

NORTH CAROLINA CAREER AND TECHNICAL EDUCATION STANDARDS

Computer Science and Information Technology Education

Grade: Grade 9 - 12

Course: Network Security I **New**

NCCTE.2020.BN31 - Network Security I

NCCTE.2020.BN31.01.00 - Understand threats, attacks and vulnerabilities.

NCCTE.2020.BN31.01.01 - Analyze indicators of compromise and determine the type of malware.

NCCTE.2020.BN31.01.02 - Compare types of attacks.

NCCTE.2020.BN31.01.03 - Explain threat actor types and attributes.

NCCTE.2020.BN31.01.04 - Explain penetration testing concepts.

NCCTE.2020.BN31.01.05 - Explain vulnerability scanning concepts.

NCCTE.2020.BN31.01.06 - Explain the impact associated with types of vulnerabilities.

NCCTE.2020.BN31.02.00 - Understand technologies and tools.

NCCTE.2020.BN31.02.01 - Install and configure network components, both hardware and software based, to support organizational security.

NCCTE.2020.BN31.02.02 - Use appropriate software tools to assess the security posture of an organization.

NCCTE.2020.BN31.02.03 - Troubleshoot common security issues.

NCCTE.2020.BN31.02.04 - Analyze and interpret output from security technologies.

NCCTE.2020.BN31.02.05 - Deploy mobile devices securely.

NCCTE.2020.BN31.02.06 - Implement secure protocols.

NCCTE.2020.BN31.03.00 - Understand architecture and design.

NCCTE.2020.BN31.03.01 - Explain use cases and purpose for frameworks, best practices and secure configuration guides.

NCCTE.2020.BN31.03.02 - Implement secure network architecture concepts.

NCCTE.2020.BN31.03.03 - Implement secure systems design.

NCCTE.2020.BN31.03.04 - Explain the importance of secure staging deployment concepts.

NCCTE.2020.BN31.03.05 - Explain the security implications of embedded systems.

NCCTE.2020.BN31.03.06 - Understand secure application development and deployment concepts.

NCCTE.2020.BN31.03.07 - Understand cloud and virtualization concepts.

NCCTE.2020.BN31.03.08 - Explain how resiliency and automation strategies reduce risk.

NCCTE.2020.BN31.03.09 - Explain the importance of physical security controls.

