CPTR1118 - CISCO 2

Credits:	3 (2/1/0)
Description:	This course covers the architecture, components and operations of routers and switches in small networks and introduces wireless local area networks (WLANs) and security concepts. Students learn how to configure and troubleshoot routers and switches for advanced functionality using security best practices and resolve common issues with protocols in both Internet Protocol Version 4 (IPv4) and Internet Protocol Version 6 (IPv6) networks.
Prerequisites:	• CPTR1108
Corequisites:	
Pre/Corequisites*:	
Competencies:	1. Configure virtual local area networks (VLANs) and Inter-VLAN routing applying security best practices. 2. Troubleshoot inter-VLAN routing on Layer 3 devices. 3. Configure redundancy on a switched network using Spanning-Tree Protocol (STP) and EtherChannel. 4. Troubleshoot EtherChannel on switched networks. 5. Explain how to support available and reliable networks using dynamic addressing and first-hop redundancy protocols. 6. Configure dynamic address allocation in Internet Protocol Version 6 (IPv6) networks. 7. Configure wireless local area networks using wireless local communication (WLC) and layer 2 (L2) security best practices. 8. Configure switch security to mitigate Local Area Network (LAN) attacks. 9. Configure Internet Protocol Version 4 (IPv4) and Internet Protocol Version 6 (IPv6) static routing on routers.
MnTC goal areas:	None

**Can be taking as a Prerequisite or Corequisite.*

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