

**uCertify**

# Course Outline

**CCNP-SCOR (350-701)**



11 May 2024

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2. Pre-Assessment
3. Exercises, Quizzes, Flashcards & Glossary  
Number of Questions
4. Expert Instructor-Led Training
5. ADA Compliant & JAWS Compatible Platform
6. State of the Art Educator Tools
7. Award Winning Learning Platform (LMS)
8. Chapter & Lessons  
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Chapter 3: Cryptography  
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Chapter 5: Authentication, Authorization, Accounting (AAA) and Identity Management  
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Here's what you get

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## 1. Course Objective

Create new career opportunities by being Cisco CCNP certified with the CCNP-SCOR (350-701) course and lab. The CCNP security training course and lab comprehensively cover the 350-701 SCOR exam objectives and expertise in the areas such as network security, cloud security, content security, endpoint protection, and detection, secure network access, visibility, and enforcement, and more. The CCNP certification training guide is equipped with comprehensive learning resources to help you deploy and configure Site-to-Site VPNs in Cisco Routers.

## 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.

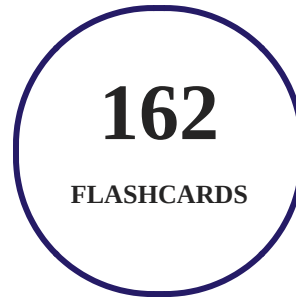
## 3. Quizzes

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.



## 4. 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.



## 5. 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.



## 6. 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.

## 7. 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.

## 8. 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.

## 9. 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

## 10. 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

- The CCNP Security Certification
- The CCIE Security Certification
- The Exam Objectives (Domains)
- Steps to Pass the SCOR Exam
- Facts About the Exam

### Chapter 2: Cybersecurity Fundamentals

- Introduction to Cybersecurity

- Defining What Are Threats, Vulnerabilities, and Exploits
- Common Software and Hardware Vulnerabilities
- Confidentiality, Integrity, and Availability
- Cloud Security Threats
- IoT Security Threats
- An Introduction to Digital Forensics and Incident Response
- Summary
- Review All Key Topics

### Chapter 3: Cryptography

- Introduction to Cryptography
- Fundamentals of PKI
- Review All Key Topics

### Chapter 4: Software-Defined Networking Security and Network Programmability

- Introduction to Software-Defined Networking
- Introduction to Network Programmability
- Review All Key Topics

## Chapter 5: Authentication, Authorization, Accounting (AAA) and Identity Management

- Introduction to Authentication, Authorization, and Accounting
- Authentication
- Authorization
- Accounting
- Infrastructure Access Controls
- AAA Protocols
- Cisco Identity Services Engine (ISE)
- Configuring TACACS+ Access
- Configuring RADIUS Authentication
- Additional Cisco ISE Design Tips
- Review All Key Topics

## Chapter 6: Network Visibility and Segmentation

- Introduction to Network Visibility
- NetFlow
- IP Flow Information Export (IPFIX)
- NetFlow Deployment Scenarios

- Cisco Stealthwatch
- Cisco Cognitive Threat Analytics (CTA) and Encrypted Traffic Analytics (ETA)
- NetFlow Collection Considerations and Best Practices
- Configuring NetFlow in Cisco IOS and Cisco IOS-XE
- Configuring NetFlow in NX-OS
- Introduction to Network Segmentation
- Micro-Segmentation with Cisco ACI
- Segmentation with Cisco ISE
- Review All Key Topics

## Chapter 7: Infrastructure Security

- Securing Layer 2 Technologies
- Common Layer 2 Threats and How to Mitigate Them
- Network Foundation Protection
- Understanding and Securing the Management Plane
- Understanding the Control Plane
- Understanding and Securing the Data Plane
- Securing Management Traffic

- Implementing Logging Features
- Configuring NTP
- Securing the Network Infrastructure Device Image and Configuration Files
- Securing the Data Plane in IPv6
- Securing Routing Protocols and the Control Plane
- Review All Key Topics

## Chapter 8: Cisco Next-Generation Firewalls and Cisco Next-Generation Intrusion Prevention Systems

- Introduction to Cisco Next-Generation Firewalls ...-Generation Intrusion Prevention Systems (NGIPS)
- Comparing Network Security Solutions That Provide Firewall Capabilities
- Deployment Modes of Network Security Solutions and Architectures That Provide Firewall Capabilities
- High Availability and Clustering
- Implementing Access Control
- Cisco Firepower Intrusion Policies
- Cisco Advanced Malware Protection (AMP)
- Security Intelligence, Security Updates, and Keeping Firepower Software Up to Date

- Review All Key Topics

## Chapter 9: Virtual Private Networks (VPNs)

- Virtual Private Network (VPN) Fundamentals
- Deploying and Configuring Site-to-Site VPNs in Cisco Routers
- Configuring Site-to-Site VPNs in Cisco ASA Firewalls
- Configuring Remote Access VPNs in the Cisco ASA
- Configuring Clientless Remote Access SSL VPNs in the Cisco ASA
- Configuring Client-Based Remote-Access SSL VPNs in the Cisco ASA
- Configuring Remote Access VPNs in FTD
- Configuring Site-to-Site VPNs in FTD
- Review All Key Topics

## Chapter 10: Securing the Cloud

- What Is Cloud and What Are the Cloud Service Models?
- DevOps, Continuous Integration (CI), Continuous Delivery (CD), and DevSecOps
- Describing the Customer vs. Provider Security Responsibility for the Different Cloud Service Models
- Cisco Umbrella

- Cisco Email Security in the Cloud
- Cisco Cloudlock
- Stealthwatch Cloud
- AppDynamics Cloud Monitoring
- Cisco Tetration
- Review All Key Topics

## Chapter 11: Content Security

- Content Security Fundamentals
- Cisco WSA
- Cisco ESA
- Cisco Content Security Management Appliance (SMA)
- Review All Key Topics

## Chapter 12: Endpoint Protection and Detection

- Introduction to Endpoint Protection and Detection
- Cisco AMP for Endpoints
- Cisco Threat Response
- Review All Key Topics

## Chapter 13: Final Preparation

- Hands-on Activities
- Suggested Plan for Final Review and Study
- Summary

### 11. Practice Test

#### Here's what you get

**100**

PRE-ASSESSMENTS  
QUESTIONS

**2**

FULL LENGTH TESTS

**100**

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.

## 12. Live Labs

The benefits of live-labs are:

- Exam based practical tasks
- Real equipment, absolutely no simulations
- Access to the latest industry technologies
- Available anytime, anywhere on any device
- Break and Reset functionality
- No hardware costs

## Lab Tasks

### **Cybersecurity Fundamentals**

- Conducting Vulnerability Scanning Using Nessus
- Completing the Chain of Custody

### **Cryptography**

- Configuring IPSec
- Generating an RSA Key Pair
- Generating an Asymmetric Key
- Using OpenSSL to Create a Public/Private Key Pair

## **Authentication, Authorization, Accounting (AAA) and Identity Management**

- Understanding MAC Bypass
- Configuring the AAA Router for TACACS+ Authentication

## **Network Visibility and Segmentation**

- Configuring a Flow Record
- Configuring a Flow Monitor for IPv4 or IPv6
- Defining a Flow Record in Cisco NX-OS
- Defining a Flow Exporter in Cisco NX-OS
- Defining a Flow Monitor with a Custom Record in Cisco NX-OS Software

## **Infrastructure Security**

- Configuring Interfaces as Trunk Ports
- Configuring Router-on-a-Stick and Switch Support for a Router
- Configuring PortFast and Rapid Spanning Tree
- Implementing BPDU Guard on a Switch Port
- Implementing Port Security
- Configuring DHCP Snooping
- Locking Down Switch Ports Administratively
- Enabling AAA Services and Working with Method Lists
- Creating and Working with Parser Views
- Preparing SSH in a Router
- Configuring a Router to Use NTP Services
- Creating a Secure Bootset
- Configuring the IPv6 ACL
- Configuring IPv6
- Configuring and Displaying Control Plane Policing
- Configuring the BGP MD5 Authentication Process between BGP Peers
- Configuring the OSPF MD5 Authentication Process
- Configuring the EIGRP MD5 Authentication Process
- Configuring the RIPv2 MD5 Authentication Process

## **Cisco Next-Generation Firewalls and Cisco Next-Generation Intrusion Prevention Systems**

- Configuring Cisco ASA Application Inspection
- Configuring the Cisco ASA To-The-Box Traffic Filtering
- Configuring Static NAT
- Configuring a Standard ACL
- Configuring Dynamic PAT
- Configuring Dynamic NAT

## **Virtual Private Networks (VPNs)**

- Implementing IPsec VPNs through CLI
- Configuring the GRE Tunnel Interface
- Configuring and Viewing DMVPN Phase 1
- Configuring Site-to-Site IPsec VPN Topology
- Configuring the Cisco ASA Remote Access IPsec VPN IKEv2 Policy, IPsec Policy, and Dynamic Crypto Map
- Configuring the Group Policy in the Cisco ASA
- Creating the IP Pool for VPN Clients
- Creating the Tunnel Group for Remote Access VPN Clients
- Configuring Clientless SSL VPNs on ASA
- Enrolling in the Manual Certificate
- Configuring a Tunnel Group for Clientless SSL VPN
- Configuring the Cisco ASA to Authenticate Users Using a RADIUS Server
- Defining a WebType ACL
- Defining the RADIUS Server for Client-Based SSL VPN
- Configuring Split Tunneling

## **Content Security**

- Configuring PBR in a Cisco Router

**Here's what you get**

**54**

LIVE LABS

**55**

VIDEO TUTORIALS

**01:40**

HOURS

### 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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