

National Cybersecurity Training & Education Center (NCyTE)

Dr. Kathi Hiyane-Brown, President

Corrinne Sande, PI/Director, NCyTE Center/CS/CIS

Janice Walker, Special Projects Director, Cybersecurity Grants
Whatcom Community College

September 2021

Washington STEM Education Innovation Alliance



About NCyTE



 National Science Foundation funded center for cybersecurity education for over 10 years



- Mission: Increase the quantity and quality of the cybersecurity workforce throughout the nation
- National in scope
- 317 member institutions community/tech colleges (160), universities (81), high schools(76)
- Located at Whatcom Community College, Bellingham, WA
- URL: www.ncyte.net



NCyTE Center Goals



Synthesized from supporting grants:

- Goal 1 Expand cybersecurity education pathways and program diversity to meet the nation's cybersecurity needs of tomorrow.
- Goal 2: Develop and deploy leading-edge cybersecurity curriculum.
- Goal 3: Cultivate industry engagement and career opportunities.
- Goal 4: Disseminate efforts to improve current and future directions of cybersecurity education in the U.S.



All Impact - WCC and NCyTE — Helping other institutions





Importance to the nation and region

- 500,000+ cybersecurity job postings nationally
- Demand vastly exceeds supply
- Washington State: 10,000 job openings
- Supply of workers very low
- Cybersecurity program graduates needed to secure national and local infrastructure, data, assets, etc.
- Cyberseek.org can provide detailed workforce gap statistics by metropolitan areas and other



Example pathways - the CIS/Cybersecurity program at Whatcom

AAS-T Cybersecurity

- Transfer to WWU
- Enroll in BAS IT Networking Cybersecurity at WCC
- Employment

AAS-T Computer Information Systems

- Enroll in BAS IT Networking Cybersecurity at WCC
- Employment

IT related degree from a community college in Washington State

■ Enroll in BAS IT Networking Cybersecurity at WCC



NCyTE Impacts to community and state

- Model educational pathways (2-year to 4-year degrees) in various states of western U.S.
- Support federal programs that establish and update cybersecurity education standards such as the NSA's Center for Academic Excellence (CAE) program;
- Solutions to evolving industry skill requirements and needs in cybersecurity education;
- CAE impact research study estimates across WCC student, graduate and operations spending between 2012 and 2019, CAE designation has contributed toward a cumulated \$16.3 million in earnings and 948 new jobs in Whatcom County



Other activities

- Pathway models and curriculum
 - New College Board approved AP CSP: Cybersecurity course
 - CTE instructor training
- Resources to update, improve and introduce cybersecurity across curriculum
- Credit equivalencies for military occupation specialties
- Outreach to underserved and underrepresented populations
- Support industry connections and events
- Leadership development and mentoring for faculty; faculty academies and bootcamps





NCyTE.net

Contact: Corrinne Sande, PI/Director csande@whatcom.edu