



## Enhance Your Resume and Advance Your Career with Professional Certifications from MicroTrain

In today's highly competitive job market it is not uncommon to see hundreds of qualified people applying for the same position. Experience alone is often not enough - you need to stand out from the crowd by not only showcasing what you've done, but what you can do. One of the most effective ways is by enhancing your resumes with professional certifications that demonstrate your skills and prove that you meet global standards of excellence.

MicroTrain's professional certification courses will add credibility and a heightened status to your resume while providing you with valuable skills that you can carry over into your next career. These certifications will help your move your resume to the top of the pile while helping to get the phone to ring with more interviews and hopefully more job offers. In addition, at MicroTrain we have professional career counselors who will help you with your resume, interview tips, networking and even job leads - all designed to get you back to work.

### CCNP: Optimizing Converged Cisco Networks

MicroTrain is one of the leading Cisco training organizations in all of Chicago Our CCNP program is designed to give students the knowledge, and the skills to be successful as a Cisco network professional. This is a single module of the CCNP. The ONT 642-845 exam will certify that the successful candidate has important knowledge and skills in optimizing and providing effective QoS techniques for converged networks. The exam topics include implementing a VoIP network, implementing QoS on converged networks, specific IP QoS mechanisms for implementing the DiffServ QoS model, AutoQoS, wireless security and basic wireless management.

**40 Hours - \$2,745**



The following job titles would benefit greatly from our Cisco training:

- CCNA
- Service Desk Engineer
- Network Engineer
- Network Administrator
- Network Technician
- Security Engineer (CCNA-Sec)
- Consultant
- CCNP--Network Architect
- Network Engineer
- Network Manager
- Communications Engineer
- Consultant
- Telephony Engineer
- Design Engineer

**Training is available at each of our three area locations:**

**Chicago**  
200 W. Adams Street  
Chicago, IL 60606  
Tel: 312.628.9200  
Fax: 312.628.9240

**Lombard**  
720 E. Butterfield Road  
Lombard, IL 60148  
Tel: 630.981.0200  
Fax: 630.981.0210

**Deerfield**  
770 Lake Cook Road  
Deerfield, IL 60015  
Tel: 847-572-0600  
Fax: 847-572-0610



## CCNP: Optimizing Converged Cisco Networks

The Building Converged Cisco Multilayer Switched Networks (BCMSN 642-812) is a qualifying exam for the Cisco Certified Network Professional CCNP and the Cisco Certified Design Professional CCDP certifications. The BCMSN 642-812 exam will certify that the successful candidate has important knowledge and skills necessary to implement scalable multilayer switched networks. The exam includes topics on Campus Networks, describing and implementing advanced Spanning Tree concepts, VLANs and Inter-VLAN routing, High Availability, Wireless Client Access, Access Layer Voice concepts, and minimizing service Loss and Data Theft in a Campus Network.



### Outline of CCNP - ONT

#### 1. Describe Cisco VoIP implementations

Describe the functions and operations of a VoIP network (e.g., packetization, bandwidth considerations, CAC, etc.); Describe and identify basic voice components in an enterprise network; (e.g. Gatekeepers, Gateways, etc.)

#### 2. Describe QoS considerations

Explain the necessity of QoS in converged networks (e.g., bandwidth, delay, loss, etc.); Describe strategies for QoS implementations (e.g. QoS Policy, QoS Models, etc.).

#### 3. Describe DiffServ QoS implementations.

Describe classification and marking (e.g., CoS, ToS, IP Precedence, DSCP, etc.); Describe and configure NBAR for classification; Explain congestion management and avoidance mechanisms; (e.g., FIFO, PQ, WRR, WRED, etc.); Describe traffic policing and traffic shaping (i.e., traffic conditioners); Describe Control Plane Policing.; Describe WAN link efficiency mechanisms (e.g., Payload/Header Compression, MLP with interleaving, etc.); Describe and configure QoS Pre-Classify.

#### 4. Implement AutoQoS.

Explain the functions & operations of AutoQoS.; Describe the SDM QoS Wizard; Configure, verify, & troubleshoot AutoQoS implementations (i.e., MQC).

#### 5. Implement WLAN security and management.

Describe and Configure wireless security on Cisco Clients and APs (e.g., SSID, WEP, LEAP, etc.); Describe basic wireless management (e.g., WLSE and WCS).; Configure and verify basic WCS configuration (i.e., login, add/review controller/AP status, security, and import/review maps); Describe and configure WLAN QoS.

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