

CTE: YOUR PATHWAY TO CYBERSECURITY CAREERS

Career and technical education (CTE) programs have proven to be an effective approach to prepare secondary and post-secondary students to succeed in cybersecurity careers.

How can CTE help me succeed in cybersecurity?

CTE provides students with academic, technical and employability skills for a career in cybersecurity through:

- CTE courses in network security, cybersecurity, cyber crime and more
- Work-based learning experiences, such as job shadowing and internships
- Career and technical student organizations, such as SkillsUSA and the Technology Student Association
- Opportunities to earn college credit and industry certifications in high school, and ultimately to earn postsecondary certificates and degrees

More than **300,000** U.S. jobs needing cybersecurity skills are unfilled.¹

The need for information security analysts will grow by **28%** through 2026, making it one of the top 20 fastest-growing occupations.²

In metropolitan areas, salaries for cybersecurity professionals can reach **\$380,000**.³

Cybersecurity professionals work in IT, health care, manufacturing, defense, finance and other sectors.

COMPUTER NETWORK ARCHITECT ⁴

Design and build data communication networks
\$104,650 per year
 At least a bachelor's degree



NETWORK AND COMPUTER SYSTEMS ADMINISTRATOR ⁵

Oversee the daily operation of computer networks
\$81,100 per year
 At least a postsecondary certificate



INFORMATION SECURITY ANALYST ⁶

Plan and implement measures to protect computer networks and systems
\$95,510 per year
 At least a bachelor's degree



Many job openings ask for industry certifications, including:⁷



CompTIA Security+



(ISC)² Certified Information Systems Security Professional



(ISC)² Systems Security Certified Practitioner



Global Information Assurance Certification Security Essentials

¹ <https://www.cyberseek.org/heatmap.html> (April 2017-March 2018 data)

² <https://www.bls.gov/ooh/computer-and-information-technology/information-security-analysts.htm>

³ <https://www.forbes.com/sites/stevemorgan/2016/01/09/top-cyber-security-salaries-in-u-s-metros-hit-380000/#248643ac7ef8>

⁴ <https://www.bls.gov/ooh/computer-and-information-technology/computer-network-architects.htm>

⁵ <https://www.bls.gov/ooh/computer-and-information-technology/network-and-computer-systems-administrators.htm>

⁶ <https://www.bls.gov/ooh/computer-and-information-technology/information-security-analysts.htm>

⁷ <https://www.cyberseek.org/heatmap.html>