



Dear Candidate,

We would like to take this opportunity to thank you for inquiring about our training services here at Brand College. This package has been compiled to provide the information you will need to choose the training program that will be most beneficial for you.

In this package, you will find information on:

- Our organization and its philosophy
- Training programs we offer
- Details on the training program of your inquiry

Every journey begins with a first step. You have already taken this first step by expressing interest in pursuing an educational program. We would welcome the opportunity to be your partner on this journey and help you complete your journey successfully.

Brand College was founded in direct response to the overwhelming demand for qualified computer professionals in today's information age. Armed with extensive background in information technology consulting and training, we are committed to providing students with high quality education that is relevant for today's rapidly changing IT environment. Our team is comprised of certified engineers and trainers who, as a group, have accumulated more than fifty years of practical experience in the field of information technology. Our goal is to maximize each student's educational experience by ensuring that entry-level students are not overwhelmed while more experienced students remain challenged.

Brand College currently offers several certification programs including:

- **CompTIA A+** PC Hardware Technician
- **CompTIA Linux+** Linux Certified Professional
- **MCITP** Microsoft Certified IT Professional
- **CCNA** Cisco Certified Network Associate
- **CCNA Voice** Cisco Certified Network Associate Voice
- **CCNP** Cisco Certified Network Professional
- **CCSP** Cisco Certified Security Professional
- **CCVP** Cisco Certified Voice Professional
- **CNTE** Certified Network Technologies Expert
- **CDNS** Certified Desktop and Network Specialist
- **CLWS** Certified LAN and WAN Specialist
- **CMNS** Certified Multi-Platform Network Specialist
- **CCNE** Cisco Certified Network Expert

Once again, thank you for your inquiry and we look forward to hearing from you in the very near future. Should you have any questions, please do not hesitate to contact our Admissions department by e-mail at [info@brandcollege.us](mailto:info@brandcollege.us) or by phone at (818) 550-0770.

Sincerely,

Brand College

### Cisco Certified Network Associate Voice (CCNA Voice)

Cisco Certified Network Associate Voice (CCNA Voice) validates associate-level knowledge and skills required to administer a voice network. With a CCNA Voice certification, a network professional demonstrates the skills required to perform baseline installation, operating, and maintenance on Cisco VoIP solutions, particularly the Smart Business Communications System from 8-250 lines. The CCNA Voice curriculum includes VoIP technologies such as IP PBX, IP telephony, handset, call control, and voicemail solutions. Candidates also get exposure to the Cisco Unified Communications architecture and design covering mobility, presence, and TelePresence applications.

- Certification program
- 48 Contact Hours, 3 Credit Hours, 6 Weeks

Course No.	Course Name	Quarter Credit Hours	Clock Hours
CCA200	VOICE I	3	48
<b>Total</b>		<b>3</b>	<b>48</b>

### Prerequisites

Candidates wishing to enter this course should have completed the Cisco Certified Network Associate (CCNA).

### Type of Document Received Upon Graduation

Upon successful completion of all program requirements, each student will be awarded a Certificate of Completion.

### Certification Tests

All certification exams are scored on a pass/fail basis. Depending on the specific exam, a correct response to 75% - 80% of the questions will be required to achieve a passing score. Students are encouraged to take exams immediately following completion of the corresponding course.

### Recommended Next Course

Candidates wishing to further their education are recommended to consider the Cisco Certified Network Professional (CCNP) program as the next logical step towards becoming a well rounded IT professional.

## CCNA Voice Program Details

### COURSE CCA200

Title: Cisco Certified Network Associate Voice

Exam: 640-460

#### **Describe the components of the Cisco Unified Communications Architecture**

- Describe the function of the infrastructure in a UC environment
- Describe the function of endpoints in a UC environment
- Describe the function of the call processing agent in a UC environment
- Describe the function of messaging in a UC environment
- Describe the function of auto attendants and IVRs in a UC environment
- Describe the function of contact center in a UC environment
- Describe the applications available in the UC environment, including Mobility, Presence, and Telepresence
- Describe how the Unified Communications components work together to create the Cisco Unified Communications Architecture

#### **Describe PSTN components and technologies**

- Describe the services provided by the PSTN
- Describe time division and statistical multiplexing
- Describe supervisory, informational, and address signaling
- Describe numbering plans
- Describe analog circuits
- Describe digital voice circuits
- Describe PBX, trunk lines, key-systems, and tie lines

#### **Describe VoIP components and technologies**

- Describe the process of voice packetization
- Describe RTP and RTCP
- Describe the function of and differences between codes
- Describe H.323, MGCP, SIP, and SCCP signaling protocols

#### **Describe and configure gateways, voice ports, and dial peers to connect to the PSTN and service provider networks**

- Describe the function and application of a dial plan
- Describe the function and application of voice Gateways
- Describe the function and application of voice ports in a Gateway
- Describe the function and operation of call-legs
- Describe and configure voice dial peers
- Describe the differences between PSTN and Internet Telephony Service Provider circuits

#### **Describe and configure a Cisco network to support VoIP**

- Describe the purpose of VLANs in a VoIP environment
- Describe the environmental considerations to support VoIP
- Configure switched infrastructure to support voice and data VLANs
- Describe the purpose and operation of PoE
- Identify the factors that impact voice quality
- Describe how QoS addresses voice quality issues
- Identify where QoS is deployed in the UC infrastructure

**Implement Cisco Unified Communications Manager Express to support endpoints using CLI**

- Describe the appropriate software components needed to support endpoints
- Describe the requirements and correct settings for DHCP, NTP, and TFTP
- Configure DHCP, NTP and TFTP
- Describe the differences between key system and PBX mode
- Describe the differences between the different types of ephones and ephone-dns
- Configure Cisco Unified Communications Manager Express endpoints
- Configure call-transfer per design specifications
- Configure voice productivity features, including hunt groups, call park, call pickup, paging groups, and paging/intercom
- Configure Music on Hold

**Implement voicemail features using Cisco Unity Express**

- Describe the Cisco Unity Express hardware platforms
- Configure the foundational elements required for Cisco Unified Communications Manager Express to support Cisco Unity Express
- Describe the features available in Cisco Unity Express
- Configure AutoAttendant services using Cisco Unity Express
- Configure basic voicemail features using Cisco Unity Express