

# uCertify

## Course Outline

### Cisco Certified Design Associate



10 May 2024

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Videos and How To

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Here's what you get

Features

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## 1. Course Objective

Gain the skills and expertise required to pass the Cisco CCDA 200-310 exam with Cisco Certified Design Associate course. The course provides complete coverage of the CCDA 200-310 exam and includes topics such as network design methodology; network design models; enterprise LAN design; data center design; Internet protocol version 6 design; routing protocol characteristics, RIP, EIGRP, and IS-IS, and much more.

## 2. Pre-Assessment

Pre-Assessment lets you identify the areas for improvement before you start your prep. It determines what students know about a topic before it is taught and identifies areas for improvement with question assessment before beginning the course.

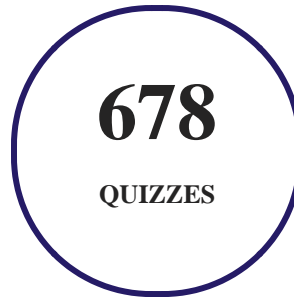
## 3. Exercises

There is no limit to the number of times learners can attempt these. Exercises come with detailed remediation, which ensures that learners are confident on the topic before proceeding.

**108**  
EXERCISES

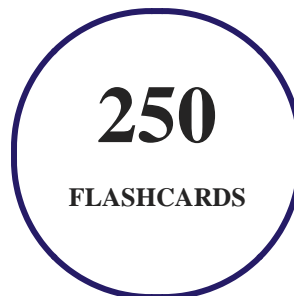
## 4. Quizzes

Quizzes test your knowledge on the topics of the exam when you go through the course material. There is no limit to the number of times you can attempt it.



## 5. flashcards

Flashcards are effective memory-aiding tools that help you learn complex topics easily. The flashcard will help you in memorizing definitions, terminologies, key concepts, and more. There is no limit to the number of times learners can attempt these. Flashcards help master the key concepts.



## 6. Glossary of terms

uCertify provides detailed explanations of concepts relevant to the course through Glossary. It contains a list of frequently used terminologies along with its detailed explanation. Glossary defines the key terms.



## 7. Expert Instructor-Led Training

uCertify uses the content from the finest publishers and only the IT industry's finest instructors. They have a minimum of 15 years real-world experience and are subject matter experts in their fields. Unlike a live class, you can study at your own pace. This creates a personal learning experience and gives you all the benefit of hands-on training with the flexibility of doing it around your schedule 24/7.

## 8. ADA Compliant & JAWS Compatible Platform

uCertify course and labs are ADA (Americans with Disability Act) compliant. It is now more accessible to students with features such as:

- Change the font, size, and color of the content of the course
- Text-to-speech, reads the text into spoken words
- Interactive videos, how-tos videos come with transcripts and voice-over
- Interactive transcripts, each word is clickable. Students can clip a specific part of the video by clicking on a word or a portion of the text.

JAWS (Job Access with Speech) is a computer screen reader program for Microsoft Windows that reads the screen either with a text-to-speech output or by a Refreshable Braille display. Student can easily navigate uCertify course using JAWS shortcut keys.

## 9. State of the Art Educator Tools

uCertify knows the importance of instructors and provide tools to help them do their job effectively. Instructors are able to clone and customize course. Do ability grouping. Create sections. Design grade scale and grade formula. Create and schedule assessments. Educators can also move a student from self-paced to mentor-guided to instructor-led mode in three clicks.

## 10. Award Winning Learning Platform (LMS)

uCertify has developed an award winning, highly interactive yet simple to use platform. The SIIA CODiE Awards is the only peer-reviewed program to showcase business and education technology's finest products and services. Since 1986, thousands of products, services and solutions have been

recognized for achieving excellence. uCertify has won CODiE awards consecutively for last 7 years:

- **2014**

1. Best Postsecondary Learning Solution

- **2015**

1. Best Education Solution
2. Best Virtual Learning Solution
3. Best Student Assessment Solution
4. Best Postsecondary Learning Solution
5. Best Career and Workforce Readiness Solution
6. Best Instructional Solution in Other Curriculum Areas
7. Best Corporate Learning/Workforce Development Solution

- **2016**

1. Best Virtual Learning Solution
2. Best Education Cloud-based Solution
3. Best College and Career Readiness Solution
4. Best Corporate / Workforce Learning Solution
5. Best Postsecondary Learning Content Solution
6. Best Postsecondary LMS or Learning Platform
7. Best Learning Relationship Management Solution

- **2017**

1. Best Overall Education Solution
2. Best Student Assessment Solution
3. Best Corporate/Workforce Learning Solution
4. Best Higher Education LMS or Learning Platform

- **2018**

1. Best Higher Education LMS or Learning Platform

2. Best Instructional Solution in Other Curriculum Areas
3. Best Learning Relationship Management Solution

- **2019**

1. Best Virtual Learning Solution
2. Best Content Authoring Development or Curation Solution
3. Best Higher Education Learning Management Solution (LMS)

- **2020**

1. Best College and Career Readiness Solution
2. Best Cross-Curricular Solution
3. Best Virtual Learning Solution

## 11. Chapter & Lessons

uCertify brings these textbooks to life. It is full of interactive activities that keeps the learner engaged. uCertify brings all available learning resources for a topic in one place so that the learner can efficiently learn without going to multiple places. Challenge questions are also embedded in the chapters so learners can attempt those while they are learning about that particular topic. This helps them grasp the concepts better because they can go over it again right away which improves learning.

Learners can do Flashcards, Exercises, Quizzes and Labs related to each chapter. At the end of every lesson, uCertify courses guide the learners on the path they should follow.

## Syllabus

### Chapter 1: Introduction

- About the 200-310 CCDA Exam
- About the CCDA 200-310 Official Cert Guide



## Chapter 2: Network Design Methodology

- Cisco Architectures for the Enterprise
- Cisco Design Lifecycle: Plan, Build, Manage
- Prepare, Plan, Design, Implement, Operate, and Optimize Phases
- Identifying Customer Design Requirements
- Characterizing the Existing Network
- Designing the Network Topology and Solutions
- References and Recommended Reading
- Review All Key Topics
- Q&A

## Chapter 3: Network Design Models

- Hierarchical Network Models
- Cisco Enterprise Architecture Model
- High Availability Network Services
- References and Recommended Reading
- Review All Key Topics
- Q&A

## Chapter 4: Enterprise LAN Design

- LAN Media
- LAN Hardware
- Campus LAN Design and Best Practices
- References and Recommended Readings
- Review All Key Topics
- Q&A

## Chapter 5: Data Center Design

- Enterprise Data Center Architecture
- Challenges in the Data Center
- Enterprise Data Center Infrastructure
- Virtualization Overview
- Virtualization Technologies
- Data Center Interconnect
- Load Balancing in the Data Center
- References and Recommended Readings

- Review All Key Topics

## Chapter 6: Wireless LAN Design

- Wireless LAN Technologies
- Cisco Unified Wireless Network
- WLAN Design
- References and Recommended Readings
- Review All Key Topics
- Q&A

## Chapter 7: WAN Technologies and the Enterprise Edge

- WAN and Enterprise Edge Overview
- WAN Transport Technologies
- WAN and Edge Design Methodologies
- DMZ Connectivity
- Internet Connectivity
- VPN Network Design
- References and Recommended Readings
- Review All Key Topics

- Q&A

## Chapter 8: WAN Design

- Traditional WAN Technologies
- Remote Site Connectivity
- Enterprise VPN vs. Service Provider VPN
- WAN Backup Design
- Enterprise WAN Architecture
- Enterprise WAN Components
- Enterprise Branch Architecture
- Enterprise Teleworker Design
- References and Recommended Readings
- Review All Key Topics

## Chapter 9: Internet Protocol Version 4 Design

- IPv4 Header
- IPv4 Addressing
- IPv4 Address Subnets

- IPv4 Addressing Design
- Address Assignment and Name Resolution
- References and Recommended Readings
- Review All Key Topics
- Q&A

## Chapter 10: Internet Protocol Version 6 Design

- Introduction to IPv6
- IPv6 Header
- IPv6 Address Representation
- IPv6 Address Scope Types and Address Allocations
- IPv6 Mechanisms
- IPv6 Routing Protocols
- IPv6 Addressing Design
- IPv4-to-IPv6 Transition Mechanisms and Deployment Models
- IPv6 Comparison with IPv4
- References and Recommended Readings
- Review All Key Topics

- Q&A

## Chapter 11: Routing Protocol Characteristics, RIP, EIGRP, and IS-IS

- Routing Protocol Characteristics
- Routing Protocol Metrics and Loop Prevention
- RIPv2 and RIPv6
- EIGRP
- References and Recommended Readings
- Review All Key Topics
- Q&A

## Chapter 12: OSPF, BGP, Route Manipulation, and IP Multicast

- OSPFv2
- OSPFv3
- BGP
- Route Manipulation
- IP Multicast Review
- References and Recommended Readings
- Review All Key Topics

- Q&A

## Chapter 13: Managing Security

- Network Security Overview
- Security Policy and Process
- Trust and Identity Management
- Secure Services
- Threat Defense
- Security Management Solutions
- References and Recommended Readings
- Review All Key Topics

## Chapter 14: Security Solutions

- Cisco SAFE Architecture
- Trust and Identity Technologies
- Detecting and Mitigating Threats
- Security Management Applications
- Integrating Security into Network Devices

- Securing the Enterprise
- References and Recommended Readings
- Review All Key Topics

## Chapter 15: Voice and Video Design

- Traditional Voice Architectures
- Converged Multiservice Networks
- IPT Design
- References and Recommended Readings
- Review All Key Topics
- Q&A

## Chapter 16: Network Management Protocols

- Simple Network Management Protocol
- Other Network Management Technologies
- References and Recommended Reading
- Review All Key Topics
- Q&A



## Chapter 17: Comprehensive Scenarios

- Scenario One: Friendswood Hospital
- Scenario Two: Big Oil and Gas
- Scenario Three: Video Games Spot
- Scenario Four: Diamond Communications

## Chapter 18: Appendix A: OSI Model, TCP/IP Architecture, and Numeric Conversion

- OSI Model Overview
- TCP/IP Architecture
- Numeric Conversion
- References and Recommended Readings

## 12. Practice Test

**Here's what you get**

**70**

**PRE-ASSESSMENTS  
QUESTIONS**

**2**

**FULL LENGTH TESTS**

**81**

**POST-ASSESSMENTS  
QUESTIONS**

## Features

Each question comes with detailed remediation explaining not only why an answer option is correct but also why it is incorrect.

### Unlimited Practice

Each test can be taken unlimited number of times until the learner feels they are prepared. Learner can review the test and read detailed remediation. Detailed test history is also available.

Each test set comes with learn, test and review modes. In learn mode, learners will attempt a question and will get immediate feedback and complete remediation as they move on to the next question. In test mode, learners can take a timed test simulating the actual exam conditions. In review mode, learners can read through one item at a time without attempting it.

## 13. Post-Assessment

After completion of the uCertify course Post-Assessments are given to students and often used in conjunction with a Pre-Assessment to measure their achievement and the effectiveness of the exam.

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