2016 Cybersecurity Skills Gap

Cyberattacks are growing, but the talent pool of defenders is not keeping pace.

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"I have 30,000 technology jobs open," states Virginia Governor Terry McAuliffe. "Many open tech jobs in Virginia are in cybersecurity but experienced workers aren't available." ~CNN Money/ May 2016

For More Information

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DCC
Danville Community College

Pittsylvania Career and Technical Center

Computer Network Hardware Operations
1 Year Program

Computer Network Hardware Operations—1 Year Program

9th Grade

- English 9
- World History I or II
- Earth Science
- Algebra I or Geometry
- PE9
- Recommended Elective: Entrepreneurship (9093)
- Elective
- Elective

Recommended Electives

- Computer Systems Technology I/II
- Computer Applications
- Any Business Courses

*Highly Recommended Electives

Dual Enrollment Credit

- ETR 154 Network Fundamentals, Router Basics and Configuration (4)
- ITN 155 Switching, Wireless & WAN Technologies (4)

10th Grade

- English 10
- Biology
- Geometry, Algebra II, or Algebra Functions & Data Analysis
- PE10
- Elective
- Elective
- *Recommended Elective: Word Processing (6625)
- *Recommended Elective: Office Administration (6621)

Industry Certifications

- **Cisco Certified Network Administrator**
- **CompTIA Network+**
- **Microsoft Technology Associate - Networking Fundamentals**

** Students can receive a College Studies Certificate if they take both Computer Systems Technology and Computer Network Hardware Operations.

**Please note, in addition to Technical and Program requirements, students must complete the requirements for graduation at the base school.

11th Grade

- English 11
- US History
- Economics & Personal Finance
- Algebra Functions & Data Analysis, Adv. Algebra/Trigonometry, or Pre-Calculus

12th Grade

- English 12
- US Government
- Computer Information Systems (6612)
- Environmental Science, Astronomy, or Chemistry

11th or 12th Grade

- Semester 1: Computer Network Hardware Operations I&II (8542/8543)
- Semester 2: Computer Network Hardware Operations III&VI (8544/8545) and Cybersecurity

** Student would take 4 electives at their base school during the year they are not attending PCTC or enroll into a different 1 year program at PCTC.

*Recommended Elective: Computer Systems Technology I & II (8622/8623)

Course Description

Students develop the skills needed to obtain entry-level network technicians, computer technicians, cable installers, and help-desk technicians. In addition, they will explore the various types of cybersecurity threats, how to mitigate those threats, and discover methods of extracting information from different types of technology. It provides a hands-on introduction to networking and cybersecurity. Labs include various methods of connecting to Local Area Networks and Wide Area Networks; wired and wireless device configuration and security; and connecting and managing file and print sharing on servers. Upon successful completion of the course, students may qualify to take industry certification exams.