CompTIA Network+ Training Syllabus:

Classroom Live Outline

1. **Network theory**
- Network types
- Network standards and the OSI model
- Data transmission methods

2. **Bounded network media**
- Copper media
- Fiber optic media
- Bounded network media installation

3. **Unbounded network media**
- Wireless networking
- Wireless network devices and components
- Implement wireless technology
- Internet of Things

4. **Network implementations**
- Physical network topologies
- Logical network topologies
- Ethernet networks
- Network devices

5. **TCP/IP addressing and data delivery**
- The TCP/IP protocol site
- IPv4 addressing
- Default IP addressing schemes
- Create custom IP addressing schemes
- IPv6 address implementation

6. **Routing and switching**
- Switching
- Network packet routing
- Static and dynamic IP routing
- VLANs

7. **TCP/IP implementation**
- Assign IP addresses
- Naming services
- TCP/IP utilities
- Common TCP/IP protocols

8. **Network security analysis**
- Introduction to network security
- Network security policies
- Physical security controls
- Common network attacks

9. **Network security implementation**
- Authentication
- Access control
- Port, service, and protocol security
- Wireless network security
- Patches and updates
- Mitigation techniques

10. **WAN infrastructure**
- WAN basics
- WAN connectivity methods
- WAN transmission technologies
- VoIP

11. **Cloud and virtualization techniques**
- Virtualization technologies
- Network storage technologies
- Cloud computing

12. **Remote networking**
- Remote network architectures

- Remote access network implementations
- Virtual private networking

13. **Network management**
- Monitor networks
- Document the network
- Establish baselines
- Network performance optimization
- Ensure business continuity

14. **Troubleshooting network issues**
- Network troubleshooting methodology
- Network troubleshooting tools
- Troubleshoot wired connectivity and performance issues
- Troubleshoot wireless connectivity and performance issues
- Troubleshoot network service issues