

ITSEC-124: Network Security

Course Description:

Students will focus on the fundamentals and implementation of network security including secure access methods and vulnerabilities in network protocols, operating systems and network applications. Students will use techniques and tools for developing secure infrastructure. MATC strongly recommends that students complete ITNET-101, or have the equivalent skills, prior to enrollment in this course.

Total Credits: 3.00

Course Competencies

- 1. Explain fundamentals of information and network security.**
- 2. Differentiate between Host, Application, and Data Security.**
- 3. Distinguish between different authentication protocols and Virtual Private Network (VPN) technologies.**
- 4. Analyze the topology security of a network.**
- 5. Distinguish SSL/TLS and HTTPS, as it relates to applying encryption.**
- 6. Differentiate among networking devices, such as servers, routers, switches, and firewalls, from security standpoint.**
- 7. Summarize the functions of Demilitarized Zone (DMZ), Network Address Translation (NAT), Virtual Local Area Network, (VLAN), and Virtual Private Network (VPN) in network security.**
- 8. Analyze the characteristics of Public Key Infrastructure (PKI) certificates and the policies/procedures surrounding them.**
- 9. Create a secure network.**