National Initiative for Cybersecurity Education (NICE) Working Group

K12 Subgroup

Career and Technical Education (CTE) Programs and Programs of Study (POS)
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1. ### Project Team Purpose

   Curating Career and Technical (CTE) programs and educational materials will enable cybersecurity career preparedness in high school. This project addresses NICE Strategic Plan Goal #2 Nurture a Diverse Learning Community: *Strengthen education and training across the ecosystem to emphasize learning, measure outcomes, and diversify the cybersecurity workforce. Specifically, objective* 2.5: Facilitate the development and dissemination of academic pathways for cybersecurity careers.

2. ### Project Team Objectives

   Through the collection and review of existing Career and Technical (CTE) programs and educational materials the public will increase their awareness about CTE cybersecurity programs which enable cybersecurity career preparedness in high school. Connection between the NICE Workforce Framework and other nationally recognized K12 standards will aid in aligning current and future CTE Programs and Programs of Study to high-quality instructional materials and programs and promote future high-quality design of instructional materials. Aligning CTE programs with Centers of Academic Excellence (CAE) will also be recognized.

3. ### Project Team Deliverables

   Deliverables proposed for this effort include:

   - Curation of known CTE programs and educational resources. Identify and document CTE programs and educational resources to include program POC, scope and sequence of program, articulation agreements, and dual credit options. Content collected such as curriculum, online courses, interactives, labs, etc. will be passed along to the content repository K12 project team.

   - Development of Toolkit of how to develop a successful CTE Cybersecurity Program to help answer questions such as:

     o Evolution of CTE programs and state and federal requirements

     o Curriculum options, dual and articulated options

     o Delivery options and instructional strategies. Professional development opportunities will also be included.

- Tips on marketing a new program. This will also include an FAQ for challenges that will be faced when creating a CTE program. This could include funding possibilities, community awareness concepts, and a How-To Build a successful Advisory Committee.
- Additional opportunities such as competitions, after-school clubs, Career Technical Student organizations, and National Technical Honor Society.