

# CYBERSECURITY EDUCATION & TRAINING RESOURCES

# **OVERVIEW**

The Cybersecurity and Infrastructure Security Agency (CISA) has compiled a living repository of cybersecurity-related educational resources for interested stakeholders, the public, teachers, and students of all ages. For more information, click on the links below.

The list is not comprehensive and is subject to change pending future additions. CISA applies neutral principles and criteria to add items and maintains sole and unreviewable discretion over the determination of items included. CISA does not attest to the suitability or effectiveness of these materials, services, and tools for any particular use case. CISA does not endorse any commercial product or service. Any reference to specific commercial materials, products, processes, or services by service mark, trademark, manufacturer, or otherwise, does not constitute or imply their endorsement, recommendation, or favoring by CISA. CISA will implement a process for organizations to submit additional free tools and services for inclusion on this list in the future.

# **RESOURCES FROM CISA**

Cybersecurity Awareness Program Parent and Educator Resources, Publication with linked materials FedVTE Public Courses, Federal Virtual Training Environment (Recommended browsers: Chrome, Edge, Firefox)(External Link) Workforce Framework for Cybersecurity (NICE Framework), National Initiative for Cybersecurity Careers and Studies Workforce Development (External Link)

<u>Cyber Career Pathways Tool</u>, National Initiative for Cybersecurity Education (NICE)Workforce Development (External Link)

Cybersecurity Education and Career Development, Cybersecurity Best Practices Cybersecurity Training and Exercises, CISA Cybersecurity Training Hub Incident Response Training, CISA Cybersecurity Incident Response Hub Industrial Control Systems (ICS) Training, CISA Cybersecurity Industrial Control Systems Hub Cyber and IT Interns, Careers at CISA Information State and Local Cybersecurity Grant Program, Information and Resources US Cyber Games, Founded by Katzcy in cooperation with NICE (External Link) Cybersecurity Awareness Month, National Cyber Alliance (External Link)

# **OTHER RESOURCES**

# For Educators

# Grades K-12

- 23 Great Lesson Plans for Internet Safety, Offered by Common Sense Education
- Cyber Safety Video Series, Cyber Innovation Center
- Professional Learning Program, Code.org, an education innovation nonprofit
- Best Cybersecurity Lessons and Activities for K-12 Education, Presented by Tech & Learning
- Digital and Media Literacy, International Society for Technology in Education
- Resources for Teachers to Use Technology to Enhance Learning, Office of Educational Technology
- Technology Offers the Ability to Extend Teaching Beyond the Classroom, Office of Educational Technology
- Digital Courses for K-12 Educators, EVERFI No-Cost Digital Lessons
- Empowering Educators to Teach Cyber, Cyber Innovation Center
- Education & Training, National Initiative for Cybersecurity Careers and Studies

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- <u>K12 Cybersecurity Education Community of Interest</u>, National Institute of Standards and Technology
- <u>NetSmartz Home</u>, National Center for Missing & Exploited Children
- <u>Activities Be Safer Online!</u>, National Center for Missing & Exploited Children
- <u>The Workforce Experience Before the Workforce</u>, National Initiative for Cybersecurity Education Challenge Project
- <u>Cybersecurity Educators</u>, Facebook Group (Account required)
- National Initiative for Cybersecurity Education (NICE), Led by National Institute of Standards and Technology

## Grades K-5

- Elementary School Cyber Education Initiative, Air Force CyberPatriot National Youth Cyber Education Program
- Cyber-Five Internet Safety, ABCya, IXL Learning
- <u>Thinkuknow 8-10s</u>, National Crime Agency
- K12 Cybersecurity Education Community of Interest, National Institute of Standards and Technology
- <u>NetSmartz Home</u>, National Center for Missing & Exploited Children
- <u>Activities Be Safer Online!</u>, National Center for Missing & Exploited Children
- Cybersecurity Educators, Facebook Group (Account required)
- <u>National Initiative for Cybersecurity Education (NICE)</u>, National Institute of Standards and Technology

#### Grades K-8

- Elementary School Cyber Education Initiative, Air Force CyberPatriot National Youth Cyber Education Program
- <u>Empowering Educators to Teach Cyber</u>, Cyber Innovation Center
- K12 Cybersecurity Education Community of Interest, National Institute of Standards and Technology
- <u>NetSmartz Home</u>, National Center for Missing & Exploited Children
- <u>Activities Be Safer Online!</u>, National Center for Missing & Exploited Children
- <u>Cybersecurity Educators</u>, Facebook Group (Account required)
- National Initiative for Cybersecurity Education (NICE), National Institute of Standards and Technology

#### Grades 6-12

- <u>Cyber Security Lab</u>, NOVA Labs, Public Broadcasting Service
- Cyber Security Awareness, Education Arcade
- Empowering Educators to Teach Cyber, Cyber Innovation Center
- <u>K12 Cybersecurity Education Community of Interest</u>, National Institute of Standards and Technology
- NetSmartz Home, National Center for Missing & Exploited Children
- The Workforce Experience Before the Workforce, National Initiative for Cybersecurity Education Challenge Project
- <u>Cybersecurity Educators</u>, Facebook Group (Account required)
- National Initiative for Cybersecurity Education (NICE), National Institute of Standards and Technology

#### **High School**

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- <u>Cybersecurity Videos to Learn the Basics</u>, NOVA Labs, Public Broadcasting Service
- Cyber Challenges to Defend Against a Cyberattack, NOVA Labs, Public Broadcasting Service
- Easy Encryption Code for Cybersecurity, Code.org an Education Innovation Nonprofit
- The Largest Cybersecurity Hacking Competition, Carnegie Mellon University
- <u>Free Cybersecurity Training Game for Students</u>, CyberStart America
- Cyber Career Cards, National Initiative for Cybersecurity Careers and Studies
- <u>Cybersecurity Awareness Program Parent and Educator Resources</u>, CISA



## Downloadable Materials/No Student Computer Required

- <u>PricewaterhouseCoopers' Access Your Potential</u>, Code.org, an Education Innovation Nonprofit
- <u>Cybersecurity Science Projects</u>, Science Buddies

#### **Education and Training Resource**

- Education and Training Catalog, National Initiative for Cybersecurity Careers and Studies
- <u>Cyber Safety Videos</u>, Cyber Innovation Center
- School Safety Resources, SchoolSafety.gov
- Empowering Educators to Teach Cyber, Cyber Innovation Center
- Education & Training, National Initiative for Cybersecurity Careers and Studies
- <u>K12 Cybersecurity Education Community of Interest</u>, National Institute of Standards and Technology
- <u>NetSmartz Home</u>, National Center for Missing & Exploited Children
- <u>The Workforce Experience Before the Workforce</u>, National Initiative for Cybersecurity Education Challenge Project
- <u>NIST Computer Security Resource Center (CSRC)</u>, National Institute of Standards and Technology
- Youth.gov, Formerly FindYouthInfo.gov created by Interagency Working Group on Youth Programs
- <u>Cybersecurity Education</u>, Perkins Collaborative Resource Network

#### Counselors

- <u>Find Your Cybersecurity Degree or Certification</u>, Cybersecurity Guide, Comprehensive Cybersecurity Education Website
- <u>Career Exploration in Cyber</u>, Cyber Innovation Center
- K12 Cybersecurity Education Community of Interest, National Institute of Standards and Technology
- <u>The Workforce Experience Before the Workforce</u>, National Initiative for Cybersecurity Education Challenge Project
- Youth.gov, Formerly FindYouthInfo.gov created by Interagency Working Group on Youth Programs

#### **Administrators**

- Statement of President Joe Biden on Signing the K-12 Cybersecurity Act into Law, The White House
- How to Improve Cybersecurity Awareness in Education, Center for Information Security Awareness
- <u>Security Awareness and System Administrator Training</u>, DIB SCC CyberAssist National Defense Information Sharing and Analysis Center
- <u>Cyber Education for District and State Leaders</u>, Office of Educational Technology
- <u>School Safety Resources</u>, SchoolSafety.gov
- <u>K12 Cybersecurity Education Community of Interest</u>, National Institute of Standards and Technology
- <u>CAE Documents Library</u>, U.S. Department of Defense Cyber Exchange

#### For Families and Students

#### **Parents and Guardians**

- <u>Stop.Think.Connect for Online Cyber Safety</u>, Stop.Think.Connect™ Global Online Safety Awareness Campaign
- <u>Cybersecurity Videos to Learn the Basics</u>, NOVA Labs, Public Broadcasting Service
- Cyber Challenges to Defend Against a Cyberattack, NOVA Labs, Public Broadcasting Service
- Cyber Civics for Families, Cyber Civics
- <u>Cyber Safety Video Series</u>, Cyber Innovation Center
- <u>Age-Based Media Reviews for Families</u>, Common Sense Media
- Digital and Media Literacy, International Society for Technology in Education (ISTE)
- <u>Cyber Training for Students and Families</u>, Office of Educational Technology
- <u>NetSmartz Home</u>, National Center for Missing & Exploited Children
- <u>Activities Be Safer Online!</u>, National Center for Missing & Exploited Children
- <u>The Workforce Experience Before the Workforce</u>, National Initiative for Cybersecurity Education Challenge Project
- <u>Job Corps</u>, Job Corps
- <u>Children's Privacy</u>, Federal Trade Commission



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#### **High School Students**

- <u>Cybersecurity Videos to Learn the Basics</u>, NOVA Labs, Public Broadcasting Service
- <u>Cyber Challenges to Defend Against a Cyberattack</u>, NOVA Labs, Public Broadcasting Service
- Easy Encryption Code for Cybersecurity, Code.org an Education Innovation Nonprofit
- <u>The Largest Cybersecurity Hacking Competition</u>, Carnegie Mellon University
- Free Cybersecurity Training Game for Students, CyberStart America
- Cyber Career Cards, National Initiative for Cybersecurity Careers and Studies
- Education & Training, National Initiative for Cybersecurity Careers and Studies
- <u>NetSmartz Home</u>, National Center for Missing & Exploited Children
- The Workforce Experience Before the Workforce, National Initiative for Cybersecurity Education Challenge Project
- Youth.gov, Formerly FindYouthInfo.gov created by Interagency Working Group on Youth Programs

#### Cybersecurity Clubs

- <u>Girls Who Code</u>, Girls Who Code
- Black Girls Code, Black Girls Code
- Learn Today and Build a Brighter Tomorrow, Code.org an Education Innovation Nonprofit
- <u>Airforce Association Initiative for a Career in Cybersecurity</u>, Air Force CyberPatriot National Youth Cyber Education Program
- <u>The Workforce Experience Before the Workforce</u>, National Initiative for Cybersecurity Education Challenge Project
- <u>AmeriCorps</u>, AmeriCorps

#### Internships

• Pathways Internship Programs – Careers, U.S. Department of State

## After High School

- NPower, CISA Non-Technical Training Program Awardee
- CyberWarrior, CyberWarrior, CISA Non-Technical Training Program Awardee
- CyberCorps Scholarship for Service, U.S. Office of Personnel Management
- Undergraduate Internship/Co-op Program-Intelligence Analyst, Central Intelligence Agency
- Internships, Lockheed Martin Students and Early Careers
- <u>National Initiative for Cybersecurity Education Cybersecurity Apprenticeship Program Finder</u>, National Institute of Standards and Technology
- Education & Training, National Initiative for Cybersecurity Careers and Studies
- The Workforce Experience Before the Workforce, National Initiative for Cybersecurity Education Challenge Project
- <u>Job Corps</u>, Job Corps

#### **Education and Training Courses**

- Education and Training Catalog, National Initiative for Cybersecurity Careers and Studies
- Cyber Safety Video Series, Cyber Innovation Center
- Education & Training, National Initiative for Cybersecurity Careers and Studies
- <u>The Workforce Experience Before the Workforce</u>, National Initiative for Cybersecurity Education Challenge Project
- <u>Find Your Cybersecurity Degree or Certification</u>, Cybersecurity Guide Comprehensive Cybersecurity Education Website

# **Financial Assistance Programs**

#### Grants and Funding Opportunities

- Education and Training Catalog, National Initiative for Cybersecurity Careers and Studies
- <u>Cyber Safety Video Series</u>, Cyber Innovation Center
- Education & Training, National Initiative for Cybersecurity Careers and Studies
- <u>The Workforce Experience Before the Workforce</u>, National Initiative for Cybersecurity Education Challenge Project



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• <u>Find Your Cybersecurity Degree or Certification</u>, Cybersecurity Guide Comprehensive Cybersecurity Education Website

#### Sponsorship

<u>SAP and HBCUs Cybersecurity Curriculum</u>, Intelligent CIO

#### **Scholarships**

- <u>Women in Cybersecurity Security Training Scholarship</u>, Women in Cybersecurity
- GenCyber Girls in CybHER® Security Camp 2022, Dakota State University and National Security Agency
- Lauro Garner Minority Cybersecurity Scholarship, Mercer University
- <u>National Centers of Academic Excellence</u>, CISA and National Security Agency
- CyberCorps Scholarship for Service, CISA and CyberCorps

#### **Organizations and Conferences**

- ISTE Conferences, International Society for Technology in Education (ISTE)
- <u>NSTA Conference</u>, National Science Teachers Association (NSTA)
- CSTA Conference, Computer Science Teachers Association (CSTA)
- NICE Conferences, National Initiative for Cybersecurity Education (NICE)
- <u>NICE K-12 Conference</u>, National Initiative for Cybersecurity Education (NICE)
- Phenom by Girl Scouts, Girl Scouts of the United States of America
- EdCon, Cyber Innovation Center





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