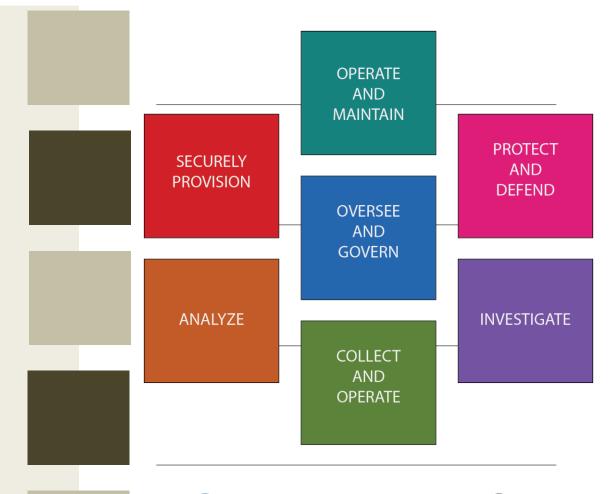
Improves communication about how to identify, recruit, develop, and retain cybersecurity talent.

Categorizes, organizes, and describes cybersecurity work.

Can be used by:

- Public and Private Sector Employers
- Education Providers
- Technology Developers
- Current and Future Cybersecurity Workers
- Training and Certification Providers
- Policymakers



NICE FRAMEWORK

NIST Special Publication 800-181



NICE FRAMEWORK - NIST Special Publication 800-181

Risk Management OPERATE AND OVERSEE AND **Cybersecurity Workforce Categories** (7) **GOVERN** MAINTAIN Customer Service **Specialty Areas** (33) – Distinct areas of Cybersecurity Software and Technical Management Development cybersecurity work Support ANALYZE Work Roles (52) – The most All Source Data **Executive Cyber** Systems Analysis Administration Leadership Architecture PROTECT detailed groupings of IT, AND DEFEND cybersecurity, or cyber-related work, which include specific Knowledge Legal Advice Cyber Defense Exploitation Systems and Advocacy Analysis Analysis Management Development COLLECT AND Knowledge, Skills, and Abilities **OPERATE** (KSA's) required to Cvber Defense Program/Project Systems Network Collection Language Management and Infrastructure Requirements Services Operations Analysis perform a set Aguisition Planning Support INVESTIGATE of Tasks. Strategic Cyber Operational Incident Cyber Systems Technology Targets Planning and Response Investigation Planning Administration R&D Policy Vulnerability Training, Digital Cyber Systems Threat Test and Education, and Assessment and Analysis Forensics Operations Analysis Evaluation Management Awareness

NICE FRAMEWORK - Categories

Categories	Descriptions	
Securely Provision (SP)	Conceptualizes, designs, and builds secure information technology (IT) systems, with responsibility for aspects of systems and/or networks development.	
Operate and Maintain (OM)	Provides the support, administration, and maintenance necessary to ensure effective and efficient information technology (IT) system performance and security.	
Oversee and Govern (OV)	Provides leadership, management, direction, or development and advocacy so the organization may effectively conduct cybersecurity work.	
Protect and Defend (PR)	Identifies, analyzes, and mitigates threats to internal information technology (IT) systems and/or networks.	
Analyze (AN)	Performs highly-specialized review and evaluation of incoming cybersecurity information to determine its usefulness for intelligence.	
Collect and Operate (CO)	Provides specialized denial and deception operations and collection of cybersecurity information that may be used to develop intelligence.	
Investigate (IN)	Investigates cybersecurity events or crimes related to information technology (IT) systems, networks, and digital evidence.	

Oversee and Govern (6 Specialty Areas, 14 Work Roles)

Category	Specialty Area	Work Role
Oversee and Str. Govern		Cyber Legal Advisor
	Legal Advice and Advocacy	Privacy Officer/Compliance Manager
	Training, Education, and	Cyber Instructional Curriculum Developer
	Awareness	Cyber Instructor
	Cybersecurity Management	Information Systems Security Manager
		Communication Security Manager
	Strategic Planning and Policy	Cyber Workforce Developer and Manager
		Cyber Policy and Strategy Planner
	Executive Cyber Leadership	Executive Cyber Leadership
	Program/Project Management and Acquisition	Program Manager
		IT Project Manager
		Product Support Manager
		IT Investment/Portfolio Manager
		IT Program Auditor

Building Blocks for a Capable and Ready Cybersecurity Workforce



NICE FRAMEWORK RESOURCE CENTER



101 Resources

- Search the NICE Framework
- One Pager
- Video Tutorial



Employer Resources

- DoD Cyber Workforce
- Position Description
 Tool
- Capability Indicators



Education/Training Provider Resources

- Course/Curriculum Mappings
- Certification Mappings
- Training Catalog



Learner Resources

- Pathways
- Career Profiles
- Hands-on Activities



GET INVOLVED



NICE Conference and Expo

November 16-18, 2020 | Atlanta, Georgia NICEconference.org

The annual convening of community members and thought leaders from education, government, industry, and non-profits to explore ways of developing a skilled cybersecurity workforce ready to meet the challenges of the future.



NICE K12 Cybersecurity Education Conference

December 7-8, 2020 | St. Louis, Missouri K12cybersecurityconference.org

Bringing together those interested in K12 cybersecurity education, this annual event highlights cybersecurity career awareness, integration of cybersecurity into educational portfolios, innovative educational approaches, and more.

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