# **YOUR PATHWAY TO CYBERSECURITY CAREERS** CAREER and technical education (CTE) programs have proven

Career and technical education (CTE) programs have proven to be an effective approach to prepare secondary and postsecondary 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:

- $\cdot\,$  CTE courses in network security, cybersecurity, cyber crime and more
- $\cdot$  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.<sup>1</sup>

The need for information security analysts will grow by 20 1/0 through 2026, making it one of the top 20 fastest-growing occupations.<sup>2</sup>

## In metropolitan areas, salaries for cybersecurity professionals can reach \$380,000.<sup>3</sup>

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

#### Many job openings ask for industry

certifications, including:<sup>7</sup>





(ISC)<sup>2</sup> Certified Information Systems Security Professional



(ISC)<sup>2</sup> Systems Security Certified Practitioner



Global Information Assurance Certification Security Essentials



<sup>1</sup> https://www.cyberseek.org/heatmap.html (April 2017-March 2018 data) <sup>5</sup> http

- <sup>2</sup> https://www.bls.gov/ooh/computer-and-information-technology/informationsecurity-analysts.htm
- $^3$  https://www.forbes.com/sites/stevemorgan/2016/01/09/top-cyber-security-salaries-in-u-s-metros-hit-380000/#248643ac7ef8
- <sup>4</sup> https://www.bls.gov/ooh/computer-and-information-technology/computernetwork-architects.htm
- <sup>5</sup> https://www.bls.gov/ooh/computer-and-information-technology/network-andcomputer-systems-administrators.htm
- <sup>6</sup> https://www.bls.gov/ooh/computer-and-information-technology/informationsecurity-analysts.htm
- 7 https://www.cyberseek.org/heatmap.html

### **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

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

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