

NICE

NATIONAL INITIATIVE FOR **CYBERSECURITY** EDUCATION



National Institute for Cybersecurity Studies (NICS)

Ms. Peggy Maxson

29 March 2012

Agenda

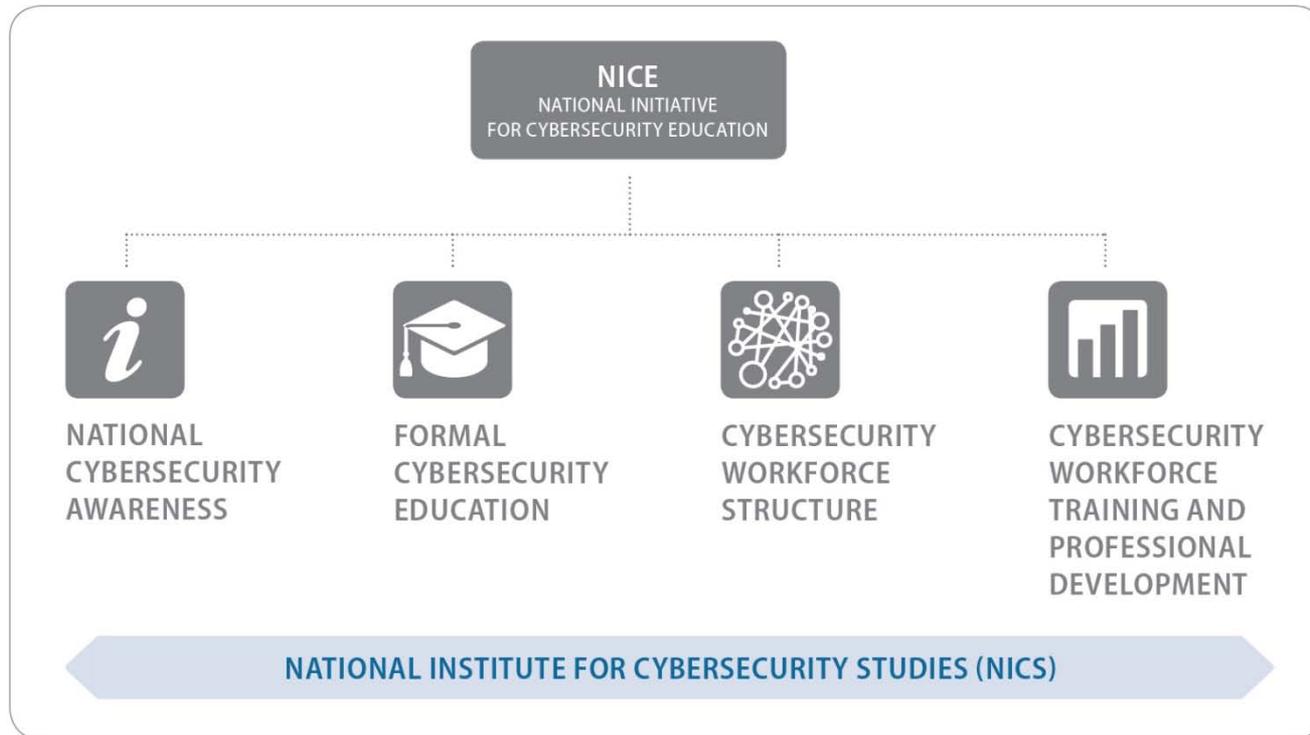
- Background
- What is NICS?
- Components of NICS
 - Portal
 - Advisory Board
 - Virtual University
- NICS Timeline for 2012
- Call To Action

A National Problem

- The Nation needs greater cybersecurity awareness
- The US work force lacks cybersecurity experts
- Many cybersecurity training programs exist but lack consistency among programs
- Potential employees lack information about skills and abilities for cybersecurity jobs
- Resources exist for teachers and students about cybersecurity but are difficult to find
- Cybersecurity Career development and scholarships are available but uncoordinated
- Lack of communication between government, private industry, and academia

NICE was established to create a cybersecurity education program for the nation to use sound cyber practices that will enhance the nation's security.

Four Components of NICE



NICS relationship to NICE

NICS was created to implement and share the resources and information produced by the four NICE components.

National Institute for Cybersecurity Studies (NICS)

NICS is a program that makes the awareness, education, training, and workforce development resources created by NICE available to the nation through a portal, an advisory board, and a virtual university.

NICS will:

- Focus cybersecurity education resources
- Influence the nation to become cyber aware
- Drive the pursuit of cyber careers



WEB PORTAL

Makes cybersecurity information and resources more readily available to the nation and promotes greater collaboration among cybersecurity students, educators, and employers.



ADVISORY BOARD

Comprised of representatives from government, academia, and industry, the advisory board provides recommendations to NICS for the development of cybersecurity awareness, education, and career training.



VIRTUAL UNIVERSITY

Enables Federal employees access to online training resources that are optimized for cybersecurity workforce development.

NICS Web Portal

The NICS Portal will be the main outlet of cybersecurity information and resources for the NICS program.



Draft NICS Portal Home Page

A Web Page



NICS
National Institute for Cybersecurity Studies

[About NICS](#) | [A-Z Site Map](#)

Home
Awareness
Education
Training
Careers
News & Events
Research
Community



Meeting the Cybersecurity Skills Need

Panelists speaking at the RSA Conference in San Francisco earlier this week said that according to the Cyber Challenge, colleges are not adequately preparing students to work in the field of cybersecurity. [More](#)

General Public
Students
Educators
Government
Industry
Veterans

Upcoming Events

FISSEA 2012 Conference	Gathersburg MD	Mar 27-29	Visit Site
CISSE 2012 Conference	Lake Buena Vista FL	Jun 11-13	Visit Site
US Cyber Challenge	Gathersburg MD	Mar 27-29	Visit Site
Software Assurance Forum	McLean VA	Mar 27-29	Visit Site
DON CIO IT Conference	Virginia Beach VA	May 14 - 16	Visit Site
Cyber Discovery 1.0 Camp	Bossier City LA	May 28 - Jun 2	Visit Site

[More Events](#)



Cyber How-To Guide

Get the basic steps to become safer and more cybersecurity proficient.

Get Training

Our automated tool can match you with the professional training you need to keep up with changing threats.



Map Your Career

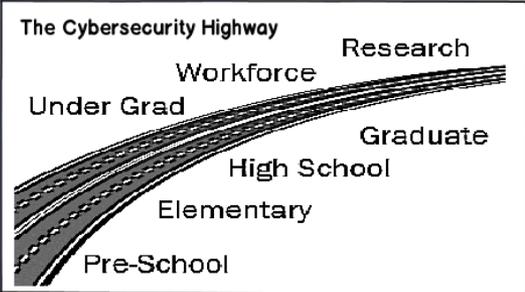
The NICE workforce framework maps Cybersecurity skills to the Knowledge, Skill and Abilities recognized by the Federal Government. [Learn More](#)



Develop Your Workforce

Learn how your organization can recruit, retain and develop an effective, healthy cybersecurity workforce.





The Cybersecurity Highway

Research

Workforce

Under Grad

Graduate

High School

Elementary

Pre-School

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Draft NICS Portal Training Page



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National Initiative for Cybersecurity Studies

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Search Catalog

Workforce Framework

Professional Certifications

Training Information

Training for Educators

Workforce Development

Find the Right Training

We've assembled training courses from hundreds of providers to create the most comprehensive listing of available Cybersecurity training. Courses are aligned to your career path. Find the training you need to enter the CS profession or advance your CS career.

Search 3,000+ Courses

By Specialty Area

Select one or more Specialty areas--

- All Source Intelligence
- Collection Operations
- Computer Network Defense
- Computer Network Defense Infrastructure Support
- Customer Service and Technical Support
- Cyber Operations

By Keyword

Enter a keyword

By Location Limit distance by

Enter a city or a zip 5 mi



PROTECT & DEFEND

SECURITY

INVESTIGATE

Browse Courses
Using the Workforce Framework

Professional Certifications

A variety of professional certifications are available. View a list of certifications; learn their purpose and how to obtain them [Learn More](#):






Workforce Framework

Experts across the country have begun the professionalization of the Cybersecurity domain. The first step in this effort was the development of a professional taxonomy that identifies and categorizes areas of the Cybersecurity discipline.

At this time each area has been mapped to the Federal, Office of Personnel Management (OPM) Knowledge, Skills, and Abilities (KSAs). We are seeking the input of commercial industry to further develop the Framework. [Learn More](#)




Training Spotlight on UMUC

Thought Leader

University of Maryland University College (UMUC) has been an active leader in developing Cybersecurity curriculae and advancing the Cybersecurity profession. Educators at UMUC have been actively involved in the [Workforce Framework](#) effort and were among the first to map their courses to the CS Knowledge Skills and Abilities (KSAs).

Engaging Courses, Varied Offerings

From basic introductory classes to extensive, hands-on experience in Digital Forensic techniques, UMUC offers a broad spectrum of CS courses and CS degrees. Their curriculum includes undergraduate and graduate degrees with a focus on career professionals hoping to expand their expertise. Students may select from traditional classroom experience, or dynamic virtual environments ideal for the working professional. [View UMUC Courses in the Training Catalog](#)

About UMUC

Founded in 1947, UMUC is one of 11 accredited, degree-granting institutions in the University System of Maryland (USM). Offering a broad range of cutting-edge classes, UMUC has earned a global reputation for excellence as a comprehensive virtual university and for focusing on the unique educational and professional development needs of adult students. Headquartered in Adelphi, Maryland, UMUC has classroom locations in the Washington, D.C., metropolitan area, Europe and Asia, and provides award-winning online classes to students worldwide. [Learn More About UMUC](#)



[Visit UMUC](#)

Fed VTE

Federal employees can access a rich library of cybersecurity and information assurance training. Put yourself in the classroom to attend lectures, watch demonstrations, and conduct hands-on labs. View and manage your organization's workforce as they progress toward their training objectives. [Learn More](#) [Log In](#)

Developing Effective Cybersecurity Training

Everyone needs basic training in cybersecurity concepts and procedures. Beyond the basics, our participating providers offer effective cybersecurity training methods and specialty training. [More](#)

Training Strategies for Businesses

No one knows your business like you do and developing tailored cybersecurity training will help keep your employees, environment, and clients secure. Our participating providers offer assistance in developing company-specific cybersecurity training strategies and programs. [Here](#)

Call for Training Providers

If you are a commercial or government agency that offers Cybersecurity training you can register your courses in the Training Catalog. [Learn How](#) to map your courses to the [Workforce Framework](#) and submit your courses for inclusion.



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User and Subject Matter Expert Outreach

- Conducted user testing at NIST Workshop in September 2011
 - Total of 61 participants
 - 26 Educators
 - 15 Government Officials
 - 10 Workforce Professionals
 - 2 Students
 - 8 Other
 - Used 215 Scenarios to identify design concerns such as navigation and layout and conceptual issues such as the purpose of and the audience of the NICS portal.
- Conducted WebEX Sessions in January & February 2012
 - Held 4 sessions to gather feedback on the operation and content of the Portal
 - Content Vetting
 - Education
 - Training
 - Workforce Development

NICS Advisory Board

An advisory board composed of stakeholders with training and education focus from each of the target sectors will guide:

- Identification of cybersecurity best practices
- Identification of gaps and strategies for national cybersecurity training and professional development
- Academic institutions in addressing cybersecurity education needs based on skills sought in current cybersecurity environment



Government

Federal
State
Local
Tribal



Academia

K-12
Colleges
Universities



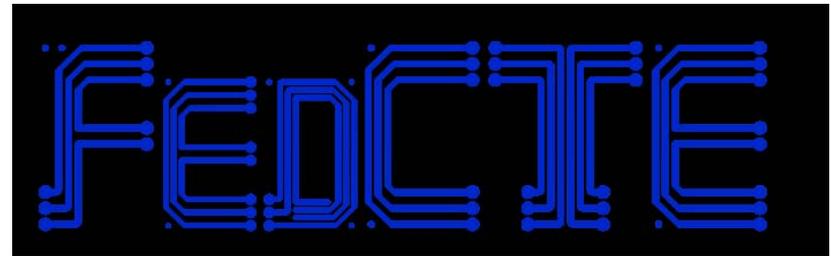
Industry

IT
Critical
Infrastructure
Vendors

Virtual University

NICS Virtual University

- Federal employees access online cybersecurity training
- Link to Federal Virtual Training Environment (FedVTE)
- Access to a database of 160 brick and mortar facilities providing classroom training opportunities
- Future plans expand the online training to State Local Tribal Virtual Training Environment (SLTVTE)
- Link to the Federal Cybersecurity Training Exercise (FedCTE) platform



FEDERAL CYBERSECURITY TRAINING EXERCISE



What Are the Current NICS Activities for FY 2012?



NICS Portal: Launch portal that serves as the nation's online resource for government, industry, academia and the general public to learn about cybersecurity awareness, education, careers and workforce development opportunities.

Key Activities:* Design Portal (Mar 2012), Focus Groups for Portal (Apr 2012), and Launch Portal Phase I (Sep 2012)

Project Management Office: Establish a Project Management Office (PMO) which will manage, support and maintain the NICS portal.

Key Activities:* Develop PMO Operational Documents (Jun 2012), Acquire PMO Resources (Aug 2012), and Establish PMO (Sep 2012)

Advisory Board: Establish an Advisory Board to provide guidance, recommendations, and best practices on cybersecurity awareness, education, careers, and training programs .

Key Activities:* Identify Advisory Board Tasks (Apr 2012), Identify Portal Advisory Board Members (Jun 2012), and Convene Advisory Board (Sep 2012)

Call To Action

Please use the NICS mailbox NICS@hq.dhs.gov to:

- Provide general comments or feedback on the Portal.
- Provide suggestions for additional material that should be included on the portal.
- Provide suggestions for Advisory Board members.
- Join our focus groups!

FOCUS GROUPS

Do you want to help us define the cybersecurity field? Are you interested in participating in a Focus Group?

Session Date/Time	Participant Requirements
Tuesday, April 10 th , 10:00am-12:00pm	Mid/Seasoned Federal Government Professionals & Cybersecurity Trainers <ul style="list-style-type: none">• 7+ years working in Cybersecurity field or as a Trainer for cyber• Federal Government career focus
Thursday, April 12 th , 10:00am-12:00pm	Early Career Professionals & Cybersecurity Recruiters <ul style="list-style-type: none">• 1-5 years working in Cybersecurity field or as a Recruiter for cyber• Federal or Private Industry/Commercial career focus
Tuesday, April 17 th , 10:00am-12:00pm	Mid/Seasoned Industry Professionals & Cybersecurity Trainers <ul style="list-style-type: none">• 7+ years working in Cybersecurity field or as a Trainer for cyber• Private Industry/Commercial career focus
Thursday, April 19 th , 10:00am-12:00pm	Educators/Administrators in Cybersecurity Academia <ul style="list-style-type: none">• 5+ years working in Cybersecurity with grades P-12• Cybersecurity education career focus

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