

NICE

NATIONAL INITIATIVE FOR **CYBERSECURITY** EDUCATION



Vision

A digital economy enabled by a knowledgeable and skilled cybersecurity workforce.



Mission of NICE

To energize and promote a robust network and an ecosystem of cybersecurity education, training, and workforce development.



Accelerate Learning and Skills Development



Inspire a sense of urgency in both the public and private sectors to address the shortage of skilled cybersecurity workers

Accelerate Learning and Skills Development

Objectives:

- 1.1 Stimulate the development of approaches and techniques that can more rapidly increase the supply of qualified cybersecurity workers
- 1.2 **Advance programs that reduce the time and cost for obtaining knowledge, skills, and abilities for in-demand work roles**
- 1.3 **Engage displaced workers or underemployed individuals who are available and motivated to assume cybersecurity work roles**
- 1.4 **Experiment with the use of apprenticeships and cooperative education programs to provide an immediate workforce that can earn a salary while they learn the necessary skills**
- 1.5 Explore methods to identify gaps in cybersecurity skills and raise awareness of training that addresses identified workforce needs

Nurture A Diverse Learning Community

Strengthen education and training across the ecosystem to emphasize learning, measure outcomes, and diversify the cybersecurity workforce



Nurture a Diverse Learning Community

Objectives:

- 2.1 Improve education programs, co-curricular experiences, and training and certifications**
- 2.2 Encourage tools and techniques that effectively measure and validate individual aptitude, knowledge, skills, and abilities**
- 2.3 Inspire cybersecurity career awareness with students in elementary school, stimulate cybersecurity career exploration in middle school, and enable cybersecurity career preparedness in high school
- 2.4 Grow creative and effective efforts to increase the number of women, minorities, veterans, persons with disabilities, and other underrepresented populations in the cybersecurity workforce
- 2.5 Facilitate the development and dissemination of academic pathways for cybersecurity careers**

Guide Career Development & Workforce Planning



Support employers to address market demands and enhance recruitment, hiring, development, and retention of cybersecurity talent

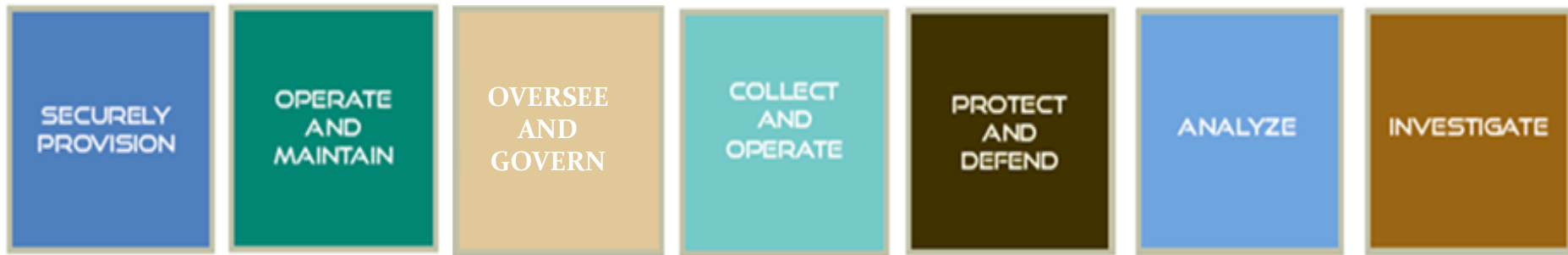
Guide Career Development and Workforce Planning

Objectives:

- 3.1 Identify and analyze data sources that support projecting present and future demand and supply of qualified cybersecurity workers
- 3.2 Publish and raise awareness of the National Cybersecurity Workforce Framework and encourage adoption**
- 3.3 Facilitate state and regional consortia to identify cybersecurity pathways addressing local workforce needs
- 3.4 Promote tools that assist human resource professionals and hiring managers with recruitment, hiring, development, and retention of cybersecurity professionals**
- 3.5 Collaborate internationally to share best practices in cybersecurity career development and workforce planning

NICE Workforce Framework

- ▶ 7 Categories, 30+ Specialty Areas
- ▶ Baselines knowledge, skills, and abilities & tasks
- ▶ Support for strategic workforce development



- ▶ Version 1.0 posted in April 2013 after draft release with public comment period
- ▶ Version 2.0 posted in May 2014 after public private refinement of specific specialty areas identified during gov't-wide of version 1.0

NICE Workforce Framework – Future Direction

Work Role

A specialized set of tasks/functions requiring specific knowledge, skills, and abilities.

Job/Position

One or more work roles one regularly performs for pay.

Job Title

A description of ones job/position in the organization.

Oversee and Govern

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

Cybersecurity Credentials - Now

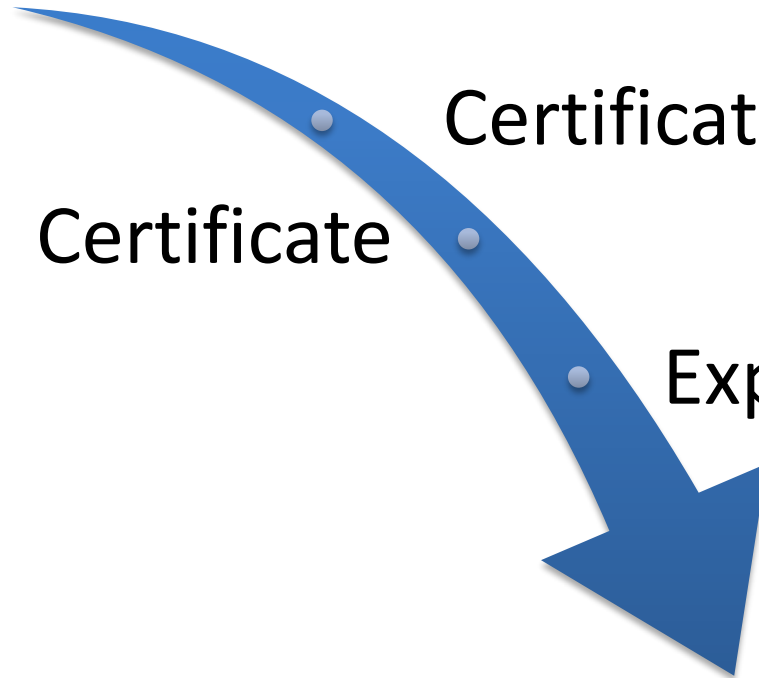
Academic Degree

Certifications

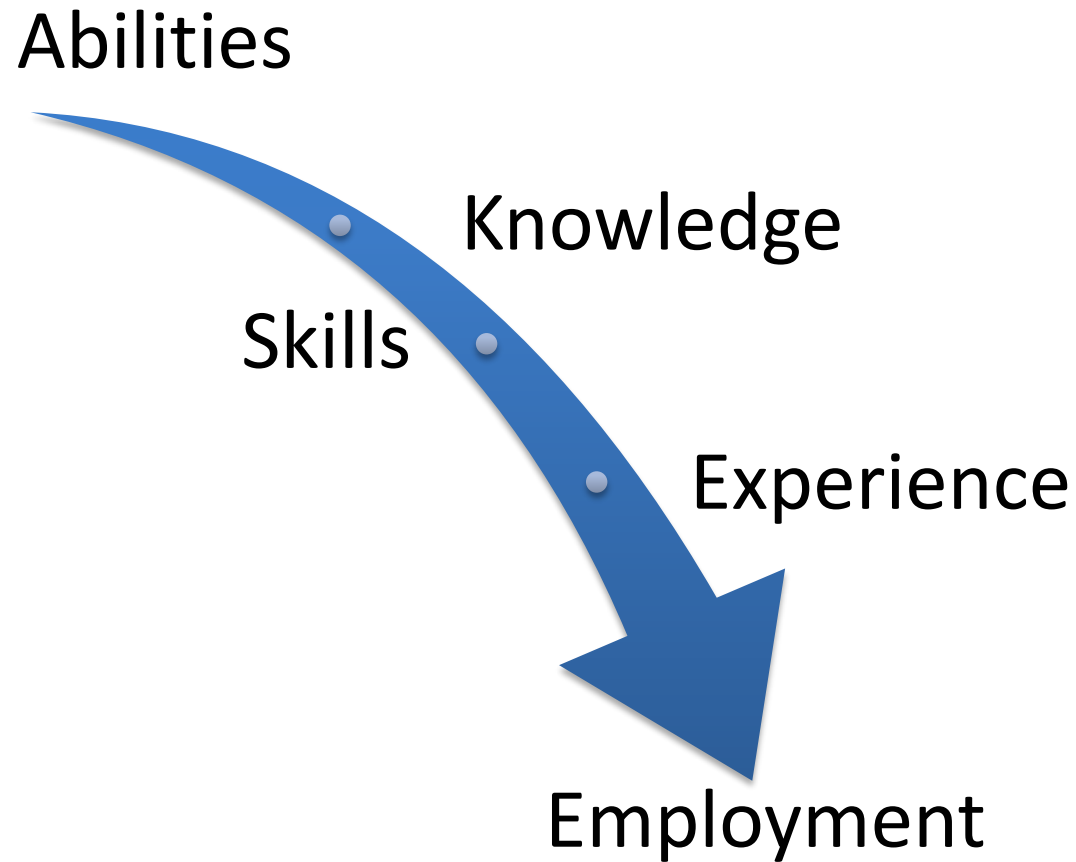
Certificate

Experience

Employment



Cybersecurity Credentials - Future



Join Us

**7th Annual
NICE 2016 Conference and Expo
November 1-2, 2016
Kansas City, Missouri**