

NISTCSF.COM

**NIST Cybersecurity Framework
Workforce Development Solutions**



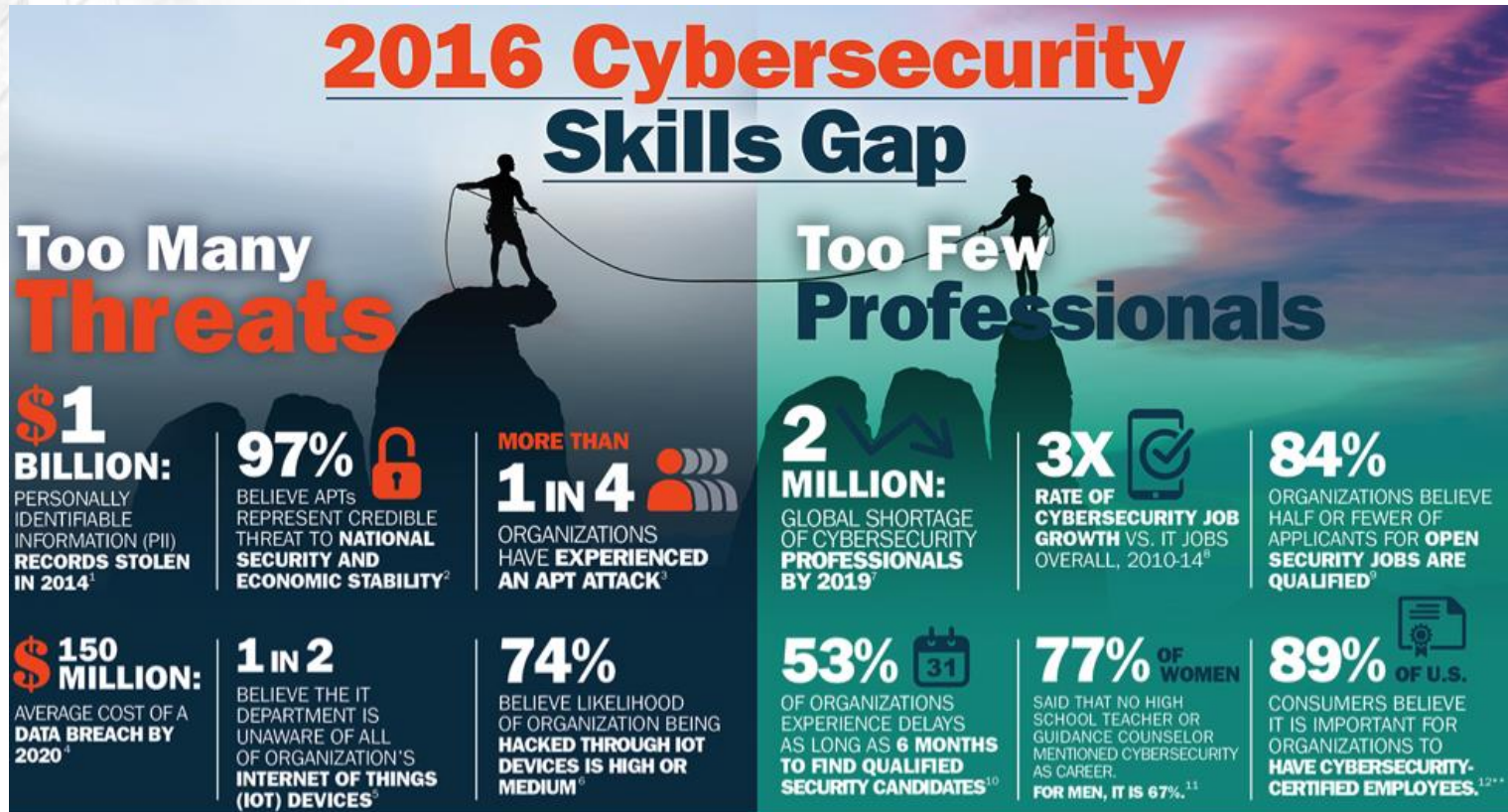
AGENDA

- The Business Cybersecurity Challenge
- NIST Cybersecurity Framework
- NICE Cybersecurity Workforce Framework
- Introduction to NISTCSF.COM
- NISTCSF.COM Training Programs

The Business Cybersecurity Challenge

Recruiting, Training & Skilling a NIST/NICE Cybersecurity Workforce

1



NIST Cybersecurity Framework (NCSF)

- Published by the
 - National Institute of Standards & Technology (NIST)
 - Department of the U.S. Department of Commerce
 - Published February 2014 and Updated in 2018
 - Deemed appropriate for organizations worldwide
 - Mandatory for Federal Agencies per EO May 2017
- Risk-based approach
 - Manages cybersecurity risk
 - Framework Core
 - Describes common desired outcomes
 - Expressed as functions
 - Framework Implementation Tiers
 - Describes how cybersecurity is practiced
 - Informed by business needs
 - Framework Profiles
 - Aligns “core” with resources & tolerances
 - Used to define current state
 - ... & future state

“The framework is intended for organizations that are responsible for critical infrastructure, defined as ‘systems and assets, whether physical or virtual, so vital to the United States that the incapacity or destruction of such systems and assets would have a debilitating impact on security, national economic security, national public health or safety...’”



NIST/NICE Cybersecurity Workforce Framework (NCWF)

- The NIST/NICE Cybersecurity Workforce Framework (NCWF) was released in November of 2016
- NCWF provides a common language to categorize and describe NCSF work and specialty roles
- NCWF was designed to serve several key groups, including employers, candidates, educators, trainers and technology providers.
- NCWF provides details on the knowledge, skills, abilities and credentials required to perform NCSF work and specialty roles
- NCWF provides an online app called Cyberseek to help candidates find a job in their area of study

NCWF Workforce Categories

No.	NCWF Category	Category Description	Related CSF Functions
1	Securely Provision (SP)	Conceptualizes, designs, and builds secure information technology (IT) systems, with responsibility for aspects of systems and/or networks development.	Identify (ID) Protect (PR)
2	Operate and Maintain (OM)	Provides the support, administration, and maintenance necessary to ensure effective and efficient information technology (IT) system performance and security.	Protect (PR) Detect (DE)
3	Oversee and Govern (OV)	Provides leadership, management, direction, or development and advocacy so the organization may effectively conduct cybersecurity work.	Identify (ID) Protect (PR) Detect (DE) Recover (RC)
4	Protect and Defend (PR)	Identifies, analyzes, and mitigates threats to internal information technology (IT) systems and/or networks.	Protect (PR) Detect (DE) Respond (RS)
5	Analyze (AN)	Performs highly specialized review and evaluation of incoming cybersecurity information to determine its usefulness for intelligence.	Identify (ID) Detect (DE) Respond (RS)
6	Collect and Operate (CO)	Provides specialized denial and deception operations and collection of cybersecurity information that may be used to develop intelligence.	Detect (DE) Protect (PR) Respond (RS)
7	Investigate (IN)	Investigates cybersecurity events or crimes related to information technology (IT) systems, networks, and digital evidence.	Detect (DE) Respond (RS) Recover (RC)

NISTCSF.COM

- **NISTCSF.COM** is a NIST Cybersecurity Curricula Consortium created by itSM Solutions, Academia and other industry partners to create a standardized set of accredited curricula for NIST Cybersecurity Framework workforce development
- The genesis of the NISTCSF program was a Professionalizing Cybersecurity report written by Francesca Spidalieri a Cyber Leadership Fellow at the Pell Center for International Relations and Public Policy at Salve Regina University and Lt. Colonel Sean Kern, USAF, CISSP, Cyberspace Operations Officer, is currently assigned as a student at the Joint Advanced Warfighting School, Joint Forces Staff College, National Defense University.
- The report sheds light on the current status of the cybersecurity labor market which is best characterized as a fog of competing requirements, disjointed development programs, conflicting definitions of security roles and functions, and highly fragmented, competing, and often confusing professional certifications.
- The consortium's goal is to provide high schools, community colleges, universities and private training companies access to print, digital book and video NIST cybersecurity curricula that can be delivered in a classroom, virtual classroom, as a self paced video or a blended learning training program.

NISTCSF.COM Training Programs



NCSF Assessment Training



NCSF Labs

**NCSF Custom
Classes**

NCSF Professional Trainings

NCSF-CFM Foundation, Practitioner & Bootcamp Certification Training

Engineering Consultant (EC) Track Business Controls Focus

Delivery:

- Online, Classroom, Self-Study and Blended with Simulations & Labs

Curriculum:

- NCSF Practitioner Certification
- NCSF Practitioner Labs
- NCSF Cyber Range Programs
- NCWF Certification Trainings
- NCSF Assessment Certifications

NICE Workforce Category:

- Securely Provision
- Analyze

Technical Analyst (TA) Track Business Operations Focus

Delivery:

- Online, Classroom, Self-Study and Blended with Simulations & Labs

Curriculum:

- NCSF Practitioner Certification
- NCSF Practitioner Labs
- NCSF Cyber Range Programs
- NCWF Certification Trainings
- NCSF Technology Certifications

NICE Workforce Category:

- Operate and Maintain
- Protect and Defend
- Collect and Operate

Business Analyst (BA) Track Business Governance Focus

Delivery:

- Online, Classroom, Self-Study and Blended with Simulations & Labs

Curriculum:

- NCSF Practitioner Certification
- NCSF Practitioner Labs
- NCSF Cyber Range Programs
- NCWF Certification Trainings
- NCSF Governance Certifications

NICE Workforce Category:

- Oversee and Govern
- Investigate

NCSF-CFM Foundation Certification Training

- This one day classroom or four-hour video program teaches the fundamentals of the NIST Cybersecurity Framework (NCSF) and the Umass Controls Factory™ Model
- This program is focused on candidates who need a basic understanding of NCSF to perform their jobs as Executives, Accountants, Lawyers or Information Technology (IT) professionals.
 - **Location of Training:** Onsite or Online
 - **Means of Instruction:** Classroom, Virtual Classroom & Self Paced Video
 - **Number of Classroom Hours: 8 (1 Day)**
 - **Credentials Attained:** Certification, College Credits, PDU's & CEU's



NCSF-CFM Practitioner Certification Training

- This 4 day or ten-hour self-paced video program teaches the advanced skills on how to engineer, implement, test and maintain NIST Cybersecurity Framework controls using the UMass Controls Factory™ Model.
- This program is focused at existing cybersecurity professionals who want to learn the knowledge, skills and abilities to work as Engineers, Testers, Operators and Continuous Improvement professionals in an NCSF program.
 - **Location of Training:** Onsite or Online
 - **Means of Instruction:** Classroom, Virtual Classroom & Self Paced Video
 - **Number of Classroom Hours: 30 (4 days)**
 - **Credentials Attained:** Certification, College Credits, PDU's, CEU's



NCSF-CFM Boot Camp Certification Training

- This five day or 14 hour video training boot camp combines the NCSF-CFM Foundation + Practitioner classes into a one week program with one exam
- This program is focused on new cybersecurity candidates who need to understand current cybersecurity challenges plus a detailed understanding of NCSF to perform their daily roles as cybersecurity Engineers, Testers, Operations and Continuous Improvement professionals.
 - **Location of Training:** Onsite or Online
 - **Means of Instruction:** Classroom, Virtual Classroom & Self Paced Video
 - **Number of Classroom Hours: 40 (5 days)**
 - **Credentials Attained:** Certification, College Credits, PDU's, CEU's



NCSF Assessment Certification Training

- This combined program of NCSF-CFM training and our CyberStrong assessment and reporting tool allow companies of any size quickly assess its alignment with the NCSF and other industry best practice frameworks.
 - **Location of Training:** Online
 - **Means of Instruction:** Self Paced Video
 - **Number of Classroom Hours:** Varies per Program
 - **30 Days Access** to the CyberStrong Online NCSF Assessment Tool
 - **Credentials Attained:** Certification, College Credits, PDU's, CEU's



NCSF Assessment Training



RESILIA™

NCSF Employee Training

- Programs include online self-paced games, animations and simulation training programs for phishing, social engineering, online safety, social media, BYOD (Bring Your Own Device), removable media, password safety, personal information, information handling and remote and mobile working
 - **Location of Training:** Online
 - **Means of Instruction:** Self Paced Video, Games, Animations & Simulations
 - **Number of Classroom Hours:** Varies per Program
 - **Credentials Attained:** Certificate of Completion, PDU's, CEU's



NCSF Employee Training



OCEANS 99

NCSF Simulation Training

- itSM's Oceans 99 ½ day simulation program can be used to create executive and boardroom decisions, as well as broad awareness for both IT and non-IT staff on the importance of cybersecurity 'behavior' and 'discipline' as well as how to translate security and risk theory into practice.
 - **Location of Training:** Classroom
 - **Means of Instruction:** Instructor Led Training
 - **Number of Classroom Hours:** ½ Day
 - **Credentials Attained:** Certificate of Completion, PDU's, CEU's



NICE Cybersecurity Workforce Framework Certification Training

- This video training library provides access to 190+ video training programs to prepare for the NICE Workforce Framework IT and Business certifications for IT Service Management, Networking, Project Management, Cybersecurity, Office Productivity Tools, Business Skills, Software Programming and Cloud Computing.
 - **Location of Training:** Online
 - **Means of Instruction:** Self-Paced Video
 - **Number of Classroom Hours:** Varies per Program
 - **Credentials Attained:** Certification, PDU's, CEU's



IoT Practitioner Certification Training

- This three day classroom program students will learn general strategies for planning, designing, developing, implementing, and maintaining an IoT system through various case studies and by assembling and configuring an IoT device to work in a sensor network.
- This program is designed for IT professionals with baseline skills in computer hardware, software support, and development who want to learn how to design, develop, implement, operate, and manage Internet of Things devices and related systems.
 - **Location of Training:** Classroom
 - **Means of Instruction:** Instructor Led
 - **Number of Classroom Hours:** Varies per Program
 - **Credentials Attained:** Certification, PDU's, CEU's

Certified **IoT**
PRACTITIONER



NCSF Labs

Hands-On NCSF-Lab Training

- Designed for performance-based learning our NCSF-Lab platform is for training companies, enterprises, government, and education organizations requiring NIST Cybersecurity Framework hands-on training
- This online training program is designed for professionals who want to experience that day-to-day hands-on skills required to design, develop, implement, operate, and manage a NIST Cybersecurity Framework program.
 - **Location of Training:** Classroom
 - **Means of Instruction:** Instructor Led
 - **Number of Classroom Hours:** Varies per Program
 - **Credentials Attained:** Certificate of Completion, PDU's, CEU's



NCSF Labs

Questions & Answers

