

CISCO NETWORK TECHNOLOGY (CNT)

CNT140AB / Introduction to Networks

4 Credits / 6.0 Periods for Lecture & Lab

Focus on the architecture, structure, functions, components, and models of the Internet and other computer networks. Principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced. Students will build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes. Preparation for Cisco certification examination. Prerequisites: None.

Division: Business and Computing Studies

CNT150AB / Switching, Routing, and Wireless Essentials

4 Credits / 6.0 Periods for Lecture & Lab

Focus on configuring switches and routers for use in small and medium size networks. Including Virtual Local Area Networks (VLANs), VLAN trunking, Inter-VLAN routing, Spanning Tree Protocol (STP), EtherChannel, Dynamic Host Configuration Protocol (DHCP), First Hop Redundancy, Local area Network (LAN) and Switch security, and Static routing. Knowledge and skills needed to implement a Wireless Local Area Network (WLAN) is also covered. Preparation for Cisco certification examination. Prerequisites: A grade of C or better in CNT140AB or permission of Instructor.

Division: Business and Computing Studies

CNT160AB / Enterprise Networking, Security, and Automation

4 Credits / 6.0 Periods for Lecture & Lab

Focus on the configuration of routers and switches within small and medium size networks for advanced functionality including Open Shortest Path First (OSPF), Network security, Access Control Lists (ACLs), Network Address Translation (NAT), Wide Area Network (WAN) concepts, Virtual Private Networks (VPNs), Quality of Service (QoS), network management, design, troubleshooting, virtualization, and automation. Preparation for Cisco certification examination. Prerequisites: A grade of C or better in CNT150AB or permission of Instructor.

Division: Business and Computing Studies

CNT202 / Cisco Secure Firewall Appliance Configuration

4 Credits / 5.0 Periods for Lecture & Lab

Applications of Cisco Networking technologies in designing and implementing security solutions to reduce risk of revenue loss and vulnerability. Hands-on experience and skills in security policy design and management, security technologies, products and solutions, secure firewall design, installation, configuration and maintenance, Authentication, Authorization, and Accounting (AAA), Failover, and Virtual Private Network (VPN) implementation using firewalls. Prerequisites: A grade of C or better in CNT160AB or permission of Instructor.

Division: Business and Computing Studies

CNT205 / Cisco Certified Network Associate Security

4 Credits / 6.0 Periods for Lecture & Lab

Associate-level knowledge and skills required to secure Cisco networks. Development of a security infrastructure, identification of threats and vulnerabilities to networks. Mitigation of security threats. Core security technologies. Installation, troubleshooting and monitoring of network devices to maintain integrity, confidentiality and availability of data and devices. Competency in the technologies that Cisco uses in its security structure. Prerequisites: A grade of C or better in CNT160AB, or Cisco Certified Network Associate (CCNA) certification, or permission of Instructor.

Division: Business and Computing Studies

CNT206 / Cisco Certified Network Associate Wireless

4 Credits / 6.0 Periods for Lecture & Lab

Associate-level knowledge and skills required in Cisco wireless networks. Includes comprehensive hands-on labs to design, plan, implement, operate, secure, and troubleshoot wireless networks. Prerequisites: A grade of C or better in CNT160AB or permission of Instructor. Course Notes: Prepares students to earn Cisco Certified Network Associate Wireless (CCNA Wireless) designation by taking the Implementing Cisco Unified Wireless Networks Essentials (IUWNE) exam.

Division: Business and Computing Studies