



USA CyberScholars
Scholarship Programs Overview

The banner features logos for the U.S. Department of Homeland Security, the Cyber Scholarship Program, and the National Science Foundation (NSF). Below the logos are four small images: a globe with a padlock, a fingerprint, a person's eye with the text 'CYBER SECURITY', and a person in a dark environment with a glowing screen.

SFS Program Overview

- Designed to increase and strengthen the cadre of federal information assurance professionals that protect the government's critical information infrastructure.
- Co-sponsored by Department of Homeland Security and National Science Foundation

"The issue of Cyber Warfare is not science fiction anymore. It's reality." ---
Senator Thomas. L. Carper

Center of Academic Excellence in Information Assurance / Cyber Defense


- The National IA Education and Training Program (NIETP) forms partnerships with government, industry and academia to enhance and broaden IA knowledge and skills
- The NIETP encourages and recognizes universities through the National Centers of Academic Excellence in IA Education and the National Centers of Academic Excellence in Research
- USA was re-designated in 2014 through 2021

Information Security Threats

- **Experts warn 2017 could be the year hackers innovate**
 - Increasing prevalence of mobile malware and cloud-based botnets
 - Ransomware attacks have grown quickly (Alps hotel \$1600 bitcoin ransom)
- **Cyber warfare and cyber espionage threats will increase**
 - 2014 Sony breach from China
 - Increasing threat from Russia (thediplomat.com 3/15)
- **Continued identity theft through social networks**
- **Deception and manipulation techniques**
 - Phishing, social engineering require cyberawareness training

Yes, they are hiring – in large numbers !

- Bureau of Labor Statistics expects the number of information security analysts to grow three times faster than the average occupation by 2022 – govinfosecurity.com 3/9/15
- Military has fast-tracked hiring of 3,000 civilians to flesh out half-staffed U.S. Cyber Command – nextgov.com 3/5/15
- Pentagon proposed at least \$27M to grow cyber forces ranks for 6,000-person Cyber Command – nextgov.com 2/4/15

DIA HQ 24hr Watch Center 

Cyber Security Jobs

- Cyber Incident Response
- Vulnerability Detection and Assessment
- Networks and Systems Engineering
- Cyber Risk and Strategic Analysis
- Intelligence and Investigation
- Computer Network Defense
- Digital Forensics
- Cyber Operations

Types of Agencies



- Federal Bureau of Investigation
- Department of Homeland Security
- National Security Agency
- Customs and Border Protection
- Federal Emergency Management Agency
- Immigration and Customs Enforcement
- Transportation Security Administration
- U.S. Citizenship and Immigration Services
- U.S. Coast Guard (*within DHS*)
- U.S. Secret Service
- Office of Inspector General

.....around 150 Federal plus state and local gov

Program Benefits



- Tuition, books, and fees for up to three years of study
- Annual stipend: UG \$22,500; GR \$34,000
- Travel costs to annual job fair/conference
- Professional development activities with cohort



USA Cyber Scholars

- Cohort activities such as cybersecurity competitions, security workshops, seminars, field trips to Federal agencies
- Participation in security outreach
- Special workforce preparation workshops



Obligations

- Complete a 10 week summer internship
- Serve at a government agency in an information assurance position for a period equivalent to the length of the scholarship
 - SFS program also allows for state, local, and tribunal appointments
- Must be willing to relocate; majority of jobs are in the D.C. area but may be nationwide

USA's IA Program



- Established as a Center for Academic Excellence for Information Assurance Education (CAE/IAE) in June 2011
- Updated designation 2014 as a Center for Academic Excellence for Information Assurance / Cyber Defense
- Typical programs of study:
 - Information Technology: Network Security or Digital Forensics (UG)
 - Information Systems: Information Assurance-designated courses (UG/GR)
 - Computer Science: Secure Programming (UG/GR)
 - Cyber Assurance (UG)
- Graduate students also maintain a portfolio of IA-related projects and are required to conduct IA-related research

IA Courses



- Information Assurance and IT Auditing
- Operating Systems Concepts and Security
- Digital Forensic Analysis
- Network Security Management
- Advanced Operating Systems
- Compiler Design and Construction
- Communications and Network Analysis
- Real-Time Software Systems
- Data Security
- Forensic Malware Detection

Eligibility Requirements



- Pursue a bachelor's or master's degree
- Attend school on a full-time basis at a CAE
- Be willing to pursue studies with an emphasis in information assurance
- **Must** be a United States citizen or permanent resident (note that some positions require citizenship)
- Must meet criteria for Federal employment
- **Must be able to obtain a security clearance**
 - Note: may be required to take polygraph and drug tests

Eligibility Requirements



- Undergraduates: 3.2 GPA
 - Must be a Junior at beginning of award term
- Graduates: 3.5 GPA
- Be recommended by the CAE

Must submit a complete application – incomplete applications will not be considered

For More Information



- **Application Info:**

Mrs. Angela Clark – SFS Program Coordinator
School of Computing, SHEC 1215, 460-7539
amclark@southalabama.edu
- **SFS Program Info:**

<https://www.sfs.opm.gov/>
- **Cyber Security Jobs:**

<http://www.dhs.gov/files/cybersecurity.shtm>
- **USA CFITS:** <http://www.usacfits.org/>

Questions

