



Building a Job-Ready Cybersecurity Workforce

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NICE Mission



To energize, promote, and coordinate a robust community working together to advance an integrated ecosystem of cybersecurity education, training, and workforce development



1

Equip every American with foundational cyber skills

2

Transform cyber education

3

Expand and enhance America's cyber workforce

4

Strengthen the Federal cyber workforce

NATIONAL CYBER WORKFORCE AND EDUCATION STRATEGY

Unleashing America's Cyber Talent

JULY 31, 2023

OFFICE OF THE NATIONAL CYBER DIRECTOR
EXECUTIVE OFFICE OF THE PRESIDENT



THE WHITE HOUSE
WASHINGTON



NICE Framework Work Role Categories

52 WORK ROLES



OVERSIGHT & GOVERNANCE



DESIGN & DEVELOPMENT



IMPLEMENTATION & OPERATION



PROTECTION & DEFENSE



CRIMINAL INVESTIGATION



INTELLIGENCE



CYBER EFFECTS

Proposed NICE Framework Competency Areas

15 Competency Areas, representing:
Fundamental Areas • Emerging Areas • Unique Domains

1. Access Controls
2. AI Security
3. Asset Management
4. Cloud Security
5. Communications Security
6. Cryptography
7. Cybersecurity Fundamentals
8. Cybersecurity Leadership
9. Data Security
10. DevSecOps
11. Cyber Resiliency
12. OS Security
13. OT Security
14. Secure Programming
15. Supply Chain Security

A low-angle shot of a wooden ladder against a clear blue sky. The ladder is made of dark wood and has several rungs. The perspective is looking up the ladder, making it appear to lead towards the top of the frame.

The First Rung

Stepping into the cybersecurity workforce

Good Jobs Principles

- Recruitment and Hiring
- Benefits
- Diversity, Equity, Inclusion, and Accessibility (DEIA)
- Worker Empowerment and Representation
- Job Security and Working Conditions
- Organizational Culture
- Living Wage
- Skills and Career Advancement

Department of Commerce and Department of Labor Good Jobs Principles
<https://www.dol.gov/general/good-jobs/principles>



Additional Resources

www.nist.gov/nice/framework



NICE Framework Resource Center

- Getting Started & FAQ
- Documents & Data
- Translations
- Playbook for Workforce Frameworks
- Success Stories (Case Studies) and Framework in Focus (Practitioner Interviews)
- Resources for Employers, Education & Training Providers, and Learners
- TKS, Competency Area Authoring Guides
- Employers Guide to Developing Job Descriptions
- Planned: Proficiency Levels, Updated Statements, New Work Roles (OT Cybersecurity Engineering, Insider Threat Awareness, Cybersecurity Awareness, Product Security and more), usage guides, and more

NICE Framework Tools

- [CyberSeek](#): An interactive cybersecurity jobs heat map across the U.S. by state and metropolitan areas and career pathway tool.
- [NICE Framework Tool & Keyword Search](#): Enables browsing and searching.
- [NICE Framework Mapping Tool](#): Answer questions about your federal cybersecurity-related position and the tool will show you how it aligns to the NICE Framework and what can be done to strengthen your cybersecurity team.
- [NICCS Education and Training Catalog](#): Cybersecurity professionals across the nation can find over 6,000 cybersecurity-related courses aligned with the NICE Framework.
- [NICCS Cyber Career Pathways Tool](#): Includes common relationships between roles as well as frequently used titles in each role. (Federal)
- [NICE Challenge Project](#): Real-world cybersecurity challenges within virtualized business environments to provide students with workforce experience before entering the workforce.