

# ITCC - CIS

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## **ITCC 1404 CISCO Exploration 2 Routing Protocols and Concepts 4 Credit Hours (4 Lec, 1 Lab)**

This course describes the architecture, components, and operations 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, Recognize and correct common routing issues and problems. Model and analyze routing processes. Fall only. Prerequisite: ITCC 1401

Course Type: Technical/Vocational Course

## **ITCC 1414 CCNA 1 Introduction to Networks 4 Credit Hours (3 Lec, 4 Lab)**

This course covers networking architecture, structure, security and functions; introduces the principals and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations to provide a foundation for the curriculum. (Spring only)

Course Type: Technical/Vocational Course

## **ITCC 1440 CCNA 2 Routing and Switching Essentials 4 Credit Hours (4 Lec, 1 Lab)**

Describes the architecture, components, and basic operation of routers and explains the basic principles of routing and routing protocols. It also provides an in-depth understanding of how switches operate and are implemented in the LAN environment for small and large networks.

Course Type: Technical/Vocational Course

## **ITCC 1444 CCNA2 Switching, Routing, and Wireless Essentials 4 Credit Hours (3 Lec, 4 Lab)**

Describes the architecture, components, and operations of routers and switches in small networks and introduces wireless local area networks (WLAN) and security concepts; provides an in-depth understanding of how routers and switches operate and are implemented in the LAN environment. (Fall Only) Prerequisite: ITCC 1414

Course Type: Technical/Vocational Course

## **ITCC 1446 CCNA4 WAN Technologies 4 Credit Hours (4 Lec, 1 Lab)**

Course Type: Technical/Vocational Course

## **ITCC 2410 Cisco Exploration 4 Accessing the WAN 4 Credit Hours (4 Lec, 1 Lab)**

This course 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. Describes user access technologies and devices and discover 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 introduced, Discuss the special network services required by converged applications and an introduction to quality of service (QoS). Fall only

Prerequisites: ITCC 2408, ITCC 1404

Course Type: Technical/Vocational Course

## **ITCC 2412 CCNA3 Scaling Networks 4 Credit Hours (4 Lec, 1 Lab)**

CCNA R&S: Scaling Networks (ScaN) covers the architecture, components, and operations of routers and switches in larger and more complex networks. Students learn how to configure routers and switches using advanced protocols.

Course Type: Technical/Vocational Course

## **ITCC 2413 CCNA4 Connecting Networks 4 Credit Hours (4 Lec, 1 Lab)**

Configure and troubleshoot network devices. Resolve common issues with data link protocols; resolve common issues with OSPF, EIGRP, and STP in both IPv4 and IPv6 networks; implement virtual private network (VPN) operations in a complex network; implement security best practices.

Course Type: Technical/Vocational Course

## **ITCC 2420 CCNA3 Enterprise Networking, Security and Automation 4 Credit Hours (3 Lec, 4 Lab)**

Describes the architecture, components, operations, and security to scale for large, complex networks, including wide area network (WAN) technologies. Emphasizes network security concepts and introduces network virtualization and automation. Prerequisite: ITCC 1444

Course Type: Technical/Vocational Course