Implementing and Administering Cisco Solutions

Course code: CCNA

This course gives you basic theory and practical knowledge of computer networks built on IPv4 and IPv6 protocols and provides a solid technical background for follow-up Cisco courses in all fields of technology. This is the official training course for 200-301 Cisco Certified Network Associate (CCNA) certification exam. Selected topics are delivered in the form of self-study modules. This CCNA course is a replacement of former ICND1 and ICND2 courses with added new topics about technologies such as SD-Access, SD-WAN, basics of programmability and it also contains selected chapters about wireless networking and network security.

Who is the course for

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What we teach you

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Required skills

- Basic computer literacy
- Basic IP addressing knowledge

Teaching materials

Course material is provided in electronic format.

Course outline

- Basic characteristics of IP networks, OSI and TCP/IP model, network media and cabling LAN network, Ethernet protocol Basic switch configuration
- Configuration and troubleshooting of VLANs and trunks IP addressing (IPv4/IPv6)
- Basic router configuration Static and dynamic routing, inter-VLAN routing
- Introduction to Open Shortest Path First (OSPF) protocol
- Basics of Spanning Tree protocol (STP) and Rapid Spanning Tree protocol (RSTP)
- Configuration and troubleshooting of link aggregation a L3 redundancy WAN networks and protocols, VPN networks
- Configuration and troubleshooting of DHCP, ACL, NAT, Overloading Basic Quality of Service (QoS) concepts
- Introduction to wireless networks
- Introduction to network architectures
- Basics of network programmability and software-defined networks (SDN)
- Introduction of Cisco DNA Center™, Software-Defined Access (SD-Access) and Software-Defined Wide
- Area Network (SD-WAN) technologies Cisco device management - configuration backup, software upgrade, licensing, SNMP, syslog and NetFlow Network security and protection from threats Basic steps for security hardening of network devices

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