

# Cybersecurity Career and Technical Education Programs

**Career and Technical Education (CTE) programs have proven to be an effective approach to prepare secondary and postsecondary students to succeed in cybersecurity careers.**

CTE provides students with the academic, technical, and employability skills through rigorous and applied coursework, work-based learning experiences, dual or concurrent enrollment, and industry-recognized certifications.

## WHY CTE?

**CTE provides opportunities for students to gain technical, academic, and professional leadership skills for college and career success.**

- CTE works for high school students
- CTE works for college students
- CTE works for the economy
- CTE works for business



**The top 3 benefits for students are the attainment of:**

- **COMPETENCIES** to qualify them for a cybersecurity career
- **EMPLOYABILITY SKILLS** such as teamwork
- **REAL-WORLD EXPERIENCES** to apply learning



**U.S. Department of Education, Office of Career, Technical, and Adult Education (OCTAE)** provides

oversight regarding the preliminary structure of CTE program. OCTAE administers CTE program funded under the Perkins Act.

Visit <https://cte.ed.gov>.

**APPLIED LEARNING**  
on technical topics integrated with rigorous academics and employability skills

**PORTABLE CREDENTIALS**  
such as industry-recognized certifications and college credits

**PRACTICAL APPLICATION**  
of knowledge and skills through work-based experiences

**Students can take advantage of CTE cybersecurity content through:**

- Individual CTE courses
- Sequence of classes
- Career Academies
- Program of Study
- Content modules across the 16 career clusters

**CTE Programs of Study (POS)**

are authorized and funded through the Carl D. Perkins Career and Technical Education Act

of 2006. A high-quality POS includes the 10 components

of the **Programs of Study Design Framework**, such as:

- providing non-duplicative progression of courses that align secondary to postsecondary education;
- including opportunities for dual or concurrent enrollment programs;
- leading to an industry-recognized certification, certificate at the postsecondary level, or an associate of baccalaureate degree; and
- including work-based learning experiences, such as apprenticeships and internships.



**The National Career Clusters®**

provides the organizing structure for delivering quality CTE programs with **16** career clusters and **79+** pathways.

Cybersecurity is most often included in the Information Technology Career Cluster.

Visit <https://careertech.org>.

