3.1 Demonstrate knowledge of basic data communications components, and demonstrate technical knowledge of the Internet.

3.2 Identify the role of networking hardware, and configure common hardware for operation.

3.3 Identify the relationship between IP addresses and domain names, including assignment of IP addresses within a subnet.

3.4 Identify the functions and components of servers commonly used on the Internet.

3.5 Identify common Internet security and availability issues, including user-level and enterprise-level concerns.

3.6 Identify common performance issues affecting Internet clients, including analysis, diagnosis.

3.7 Perform basic hardware and system maintenance for network-aware systems.

3.8 Manage fundamental elements of modern network-based client operating systems.

3.9 Configure and troubleshoot wireless networks.

3.10 Demonstrate understanding of virtualization.

3.11 Explain concepts involving personal privacy protection on the Internet.