

CISCO (CSCO)

CSCO 220 and 221: AS NEEDED

CSCO 120 # - CCNA Internetworking Fundamentals **Units: 4**

Prerequisite: Strongly recommend minimum ACCUPLACER Reading Comprehension score of 74. This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. It 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. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced.

Term Offered: Spring and Fall

CSCO 121 # - CCNA Routing and Switching Essentials **Units: 4**

This course describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. Students will configure and troubleshoot routers and switches and resolve common issues with RIPv1, RIPv2, single-area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks.

Enrollment Requirements: Prerequisite: CSCO 120 with a 'C' or better.

Term Offered: Spring and Fall

CSCO 220 # - CCNA Scaling Networks **Units: 3**

This course describes the architecture, components, and operations of routers and switches in a larger and more complex network. Students learn how to configure routers and switches for advanced functionality. Students will configure and troubleshoot routers and switches and resolve common issues with OSPF, EIGRP, STP, and VTP in both IPv4 and IPv6 networks. Students will also develop the knowledge and skills needed to implement DHCP and DNS operations in a network.

Enrollment Requirements: Prerequisite: CSCO 121 with a C or better.

Term Offered: Spring and Fall

CSCO 221 # - CCNA WAN Fundamentals **Units: 3**

This course discusses the WAN technologies and network services required by converged applications in a complex network. The course enables students to understand the selection criteria of network devices and WAN technologies to meet network requirements. Students learn how to configure and troubleshoot network devices and resolve common issues with data link protocols. Students will also develop the knowledge and skills needed to implement IPSec and virtual private network (VPN) operations in a complex network.

Enrollment Requirements: Prerequisite: CSCO 220 with a C or better.

Term Offered: Spring and Fall

CSCO 230 # - Fundamentals of Network Security **Units: 4**

The Fundamental of Network Security course is designed to prepare students for entry level certification in network security. The course is an introduction to network security and overall security processes. The course teaches students to design and implement security solutions to reduce the risk of revenue loss and network vulnerability.

Transferability: May not transfer towards an NSHE bachelor's degree

Enrollment Requirements: Prerequisite: CSCO 121

Term Offered: Fall