COURSES

PDF CISCO TECHNOLOGIES

CSCO120 Ccna Internetworking Fundamentals 4 Credits
Introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. Uses the OSI and TCP layered models to examine the nature and roles of protocols and services at the application, network, data link, and physical layers. Principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced.

CSCO121 Ccna Routing Protocols 4 Credits
Prerequisites: CSCO120 or consent of instructor Covers the architecture, components, and operation of routers, and explains the principles of routing and routing protocols. Students analyze, configure, verify, and troubleshoot the primary routing protocols RIPv1, RIPv2, EIGRP, and OSPF.

CSCO130 Fundamentals of Wireless Lans 4 Credits
Introduces wireless LAN concepts and focuses on the design, planning, implementation, operation and troubleshooting of wireless networks. Covers a comprehensive overview of technologies, security and design best practices with particular emphasis on hands-on skills.

CSCO220 Ccna Lan Switch Wireless 4 Credits
Prerequisites: CSCO120 Covers an in-depth understanding of how switches operate and are implemented in the LAN environment for small and large networks. Beginning with a foundational overview of Ethernet, provides detailed explanations of LAN switch operation, VLAN implementation, Rapid Spanning Tree Protocol (RSTP), VLAN Trunking Protocol (VTP), Inter-VLAN routing, and wireless network operations. Students analyze, configure, verify, and troubleshoot VLANs, RSTP, VTP, and wireless networks. Campus network design and Layer 3 switching concepts are introduced.

CSCO221 Ccna Wan Fundamentals 4 Credits
Prerequisites: CSCO121 & CSCO220 Explains the principles of traffic control and access control lists (ACLs) and provides an overview of the services and protocols at the data link layer for wide-area access. Students learn how to implement and configure Point-to-Point Protocol (PPP), Point-to-Point Protocol over Ethernet (PPPoE), DSL, and Frame Relay. WAN security concepts, tunneling, and VPN basics are also introduced.

CSCO230 Security Operations Center Fundamentals 4 Credits
Prerequisites: CSCO121 Designed to prepare students for certification in this field (Cisco and CompTIA security exams). Teaches how to design and implement security solutions to reduce the risk of revenue loss and vulnerability. Combines hands-on experience, instructor-led lectures, and a Web based curriculum for students. Provides an introduction to network security and overall security processes.

CSCO280 Ccnp Advanced Routing 4 Credits
Prerequisites: CSCO221 or CCNA Certification Prepares students with the knowledge and skills to necessary to use advanced IP addressing and routing in implementing scalability for Cisco ISR routers connected to LANs and WANs. Covers topics on Advanced IP Addressing, Routing Principles, Multicast Routing, IPv6, Manipulating Routing Updates, and configuring basic BGP, Configuring EIGRP, OSPF, and IS-IS. Recommended preparation for the Building Scalable Cisco Internetworks exam required to become a Cisco Certified Network Professional (CCNP).

CSCO281 Ccnp Secure Convg Wide Nt 4 Credits
Prerequisites: CSCO221 or CCNA Certification Prepares students with the knowledge and skills necessary to secure and expand the reach of an enterprise network to teleworkers and remote sites with focus on securing remote access and VPN client configuration. Covers topics on the Cisco hierarchical network model as it pertains to the WAN, teleworker configuration and access, frame mode MPLS, site-to-site IPSEC VPN, Cisco EZVPN, strategies used to mitigate network attacks, Cisco device hardening and IOS firewall features. Recommended preparation for the Implementing Secure Converged Wide Area Networks exam required to become a Cisco Certified Network Professional (CCNP).