#### 1

# ELECTRICAL TECHNOLOGY, CISCO CERTIFIED NETWORK INSTALLATION ASSOCIATE

## **Associate in Science Degrees**

Electrical Technology, CISCO Certified Network Installation Associate

 Associate in Science (https://lbcc-public.courseleaf.com/degrees-certificates/electrical-technology-cisco-certified-network-installation-associate/electrical-technology-cisco-certified-network-installation-associate-as/)

#### **Certificates of Achievement**

- CISCO Certified Network Installation Associate Certificate
   of Achievement (https://lbcc-public.courseleaf.com/degrees certificates/electrical-technology-cisco-certified-network-installation associate/cisco-certified-network-installation-associate-certificate achievement/)
- Electrical Technology, CISCO Certified Network Installation Associate
   Certificate of Achievement (https://lbcc-public.courseleaf.com/degrees-certificates/electrical-technology-cisco-certified-network-installation-associate/electrical-technology-cisco-certified-network-installation-associate-certificate-achievement/)

### **Certificate of Accomplishment**

 Network Cabling Specialist - Certificate of Accomplishment (https://lbcc-public.courseleaf.com/degrees-certificates/electrical-technology-cisco-certified-network-installation-associate/network-cabling-specialist-certificate-accomplishment/)

CISCO 250 2 units

Communications Cabling Installation 18 hours lecture, 54 hours laboratory

Corequisite: ELECT 600.

Grading: letter grade or pass/no pass.

This course will present the basic skills and knowledge needed to qualify for employment as a communications cabling installer. The course content will include safe use of tools, copper and fiber optic cabling systems, TIA standards, BICSI best practices, and the National Electrical Code as it applies to low-voltage communications cabling.

CISCO 251 2 units Introduction to Networks

18 hours lecture, 54 hours laboratory

Corequisite: ELECT 600. Grading: letter grade.

This is the first course in a sequence of three that prepares students to pass the Cisco certification exam required to become a Cisco Certified Network Associate (CCNA). The course includes introductions to networking devices, IPv4 and IPv6 addressing schemes, routing and switching concepts, media design and selection, topologies and cabling, electricity and electronics concerns, and network management and trouble-shooting approaches. The instruction for this course is based on the Cisco Networking Academy CCNAv7 curriculum.

CISCO 252 2 units

Switching Routing Wireless Essentials 18 hours lecture, 54 hours laboratory

Prerequisite: CISCO 251. Grading: letter grade.

This is the second course in a sequence of three that prepares students to pass the Cisco certification exam required to become a Cisco Certified Network Associate (CCNA). The course maintains a 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, LAN and Switch Security, and Static Routing. The course also provides knowledge and skills relating needed to implement a wireless LAN (WLAN). The instruction for this course is based on the Cisco Networking Academy CCNAv7 curriculum.

CISCO 253 2 units

Enterprise Network Security Automation 18 hours lecture, 54 hours laboratory

Prerequisite: CISCO 252. Grading: letter grade.

This is the third course in a sequence of three that prepares students to pass the Cisco certification exam required to become a Cisco Certified Network Associate (CCNA). The course maintains a focus on enterprise size networks for advanced functionality. The course describes the architecture, components, operations and security to scale for large complex networks, including Wide Area Network (WAN) technologies. The course emphasizes network security concepts and introduces network virtualization and automation. The instruction for this course is based on the Cisco Networking Academy CCNAv7 curriculum.