

# Cybersecurity (2021)

## Explore to Cybersecurity Concepts CYB 1

- 1 Define the importance of the cybersecurity industry. CYB 1.1
- 2 Identify the role cybersecurity plays in personal usage CYB 1.2
- 3 Identify the role cybersecurity plays in industry usage. CYB 1.3

## Establishing Trust Cybersecurity CYB 2

- 1 Investigate the Confidentiality Integrity Availability (CIA) Triad – Security Models. CYB 2.1
- 2 Compare and contrast usability and security. CYB 2.2

## Explore Data Security and Security Systems CYB 3

- 1 Investigate encryption and encryption types. CYB 3.1
- 2 Investigate how businesses utilize security systems. CYB 3.2
- 3 Compare and contrast public versus private wifi. CYB 3.3
- 4 Explore processes that maintain integrity of data. CYB 3.4
- 5 Investigate data breaches and its impact on business and customers. CYB 3.5

## Examine risks, vulnerabilities, threats, and implications CYB 4

- 1 Differentiate between threats, vulnerabilities, and attacks. CYB 4.1
- 2 Utilize adversarial thinking CYB 4.2
- 3 Describe common security related software vulnerabilities CYB 4.3
- 4 Explore social engineering techniques related to cybersecurity CYB 4.4

## Examine legal and ethical issues related to cybersecurity CYB 5

- 1 Compare and contrast ethical versus nonethical hacking CYB 5.1
- 2 Understand confidentiality and the role it plays in cybersecurity. CYB 5.2
- 3 Discuss the impact of unethical and illegal hacking on quality of life. CYB 5.3
- 4 Evaluate how the role of value and ethics impacts laws and policy decisions CYB 5.4
- 5 Evaluate how the role of value and ethics impacts laws and policy decisions CYB 5.5

**Explore Careers in  
cybersecurity** CYB 6

**1 Identify personal interests and abilities related to cybersecurity careers.** CYB 6.1

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**2 Investigate career opportunities, trends, and requirements related to  
cybersecurity careers** CYB 6.2

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**3 Identify skills needed for cybersecurity careers.** CYB 6.3