South Dakota CTE

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

Skip to main content

Explore Careers in cybersecurity CYB 6

1. **Identify personal interests and abilities related to cybersecurity careers.** CYB 6.1
2. **Investigate career opportunities, trends, and requirements related to cybersecurity careers** CYB 6.2
3. **Identify skills needed for cybersecurity careers.** CYB 6.3