



BINGHAMTON  
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# National Science Foundation Cybercorps® Scholarship For Service

Websites:

- <https://sites.google.com/binghamton.edu/ciac/scholarship-for-service>
- <https://sfs.opm.gov/>





# NSF Cybercorps® Scholarship For Service

## Cybersecurity: A National Priority

- ❖ Critical to maintain the safety and integrity of our nation's cyber infrastructure.
- ❖ Every government agency is now a tech agency.
- ❖ The cybersecurity workforce in the United States saw a 30% increase in 2021.
- ❖ However, over 530,000 cybersecurity positions remained unfilled in the United States in 2023.

### 2021 Cybersecurity Workforce Study

A Resilient Cybersecurity Profession Charts the Path Forward



<https://www.dice.com/career-advice/market-for-cybersecurity-specialists-remains-strong>

### Market for Cybersecurity Specialists Remains Strong

Nick Kolakowski

Jan 30, 2023

2 min read



Fears of an oncoming recession haven't impacted the hunger for cybersecurity specialists.

According to [CyberSeek](#), a cybersecurity analytics site developed by the National Initiative for Cybersecurity Education at NIST, CompTIA and Lightcast, the U.S. needs 530,000 more cybersecurity specialists to close existing supply gaps.

"Despite concerns about a slowing economy, demand for cybersecurity workers remains historically high. Companies know cybercrime won't pause for a market downturn, so employers can't afford to pause their cybersecurity hiring," Will Markow, Lightcast Vice President of Applied Research-Talent, wrote in a statement accompanying the new data.

Demand for cybersecurity professionals hit record levels for the first nine months of 2022, only to cool in November and December. Throughout the year, the total number of employed cybersecurity workers hit 1.1 million. Public- and private-sector need for cybersecurity specialists expanded at comparable rates between 2021 and 2022; during that period, public-sector demand grew 25 percent, outpacing the private sector at 21 percent.



# NSF Cybercorps® Scholarship For Service

## Binghamton's SFS Program

- ❖ \$3.5 million five-year grant from the NSF to fund SFS Scholars.
- ❖ The goal is to train highly skilled cybersecurity professionals for entry into the government workforce and for long-term success in cybersecurity careers.





# NSF Cybercorps® Scholarship For Service

## SFS Benefits to You

- ❖ The SFS scholarship will **cover**:

- Tuition + part of fees
- Stipend
  - \$25,000 stipend per year for undergrads in 4+1 program
  - \$34,000 stipend per year for graduate students
- Up to 3 years of funding
- Plus up to \$6,000 per year for related expenses
  - SFS Job Fair, conferences, bootcamp, research materials and supplies, laptop, books, professional cybersecurity training and certifications, etc.
- Note: Like any income, portions of the SFS scholarship may be taxable.



# NSF Cybercorps® Scholarship For Service

## Your Service Commitment

1. Commit to work in a cybersecurity position upon graduation for
  - government organization
  - national laboratory
  - an SFS institute
  - for a period of time equal to the period of funding.
2. Seek and join a summer internship each year with a government agency during SFS scholarship.
  - The OPM hosts two job fairs for SFS scholars each year.
  - Each government organization has an SFS point of contact whom scholars can connect with.
  - SFS Faculty will assist scholars on job/internship search and placement.



## Eligibility

- U.S. citizen.
- full-time 4+1 undergrad (GPA 3.3 or better) OR
- full-time MS student OR
- full-time PhD student working on cybersecurity
- Undergrad/MS students must be enrolled in one of the following cybersecurity programs:
  - Cybersecurity Track (CS, recommended)
  - Information Assurance Area of Specialization (ECE), or
  - Advanced Certificate in Cybersecurity (CS & ECE)
- 4+1 students can be supported in Senior year + MS year.
- Willingness & ability to obtain a security clearance, if needed.



# NSF Cybercorps® Scholarship For Service

## SFS Scholars: Training

- **Cybersecurity courses**
  - Architectural support for security
  - Software & systems security
  - Malware analysis
  - AI-based security
  - Mobile and IoT security
  - Steganography Steganalysis Forensics
  - Privacy
  - Cybersecurity ethics and education
  - Online cybersecurity certifications (Paid for by SFS)
- **Research training**
  - Each scholar will be assigned one or more faculty mentors.
  - Work with the faculty mentor on a cybersecurity related project through
    - MS project/thesis
    - independent study
    - Ph.D. dissertation.
  - Attend cybersecurity conferences, seminars, training



# NSF Cybercorps® Scholarship For Service

## SFS Scholars: Training

- **Hands-on training:** Capture The Flag (CTF) club, cybersecurity competitions.
- **Career training:** ethics, communication, writing, presentation, critical thinking, and teamwork.
- **K-12/Community outreach:** make an impact on community



# NSF Cybercorps® Scholarship For Service

## Scholar Appointment and Repayment

- ❖ Each scholar needs to complete the **service agreement questionnaire** and sign the **OPM service agreement**
- ❖ Satisfy academic/service requirements to avoid repayments (**>95%** success rate so far for SFS program)
- ❖ Repayment situations
  - failing to fulfill the post-award employment obligation
  - declaring intent not to fulfill the post-award employment obligation
  - dismissal from the university for disciplinary reasons
  - withdrawal from the degree program before completing the program



# NSF Cybercorps® Scholarship For Service

## Top SFS employers

- ❖ National Security Agency (NSA)
- ❖ Central Intelligence Agency (CIA)
- ❖ Federal Bureau of Investigations (FBI)
- ❖ Air Force/DoD Research Labs
- ❖ MITRE
- ❖ Department of Navy/Homeland Security/State
- ❖ Department of Defense/Commerce/Justice
- ❖ Sandia/Lincoln/Pacific Northwest/Los Alamos/Idaho National Labs
- ❖ State/local governments
- ❖ NASA, MIT Lincoln Labs
- ❖ Office of Inspector General in every government agency.



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## Interested? Apply!

Apply by March 31st 2023 for early consideration:

- <https://sites.google.com/binghamton.edu/ciac/scholarship-for-service>

## Contact us!

### Faculty

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