



# Homeland Security

## **Cybersecurity Workshop: Critical Cybersecurity Education & Professional Development**

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National Cybersecurity Education & Awareness Branch (CE&A)

February 2018

# DHS Cybersecurity Education & Awareness

**DHS CE&A leads national cybersecurity public awareness, education, training, and workforce development efforts to support the protection against and response to cyber threats and hazards to the Homeland's economic and national security.**

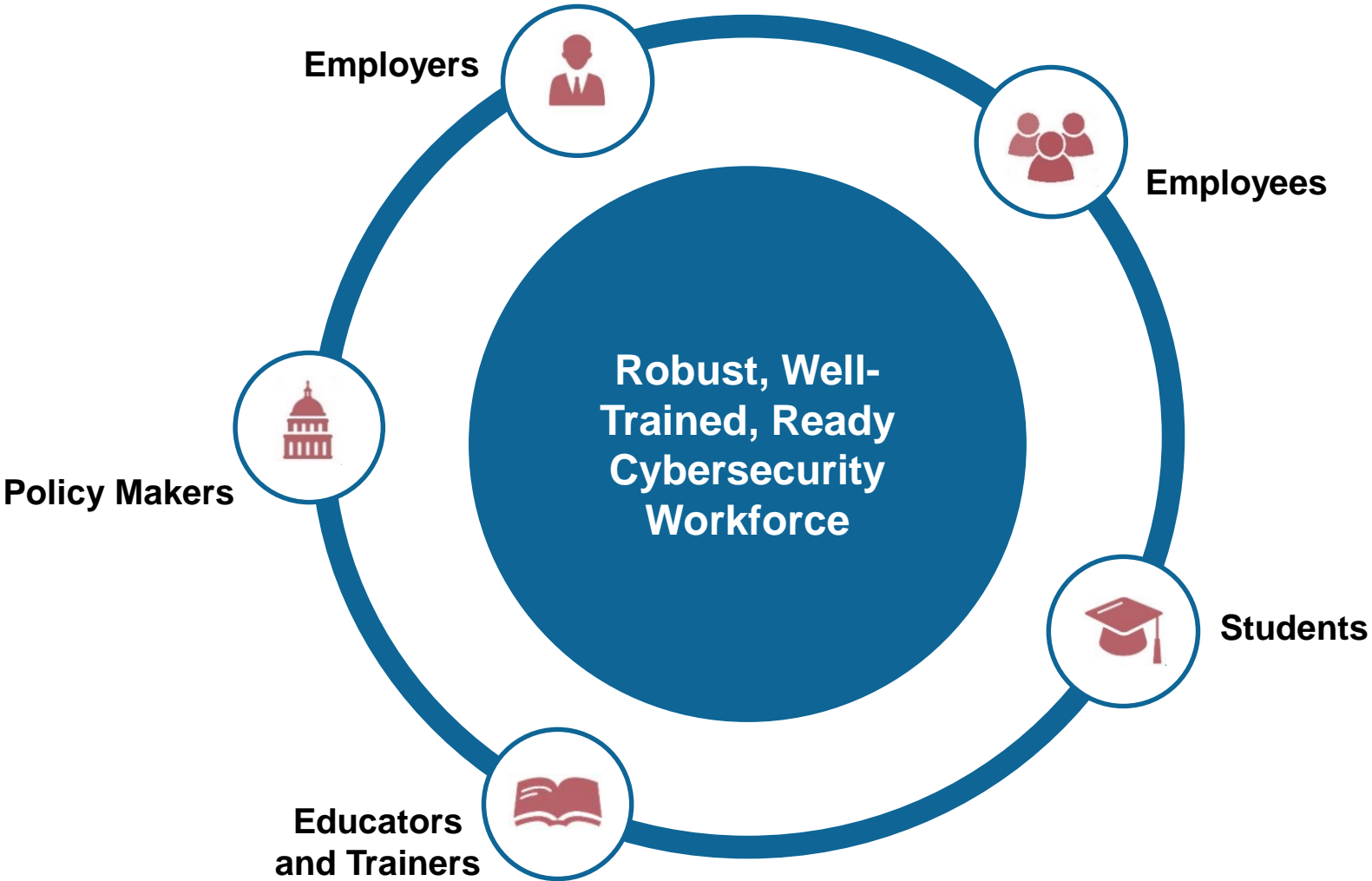
CE&A achieves these efforts by focusing on the following programs and activities:

- Cyber Awareness Programs
- Formal Cybersecurity Education
- Training and Education Programs
- National Professionalization and Workforce Development Programs
- State, Local, Tribal and Territorial Cybersecurity Engagement
- Strategic Partnerships

# The Cybersecurity Workforce Challenge



# Vision for the Nation's Cybersecurity Workforce



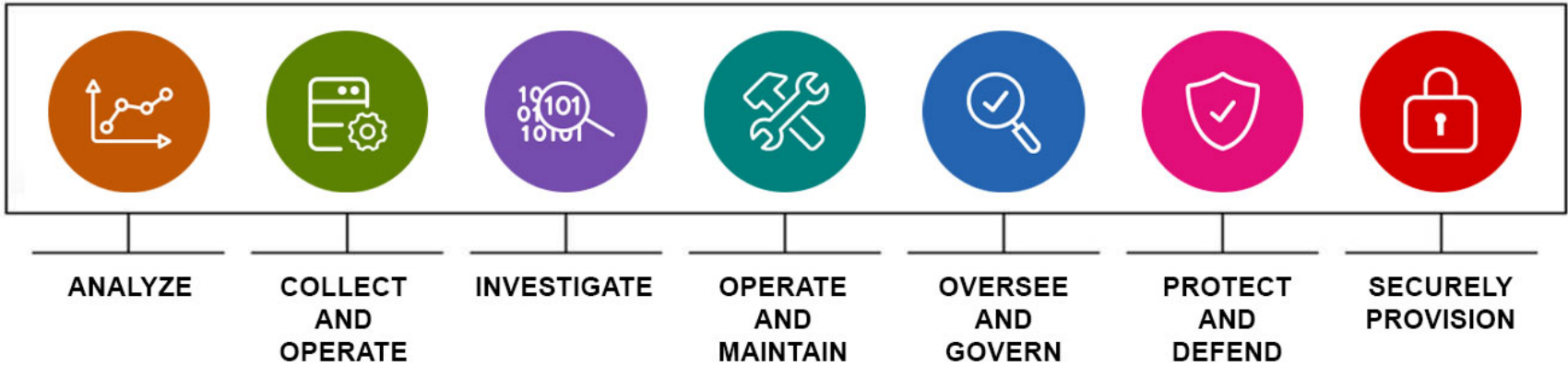
# Foundation for the Cybersecurity Workforce

Strategies and resources for workforce design, professionalization, recruitment and retention for the cybersecurity field are being developed by CE&A.

85% of the federal government and the state of California have aligned to the Workforce Framework

## The NICE Cybersecurity Workforce Framework

- Describes cyber positions and related knowledge, abilities, and tasks
- Organizes the work required for a cyber capability
- Supports strategic workforce development



**7 CATEGORIES**

# National Cybersecurity Workforce Framework

The Department of Homeland Security (DHS) raises public awareness, provides a foundation for the recruitment, training, and retention of cybersecurity professionals, and promotes cybersecurity education. The Workforce Framework is a national resource providing employers, educators, trainers, and policy makers a common language for describing cybersecurity work.

The Workforce Framework contains cybersecurity Specialty Areas, knowledge, skills, and abilities (KSAs), tasks, and sample job titles. It has been updated to reflect the evolving cybersecurity field and incorporate diverse viewpoints across government, industry, and academia. Explore the Workforce Framework at the [National Initiative for Cybersecurity Careers and Studies \(NICCS™\) website](#).

## ***The Workforce Framework is:***

### A Blueprint

- Describes and categorizes cybersecurity work.
- Identifies sample job titles, tasks, and knowledge, skills, and abilities (KSAs).

### A Tool

- Provides a foundation organizations can use to develop position descriptions, competency models, and training.

### A Collaboration

- Incorporates inputs from industry, academia, and government.
- Addresses the nation's need to identify, qualify, and develop the cybersecurity workforce.



# Why is the Workforce Framework Important?

**The Workforce Framework categorizes cybersecurity work and identifies cybersecurity Specialty Areas.**

**The Workforce Framework establishes:**

- A common taxonomy and language which organizes cybersecurity work into seven Categories and 33 Specialty Areas.
- A baseline of tasks, Specialty Areas, and KSAs associated with cybersecurity professionals.

**The Workforce Framework improves our Nation's ability to:**

- Provide employers, educators, trainers, and policy makers a common language for describing cybersecurity work.
- Build and maintain the highly skilled and agile workforce needed to protect the nation.
- Coordinate and collectively address cybersecurity threats.

# Workforce Framework for Education

**The Workforce Framework provides the structure for helping the nation build a cyber capable workforce.**

## **Educators:**

- To prepare students for a cybersecurity career, educators can shape curricula around a common language and the latest advances in the cybersecurity field.
- The Workforce Framework helps educators develop their curricula by categorizing and defining cybersecurity work.
- In partnership with employers and with a better defined cybersecurity job market, educators will be able to align their programs to equip students for jobs.

## **Students:**

- Students will graduate with knowledge and skills that employers need.
- The Workforce Framework provides common terminology, job searching information, and descriptions of Specialty Areas within cybersecurity that can help students decipher job descriptions and plan for a future in cybersecurity.
- Students can better prepare for a career in cybersecurity by seeking out additional training or certifications. The Workforce Framework helps students identify coursework or training that best prepares them for their ideal cybersecurity job.



# Colleges and Scholarships Resources



## National Centers of Academic Excellence (CAE)

are designated colleges and universities with top cybersecurity programs

**200+ CAEs across the country**

Undergraduates, graduates, and doctoral students can apply for the CyberCorps® Scholarship for Service (SFS) to cover tuition and other related expenses while pursuing a cybersecurity degree.

Upon graduation, candidates fulfill government service.

Visit [sfs.opm.gov](https://sfs.opm.gov) to apply as a student or hiring agency.

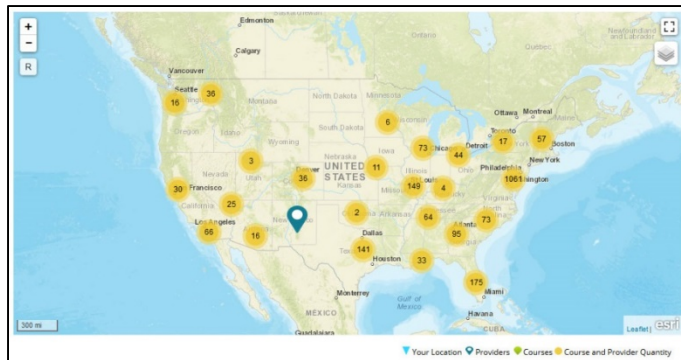


# Cybersecurity Training Resources

## Build and strengthen key knowledge and skills

**Federal Virtual Training Environment (FedVTE)** offers free, online, on-demand training available to U.S. government employees and veterans

Sign up for an account at  
[fedvte.usalearning.gov](https://fedvte.usalearning.gov)



**The NICCS Website Training Catalog** locates nearby cybersecurity courses, allowing users to stay up-to-date on their knowledge and skills

Visit [niccs.us-cert.gov](https://niccs.us-cert.gov) to find your next course!

# How to Reach Us



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