needs of intelligence analysts who must make sense of large volumes of data and share
 information in new ways.
- Laboratory for Physical Science (LPS) LPS is a unique facility at University of Maryland,
 College Park where university and federal government personnel collaborate on research in advanced communication and computer technologies.
- Laboratory for Telecommunications Science (LTS) LTS conducts both classified and unclassified networking and computing research, exploring the implications of new communications domains. Researchers work at the cutting edge of technology, enhancing NSA's mission of being codemakers and codebreakers.
- o Mathematical Sciences Program (MSP) The National Security Agency MSP was started at NSA in 1987 in response to an increasingly urgent need to support mathematics in the United States. Indeed, the NSA realizes the mutual benefits of maintaining a vigorous academic mathematics community and is proud to offer grant funding for eligible faculty members through the MSP. More information available at https://www.nsa.gov/what-we-do/research/math-sciences-program/

More information available at: https://www.nsa.gov/resources/students-educators/research-partnership/

Other Opportunities

• Visiting Professors/Sabbaticals

NSA Employees currently serve at a number of academic institutions across the United States, representing NSA and teaching Agency coursework in public, private, and military universities.

NSA Research has hosted professors in Sabbaticals. If interested please email Research Partnerships@nsa.gov.

NSA Publication: The Next Wave

The Next Wave (TNW) is a quarterly research publication of the National Security Agency to disseminate technical advancements and research activities in telecommunications and information technologies. Additional information at https://www.nsa.gov/News-Features/the-next-wave/.