

Cybersecurity/Networking Syllabus

Course Description/Goals:

This course introduces the tools and concepts of cybersecurity and encourages students to create solutions that allow people to share computing resources while protecting privacy.

Course TEKS/Objectives:

In the Foundations of Cybersecurity course, students will develop the knowledge and skills needed to explore fundamental concepts related to the ethics, laws, and operations of cybersecurity. Students will examine trends and operations of cyberattacks, threats, and vulnerabilities. Students will review and explore security policies designed to mitigate risks. The skills obtained in this course prepare students for additional study in cybersecurity. A variety of courses are available to students interested in this field. Foundations of Cybersecurity may serve as an introductory course in this field of study.

<https://tea.texas.gov/academics/curriculum-standards/teks-review/cte-teks-fundamental-recommendations-cybersecurity.pdf>

Course Outline:

Semester 1	Semester 2
Security Concepts Threats, Vulnerabilities & Mitigations Cryptographic Solutions Identity and Access Management Network Architecture Resiliency & Site Security Vulnerability Management	Network and Endpoint Security Incident Response Protocol, App & Cloud Security Security Governance Concepts Risk Management Processes Data Protection and Compliance