

Network Protocols & Services

Duration: 1 day

- **Fundamentals of Networking**

- Overview of OSI & TCP/IP models
- Functions of each layer in communication

- **IP Addressing and Subnetting**

- IPv4 structure and classes
- Public vs Private Addressing
- Subnetting concepts and calculations
- Introduction to routing and route determination

- **Essential Network Services**

- Understanding DNS and DHCP
- SNMP (MIB/OID), NTP, Telnet, FTP, SSH
- Role of HTTP and HTTPS in web communication

- **Secure Network Communication**

- Introduction to VPNs and their purpose
- Basics of TLS/SSL protocols for encryption