Expanding Knowledge in Cyberawareness and Careers in Cybersecurity

10th Annual C3 Conference
Cyberethics, Cybersafety, and Cybersecurity

October 6-7, 2011
University of Maryland

Learn More

SAVE THE DATE

PROGRAMS
We have a wide range of programs, content and activities for formal and informal settings. The central focus is Cybersecurity content, but it is supported by the too often neglected topics of citizen awareness of ethics, safety and security.

More

WORKFORCE AWARENESS
What is CyberSecurity? What is Information Assurance? What career options are there in CyberSecurity and what pathways are there? More

C3 AWARENESS
We inform the educational community about Cyberethical, Cybersafety and CyberSecurity (C3) implications of technology use and illustrate how students, educators and parents can apply these concepts to their own setting.

More

K12 IT SYSTEMS
Workshops are conducted at partner institutions on a variety of topics determined by our annual needs assessment survey. More
K–12 Programs

K–12 Division Goals include increasing:

- The IA workforce pipeline
- Community awareness of IA workforce
- Community awareness of C3–Cyberethics, Safety and Security, and
- Security of K–12 IT systems
K-12 Pipeline

- Annual Cyberethics, Cybersafety and Cybersecurity (C3) Conference
- Cool Careers in Cybersecurity for Girls Summit
- Careers in Cybersecurity for Guidance Counselors Workshop
- After School/Enrichment Cyber Clubs
- Summer Cyber Academies
- CW K12 Content
- Competitions
- SECURE IT: *Strategies to Encourage Careers in Cybersecurity and IT*
- CTE Cybersecurity Track
New Efforts in 2011

- HS Networking Security Competition
- Mid-Atlantic CCDC High School Activities: March 10–12, 2011
  - High school shadowing and activities for HS students
- MD US Cyber Challenge:
  MD July 11–15 and July 18–22
  - MD HS students AND teachers
  - 4 full days of instruction followed by capture the flag exercise
- 2011 Summer Cybersecurity Pathways PD
  - For teachers teaching CTE track
  - VMware & CCNA
- C3 Schools Initiative (Cyber Schools)
- CyberMaryland
- C3 Student/Educator Newsletter
- Journal of Cyberethics, Safety and Security Education
Thank You
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410 531 3910
cyberwatchcenter.org
K–12 Program

- Informal after school programs
  - Mindtools (4–5)
  - JR. Cyberwarrior Program (6–8)
- Summer Cyberwarrior high school programs

Formal Lesson Plans
High School Clubs
4H
Girl Scouts
5 Content Modules

- Computational Logic/Programming—Scripting
- Cryptography
- Digital Ethics, Safety and Security
- System Vulnerabilities
- Digital Forensics

- Grade bands 4–5, 6–8 and 9–12

- Tied to national and state standards and partnering school system math, science & technology curriculum, students engage in hands-on STEM activities and improve digital literacy skills while learning and applying concepts through gaming, modeling and simulation development.

- Speakers and field trips

- The central focus is the field of IA, but supported by the too often neglected topics of citizen awareness of Cyberethics, safety and security.
High School → 2 Year → 4 Year
High School Information Assurance Track

- CW 110 Computer Ethics (can also make use of Simulation Case studies via NSF grant)
- CW 130 Understanding Operating Systems
- **CW 160 Computer Security, Security+**
- CW 150/151 Networking—w/ some existing track course (Cisco 1 & 2)

- Other ideas
  - CW 230 Windows 2003 Server
  - **CW 235 Network Defense and Countermeasures**

Foundation needed for:
- CompTIA’s Security +
- Cisco CCNA Preparation certificate
- Apply credits IA A.A.S. degree
- CISSP Prep Exam
- WIRESHARK Certified network Analyst
- CCENT Cert
## SECURE IT: Strategies to Encourage Careers in Cybersecurity and IT

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<th>Elementary MINDTOOLS</th>
<th>Formal: Individual Classroom Activities</th>
<th>Formal: Extension Units</th>
<th>Informal: After School Program</th>
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<th>Middle JR CYBERWARRIORS</th>
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<th>High CYBERWARRIOR</th>
<th>Informal: After School Cyber Clubs &amp; Summer Program</th>
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<td>FIRST Tech Challenge FIRST Robotics Am Comp Sc League Image Cup High School CCC Patriots US Cyber Challenge Forensics Cup DHS PSA NACLO ILQ STS ISEF</td>
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<th>Other Activities</th>
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<td>Cool Careers in CyberSecurity for Girls Event</td>
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<td>C3: Cyber Ethics, Safety &amp; Security Conference</td>
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<td>K12 C3 Awareness Contest</td>
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<td>Cybersecurity Olympiad</td>
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<td>C3 Awareness grants</td>
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Recent News

**Sep.7**  
Cyber Competition Pits Hackers Against Computer Networks at Hopkins APL/CyberWatch Competition

**Jun.23**  
Wanted: Young Cyberexperts to Defend Internet

**Jun.3**  
CCDC and the Tale of the Insider Threat

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**TEAM REGISTRATION**

The CyberWatch Mid-Atlantic CCDC is open to all two-and four-year undergraduate and graduate students in Delaware, Maryland, North Carolina, Pennsylvania, Virginia, and Washington, D.C. Team registrations start October 10, 2010 and are due by December 10, 2010 (by 5 PM EST).

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**AGENDA**

The Mid-Atlantic CCDC runs for three full days. Check out the activities here.

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**Past Organizers, Sponsors and Contributors**

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Security Awareness Contest

WHAT’S IT ALL ABOUT?
The EDUCAUSE and Internet2 Higher Education Information Security Council, with sponsorship by the National Cyber Security Alliance (NCSA) and CyberWatch, is seeking creative and educational videos and posters on information security to be part of a national campaign to increase information security awareness at colleges and universities.

WHAT’S IT ALL ABOUT?
If your video or poster is selected you’ll get exposure for your work on the EDUCAUSE security web site (educause.edu/security), from media announcements, and as part of campus security awareness campaigns across the country. And that’s not all — winners receive cash prizes:

- Gold: $1,500
- Silver: $1,000
- Bronze: $500

WAYS YOU CAN PARTICIPATE:
- Training or instructional video (2 minutes or less)
- Public service announcement (PSA) (30 seconds or less)
- Poster

Submissions should address information security problems and/or suggest effective ways of handling them.

Deadline to enter: March 31, 2011

WANT MORE INFORMATION?
For topic suggestions or help, contact us.
Email: security-video@educause.edu
Web: educause.edu/securityvideocontest2011

Presented by:
EDUCAUSE
Internet2
Higher Education Information Security Council

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STAYSAFEONLINE.org
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