NCYTE insights

CYAD
Cybersecurity Across Disciplines

Hurry! Registration Closes May 20!

CyAD Conference
June 12-13, 2024

Join us for an in-person conference at Moraine Valley Community College, located outside of Chicago, IL, to address the growing number of cyber threats happening across disciplines.

No cybersecurity experience is needed to participate in this conference!

Cybersecurity subject matter experts from private and public organizations will be presenting. Workshops and breakout sessions will focus on cybersecurity risks and mitigation strategies across disciplines and protecting the nation's critical infrastructure.

- **CyAD Information for Educators Outside of Cybersecurity Flyer**
- **CyAD Information for Cybersecurity Educators Flyer**

A travel stipend is available for eligible participants. To learn more visit the CyAD Conference General Information webpage.

New information has just been added to the Agenda webpage! Keep checking back – we'll continue to update the agenda as the event draws closer!

Contact Anna Ritchey with any questions at aritchey@whatcom.edu.

<div align="center">

Register Now!

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We need the CAE Community's assistance!

NCyTE is currently engaged in two research efforts and is seeking CAE Community membership support. The first is a follow-up to our 2019 "Where Are They Now" Workforce Study: Community College Cybersecurity Alumni. The 2019 report was the result of a six-month study examining the success of community colleges placing cybersecurity professionals and involved in identifying the types of jobs community college graduates found after graduation and the alignment of these jobs to the National Institute of Standards and Technology (NIST), NICE framework work roles. The updated CAE-CD research study is being conducted by Tobi West, Ph.D. from Coastline Community College. If you are a CAE-CD Point of Contact (POC) from

a 2-year college, be on the look-out for a survey invitation and follow-up outreach from Dr. West.

For the second study, NCyTE has engaged the Seattle Jobs Initiative (SJI) to analyze the use of Classification of Instructional Programs (CIP) codes across cybersecurity programs. To do this, we are surveying both 2-year and 4-year CAE-designed institutions to identify all CIP codes used for cybersecurity programs.

What is a CIP Code?

The CIP code is a six-digit numerical taxonomy designed to categorize and standardize instructional programs and courses in post-secondary education in the United States. These are used by educational institutions to report program statistics, such as enrollment and graduation data, to decision-making bodies (more information [here](#)).

Why does it Matter?

Cybersecurity programs emerged from very disparate programs before there was a dedicated cybersecurity defense code and may not have updated their CIP code. If that is the case, national and state systems are not capturing all cybersecurity graduates, and we do not have a solid way of assessing whether there are enough cybersecurity grads being produced or if they are going into cybersecurity occupations.

With a better understanding of how these codes are being used, we can better reflect how many cybersecurity graduates are being produced, what skills they have, and what occupations they are entering.

Where do I find my CIP codes?

Your office of institutional research is most likely the best source of this information as it uses CIP codes in their reports to federal and state governments.

How can you help?

If you are the POC for your CAE designated institution, be on the look-out for a survey invitation and follow-up outreach from SJI. We appreciate your support and participation in the survey. If you have not received the survey or if you have any questions, you may contact the SJI research team at research@seattlejobsinit.com

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NICE Conference & Expo: Strengthening Ecosystems

June 3-5, 2024
Dallas, Texas

NCyTE will be at the NICE Conference & Expo. Join us for one of the break-out sessions and stop by our booth and say hello. It would be great to see you and join forces!

The NICE Conference & Expo theme "Strengthening Ecosystems: Aligning Stakeholders to Bridge the Cybersecurity Workforce Gap" highlights the collective effort to strengthen the cybersecurity landscape. By joining forces with key partners, we can foster a more robust cybersecurity ecosystem to bridge the workforce gap.

[NICE Conference & Expo Info](#)

NCyTE May Monthly Meeting

Integrating Zero-Trust Principles into IIoT Architectures for Enhanced Security

May 24, 2024 | 9:00 am PST | Virtual

Join us for an engaging discussion. You don't have to be a member to attend.

While zero-trust architectures have been employed for networks and data centers for years, our research focuses on integrating zero-trust principles into Industrial Internet of Things (IIOT) architectures.

Zero-trust architectures can be integrated into IIoT architectures to enhance system security using resilience and security metrics that enable full-scale system validation and evidence-based security assurances.

This research facilitates the modeling of smart building systems through lightweight devices and the creation of graph representations of industrial processes based on multi-disciplinary schemas. These processes have been analyzed using zero-trust

architecture principles through the development of many new tools centered around codified attack surfaces and describing the system with quality data.

Finally, this research focuses on traceable data and graph-based data analysis strategies, thereby creating a flexible data analytics toolkit for IIoT systems including AI/ML models.

Presenter: Dr. Shaya P. Wolf

[Register](#)

Community & Technical College Faculty Development Academies

NCyTE offers a variety of professional development academies for community and technical college faculty wishing to expand their knowledge, earn an industry certification, and strengthen their ability to incorporate new cybersecurity content in their community college curriculum. For a complete list of offerings and detailed descriptions, visit the NCyTE Events calendar at [NCyTE Center - Events (wildapricot.org)](#).

NCyTE Faculty Development Academy:

Artificial Intelligence for Cybersecurity Educators

Virtual | July 8 -12, 2024
8 am- 12 pm Pacific

A four-day workshop for community college faculty on how to integrate AI and AI technologies into their existing network security and information technology programs.

- **Provides an essential understanding of how AI is revolutionizing the field of cybersecurity.**

- **Explores the current state of Artificial Intelligence and its expanding role in cybersecurity engagements.**

- **Covers insights into the latest advancements and challenges in the domain.**

Eligible community and technical college faculty will receive a stipend upon completing the academy.

Instructor:

- **Mike Qaissaunee, Professor-Engineering & Technology at Brookdale Community College.**

Visit the registration page to learn more.

[AI for Cybersecurity Educators Registration](#)

NCyTE Faculty Development Academy:

Microsoft Azure Open AI Fundamentals

Virtual | July 15 -18, 2024
8 am - 4 pm Pacific

A four-day workshop on the expansive capabilities of Microsoft Azure in the realm of artificial intelligence. Participants gain practical skills in building, training, and deploying machine learning models.

- **Prepares participants for the Microsoft Certified: Microsoft Azure AI Fundamentals exams.**

- **Uses hands-on experience with Azure's AI tools and services.**

- **Covers a range of AI topics including AI workloads and considerations, and the foundational principles of machine learning on Azure**

Eligible community and technical college faculty will receive a stipend upon completing the academy.

Instructors:

- **Jiri Jirik, Director, Education Pathways National Center at Moraine Valley Community College**
- **Kyle Jones, Information Technology Chair at Sinclair Community College**

Visit the registration page to learn more.

[Open AI Fundamentals Registration](#)

NCyTE

Advancing Cyber Resilience:
CMMC 2.0 Workshop

July 18 & 19

8:00 am - 3:00 pm PST| Virtual

The two-day CMMC 2.0 workshop covers the updated, streamlined three-level model. Shifting most Auditing requirements to the DoD, CMMC 2.0 aligns more closely with the NIST 800-171 standards.

Who should participate?

- Cybersecurity faculty members
- IT or cybersecurity professionals in small businesses

Instructor:

Dr. John Sands has over three decades of experience in education, workforce research, and teaching. Dr. Sands brings extensive knowledge in data communications, manufacturing technologies, information technology, and cybersecurity management.

Seating is limited. Register now!

CMMC Registration

NCyTE Membership

Join as an institutional member! Gain access to curriculum resources, travel stipends for conferences, industry partners, workshop resources, NCyTE Center visibility, and a growing cybersecurity community.

Over 450 institutions representing universities, colleges, high schools, and middle schools are NCyTE members.

Join today!

NCyTE YouTube Channel

How is AI being leveraged to fortify cyber defenses, shape policies, and train the next-gen workforce?

In May, NCyTE had three presenters from NICE | NIST - Karen Wetzel, Danielle Santos, and Mike Prebil. They covered the RAMPS NOFO and the NICE Framework updates. Watch the recording on NCyTE's YouTube channel. Visit the NCyTE Monthly Membership Meeting Info webpage for the complete description and resources shared at the meeting.

[NCyTE YouTube Channel](#)

[NCyTE Monthly Membership Meeting Info](#)
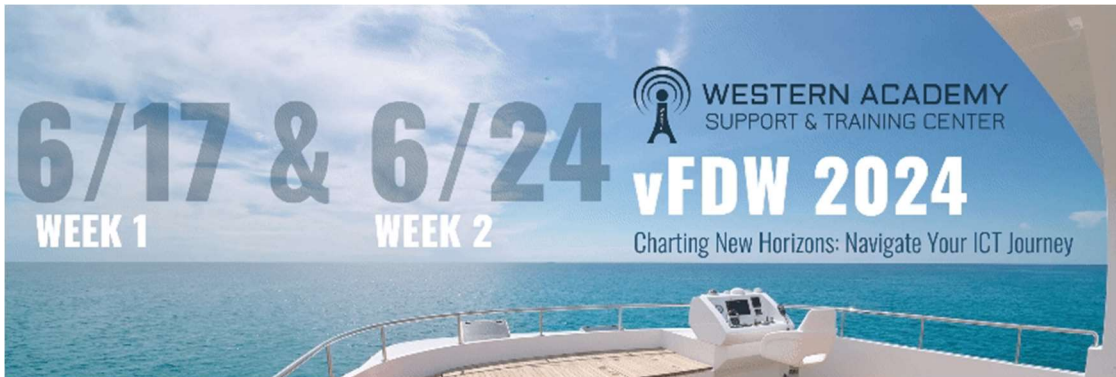
WASTC is offering eleven exclusive workshops. Six of them begin on June 17, and five on June 24. We have highlighted two of them for you to test the waters. Happy sailing!

Smooth Sailing with Raspberry Pi Pico

Dates: Week 1 June 17 – 21
Time: Monday – Thursday: 9 AM to Noon and 1 PM to 4; Friday: morning 9 AM to Noon

This hands-on workshop will teach Physical Computing using Raspberry Pi Pico, Micro-Python, and Arduino. Physical computing refers to the use of tangible, embedded microcontroller-based interactive systems that can sense the world around them and/or control outputs such as lights, displays and motors. Assembling the hardware elements of a physical computer and programming it with the desired behavior provides a creative and educational experience.

Learn More

Teaching the Internet of Things (IOT) in Rough Seas

Dates: June 24 – 28
Time: Monday – Thursday: 9 AM to Noon and 1 PM to 4; Friday: morning 9 AM to Noon

Now that Cisco has retired the Academy IoT courses, we need to build new curriculum to teach the Internet of things. In this workshop we will lay out a framework for instructors to use to build out their own courses. The workshop will. use a mix of brainstorming, guided lectures with a mix of activities, labs and practicums that we have all developed. Our hope in this workshop is to draw upon

participants' expertise to build a set of resources, curricula and best practices that we can share with our community. This workshop will be led by Kerry Bruce and Bill Saichek.

Learn More

NCYTE CENTER

The **National Cybersecurity Training & Education (NCyTE) Center** advances cybersecurity education in the U.S. by investing in technological innovation, resources, professional development and tools to support faculty, community colleges and the workforce pipeline of tomorrow.

Whatcom COMMUNITY COLLEGE

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