

ITNET-101: Network Communications

Course Description:

Network Communications provides an introduction to networking technologies and provides good background material for students interested in preparing for CompTIA's broad-based, vendor-independent networking certification exam, Network+. This course covers a wide range of material about networking such as LAN components, OSI model and standards organizations, transmission media, topologies, protocols (such as TCP/IP), interconnecting devices, wide area networks and security. Through some hands-on exercises, demonstration and discussion, students will develop an understanding of what is involved in basic network design, network management, security and troubleshooting.

Total Credits: 3.00

Course Competencies

- 1. Differentiate between various network topologies**
- 2. Describe various network media**
- 3. Distinguish major network physical components**
- 4. Communicate the differences between various wireless technologies**
- 5. Articulate the functions of the 7 layers of the OSI Model**
- 6. Differentiate between various protocols used in the TCP/IP suite**
- 7. Identify the application of various network protocols**
- 8. Differentiate between the internet, extranets and intranets**
- 9. Articulate the characteristics of fault tolerance**
- 10. Troubleshoot a SOHO (Small Office/Home Office) network**
- 11. Articulate the characteristics of Cloud Computing and Remote Access**
- 12. Articulate IPv4 and IPv6 segmentation and subnetting**
- 13. Differentiate the differences between LANs and WANs**