

Cybersecurity Systems Technology (8628)

Demonstrating Ethical Behavior with Computer Systems Technology **CST.1**

- 1 Identify security issues related to computer hardware, software, and data.** **CST.1.1**

- 2 Identify concepts of cybersecurity, honesty, courtesy, and confidentiality related to information and email systems and social networking (e.g., spam, viruses, and etiquette).** **CST.1.2**

- 3 Investigate Internet privacy issues and computer crimes, including identity theft.** **CST.1.3**

- 4 Comply with copyright and patent laws and intellectual property.** **CST.1.4**

- 5 Explain privacy, licensing, and policy concepts.** **CST.1.5**

- 6 Comply with policies regarding acceptable use of technology.** **CST.1.6**

Exploring Hardware Components That Are Relevant to Cybersecurity **CST.2**

- 1 Configure settings using Basic Input-Output System/Unified Extensible Firmware Interface (BIOS/UEFI) tools on a personal computer (PC).** **CST.2.1**

- 2 Describe the purpose and properties of motherboard components that are relevant to cybersecurity.** **CST.2.2**

- 3 Describe the purpose and property of RAM.** **CST.2.3**

- 4 Install PC expansion cards.** **CST.2.4**

- 5 Identify features of CPUs as applicable to cloud and cybersecurity.** **CST.2.5**

- 6 Enumerate various PC connection interfaces.** **CST.2.6**

- 7 Identify the components required for a PC.** **CST.2.7**

- 8 Differentiate among storage devices.** **CST.2.8**

- 9 Identify common peripheral devices and the risk associated with them.** **CST.2.9**

- 10 Manage network printers.** **CST.2.10**

Exploring Networking CST.3

- 1 Compare the characteristics of connectors and cabling. CST.3.1
- 2 Explain the properties and characteristics of Transmission Control Protocol/Internet Protocol (TCP/IP). CST.3.2
- 3 Explain common ports, protocols, and their purpose. CST.3.3
- 4 Compare various Wireless Fidelity (WiFi) networking standards and encryption types. CST.3.4
- 5 Install wireless/wired router. CST.3.5
- 6 Compare Internet connection types, network types, and their features. CST.3.6
- 7 Compare network architecture devices, their functions, and features. CST.3.7
- 8 Install cable types and connectors. CST.3.8

Exploring Mobile Devices CST.4

- 1 Explain the characteristics and security risks of types of mobile devices. CST.4.1
- 2 Explain the characteristics of mobile devices. CST.4.2
- 3 Describe security concerns with Internet of Things (IoT) devices. CST.4.3
- 4 Troubleshoot wired and wireless networks. CST.4.4

Troubleshooting Hardware and Networking CST.5

- 1 Identify concepts related to copyright, public domain, copy protection, intellectual property, and licensing agreements. CST.5.1
- 2 Describe the characteristics and purposes of various PC connection interfaces. CST.5.2
- 3 Install a power supply. CST.5.3
- 4 Compare types of displays. CST.5.4
- 5 Identify common PC connector types and associated cables. CST.5.5
- 6 Identify the types of network cables and connectors. CST.5.6
- 7 Use networking tools. CST.5.7
- 8 Install laptop hardware and components. CST.5.8
- 9 Describe the function of components within the display of a laptop. CST.5.9
- 10 Demonstrate laptop features. CST.5.10
- 11 Troubleshoot hard drives and RAID arrays. CST.5.11

12 Troubleshoot common video, projector, and display issues. CST.5.12

13 Analyze appropriate safety procedures. CST.5.13

14 Explain the troubleshooting theory. CST.5.14

15 Analyze controls and their effect on the environment. CST.5.15