



This course supports the assessments for Designing Customized Security. The course covers 5 competencies and represents 6 competency units.

Introduction

Overview

The course provides an introduction to the core security concepts and skills needed for the installation, monitoring, and troubleshooting of network security features, to maintain the integrity, confidentiality, and availability of data and devices.

Successfully completing this course will certify these skills. You will also develop competency in the technologies that Cisco uses in its security infrastructure.

Recommended Experience: You must possess a current Cisco Certified Network Administrator in Routing and Switching certification.

This course prepares students for the following certification exam: Cisco CCNA Security.

Competencies

This course provides guidance to help you demonstrate the following 5 competencies:

- **Competency 428.6.1: Conceptual Design for Network Infrastructure Security**
The graduate identifies technical and security issues, and creates conceptual designs for network infrastructure security.
- **Competency 428.6.2: Logical Design for Infrastructure Security**
The graduate creates logical conceptual designs for network infrastructure security.
- **Competency 428.6.3: Physical Design for Infrastructure Security**
The graduate creates physical designs for network infrastructure security.
- **Competency 428.6.4: Access Control Strategy**
The graduate designs access control strategies for various types of data.
- **Competency 428.6.5: Client Infrastructure Security**
The graduate creates physical designs for client infrastructure security.

Getting Started

Welcome to Designing Customized Security! The assessment for this course is Cisco's Implementing Cisco Network Security (IINS) Exam, a certification exam valued by many employers. Learning resources provided include detailed videos from CBT Nuggets, the contents of the CCNA Security 210-260 Official Cert Guide book and practice activities from Cisco within the uCertify platform, and practice exams from Boson and Pearson that you can use to review the material for the exam and discover areas where you are weaker for you to study further. A detailed pacing guide provides a roadmap for making your way through the course efficiently.



Course Instructor Assistance

As you prepare to successfully demonstrate competency in this subject, remember that course instructors stand ready to help you reach your educational goals. As subject matter experts, mentors enjoy and take pride in helping students become reflective learners, problem solvers, and critical thinkers. Course instructors are excited to hear from you and eager to work with you.

Successful students report that working with a course instructor is the key to their success. Course instructors are able to share tips on approaches, tools, and skills that can help you apply the content you're studying. They also provide guidance in assessment preparation strategies and troubleshoot areas of deficiency. Even if things don't work out on your first try, course instructors act as a support system to guide you through the revision process. You should expect to work with course instructors for the duration of your coursework, so you are welcome to contact them as soon as you begin. Course instructors are fully committed to your success!

Preparing for Success

The information in this section is provided to detail the resources available for you to use as you complete this course.

Learning Resources

Your primary learning resources for this course are:

- CBT Nuggets Video Series: Direct links to videos are provided in the Pacing Guide as well as included in the uCertify platform.
- [CCNA Security 210-260 Official Cert Guide](#): This resource, provided through uCertify, includes a pre-assessment, readings with integrated knowledge checks, practice labs, and two practice exams.

Practice Labs

Use the Practice Labs simulations to work through and practice the exam content. Direct links to these simulations are included in the "Virtual Lab" activities that can be found throughout the course.

Practice Exams

Two sets of practice exams are included to help you make sure you are ready for success with the certification exam:

- Practice Test A and Practice Test B from Pearson are included in your [uCertify course](#).
- Practice tests from Boson are also provided, and require manual enrollment.

Manually Enrolled Resource for Boson

Take a moment to enroll in the Boson learning resource. To enroll, navigate to the "Learning Resources" tab, click the "Sections" button, and then click the "Enroll Now" button. Once your



mentor approves your enrollment, you will receive an email with further access instructions. Contact your mentor if you have questions.

Study Tips

This course is not easy, so pay close attention to the following tips so you can pass the exam the first time.

It is essential to read the materials prior to attempting the simulations/exercises to ensure you have a full and applicable understanding of the concepts and competencies required for successful completion of the practice exams.

Tips From Your Course Instructor

- The concepts presented in this course are not necessarily difficult, but the sheer volume of information can be daunting, especially because you are expected to have internalized each concept—you are not allowed to look things up. Because of this, previous experience may or may not help.
- Do not rely on practice exams; practice exams may help build your confidence, but the real exam will phrase the questions differently, offer dissimilar choices, and might use unfamiliar terminology. Practice exams should only be used to discover weak areas for further studying and review.
- View the exam comments of other students cautiously. Each version of this exam is different. If others advise you to skip studying a piece of technology because it was not on the exam, what they mean is that it was not on their exam—it might be on yours.
- You will need a current, valid CCNA certification to receive the CCNA Security certification from Cisco. You will need to submit your scores to WGU after completing this exam.
- *Before you take the Cisco 210-260 IINS exam, you must have successfully passed either*
 - *the 200-120 CCNA EXAM, or*
 - *both the 100-101 ICND1 and 200-101 ICND2 exams earning the CCNA certification, or*
 - *both the 100-105 ICND1 and 200-105 ICND2 exams earning the CCNA certification.*
- If you have not earned your CCNA, you will not be allowed to take this exam. Please contact the course instructor if you have questions.
- When scheduling, you may wish to choose a date that is about a month out to give you time to solidify your understanding of the material.

Pacing Guide

The pacing guide suggests a weekly structure to pace your completion of learning activities. It is provided as a suggestion and does not represent a mandatory schedule. Follow the pacing guide carefully to complete the course in the suggested timeframe.

Week 1



- Networking Security Concepts
 - Review the Cisco FAQ in the [CCNA Links](#)
 - Watch CBT Nuggets Videos:
 - [Welcome to CCNA Security](#) (2:19)
 - [CIA \(Confidentiality, Integrity, and Availability\)](#) (6:31)
 - Cisco Official Certification Guide Chapters 1–2
 - Chapter 1 "Networking Security Concepts"
 - Chapter 2 "Common Security Threats"
 - Complete Beginning Chapter Quiz 1–2

Week 2

- Implementing AAA and BYOD
 - Watch CBT Nuggets Videos:
 - [AAA, Review, and Assessment](#) (18:20)
 - [AAA on the ASA](#) (1:08)
 - [AAA on the ASA \(Cisco CCNP Security Firewall\)](#) (47:43)
 - Cisco Official Certification Guide Chapters 3–4
 - Chapter 3 "Implementing AAA in Cisco IOS"
 - Chapter 4 "Bring Your Own Device (BYOD)"
 - Complete Beginning Chapter Quiz 3–4

Week 3

- Fundamentals of VPN, Cryptography, and IP Security
 - Watch CBT Nuggets Videos:
 - [Cryptography, IPsec, and SSL/TLS](#) (1:56)
 - [Going Deeper into Crypto and VPNs](#) (4:11)
 - [Crypto Review and Lab](#) (19:08)
 - [Crypto and VPN Assessment](#) (4:40)
 - Cisco Official Certification Guide Chapters 5–6
 - Chapter 5 "Fundamentals of VPN Technology and Cryptography"
 - Chapter 6 "Fundamentals of IP Security"
 - Complete Beginning Chapter Quiz 5–6

Week 4

- Implementing IPsec Site-to-Site VPNs and SSL VPNs
 - There are no videos for Week 4. You may want to watch some of the videos from Week 5 to get ahead.
 - Cisco Official Certification Guide Chapters 7–8
 - Chapter 7 "Implementing IPsec Site-to-Site VPNs"
 - Chapter 8 "Implementing SSL VPNs Using Cisco ASA"
 - Complete Beginning Chapter Quiz 7–8



Week 5

- Securing Layer 2 Technologies and Network Foundation Protection
 - Watch CBT Nuggets Videos:
 - [Port Security Concepts](#) (14:13)
 - [Port Security Implementation](#) (10:45)
 - [DHCP Snooping Concepts](#) (15:16)
 - [DHCP Snooping Implementation](#) (16:27)
 - [PVLAN Concepts](#) (9:51)
 - [PVLAN Implementation](#) (13:36)
 - [DAI Concepts](#) (16:39)
 - [DAI Implementation](#) (16:04)
 - [Secure Switching](#) (3:31)
 - [Securing the Switched Data-plane](#) (50:47)
 - [Secure Switching Review](#) (8:35)
 - [Network Foundation Protection](#) (38:17)
 - [Controlling the IPv4 Data-plane with ACLs](#) (34:21)
 - Cisco Official Certification Guide Chapters 9–10
 - Chapter 9 "Securing Layer 2 Technologies"
 - Chapter 10 "Network Foundation Protection"
 - Complete Beginning Chapter Quiz 9–10

Week 6

- Securing the Management and Data Plane
 - Watch CBT Nuggets Videos:
 - [NFP, Hardening, AAA, and more](#) (2:28)
 - [Fortifying the Local Router](#) (42:09)
 - [AAA, RADIUS and TACACS+](#) (47:38)
 - [Tools to Protect the Management-plane](#) (43:12)
 - Cisco Official Certification Guide Chapters 11–12
 - Chapter 11 "Securing the Management Plane on Cisco IOS Devices"
 - Chapter 12 "Securing the Data Plane in IPv6"
 - Complete Beginning Chapter Quiz 11–12

Week 7

- Securing Routing Protocols and Firewall Fundamentals
 - Watch CBT Nuggets Videos:
 - [IOS Firewall Services](#) (3:18)
 - Cisco Official Certification Guide Chapters 13–14
 - Chapter 13 "Securing Routing Protocols and the Control Plane"
 - Chapter 14 "Understanding Firewall Fundamentals"
 - Complete Beginning Chapter Quiz 13–14



Week 8

- Cryptography IPsec/SSL
 - Watch CBT Nuggets Videos:
 - [ZBF GNS3 Integration](#) (23:53)
 - [Zone-Based Firewall Review](#) (17:05)
 - [ASA Concepts](#) (2:52)
 - [ASA GNS3 Integration](#) (11:29)
 - [ASA Activation](#) (7:24)
 - [Build an ASA GNS3 Topology](#) (13:33)
 - [ASA CLI configuration in GNS3](#) (20:16)
 - [ASA and ASDM working in GNS3](#) (13:37)
 - [ASA NAT](#) (4:25)
 - [NAT on the ASA, 8.2, 8.3 and beyond](#) (1:11:23)
 - [ASA NAT Lab](#) (14:47)
 - [ASA ACLs](#) (16:40)
 - [ASA MPF, Modes & HA](#) (4:04)
 - [ASA MPF and DMZ Lab](#) (20:07)
 - Cisco Official Certification Guide Chapters 15–16
 - Chapter 15 "Implementing Cisco IOS Zone-Based Firewalls"
 - Chapter 16 "Configuring Basic Firewall Policies on Cisco ASA"
 - Complete Beginning Chapter Quiz 15–16
- Schedule the exam in about a month

Week 9

- Cisco IDS/IPS Fundamentals and Threat Mitigation Technologies
 - Watch CBT Nuggets Videos:
 - [IDS & IPS Fundamentals](#) (3:30)
 - [IDS/IPS Review and Assessment](#) (16:21)
 - [FirePOWER](#) (12:30)
 - [Defense in Depth](#) (18:15)
 - Cisco Official Certification Guide Chapters 17–19
 - Chapter 17 "Cisco IDS/IPS Fundamentals"
 - Chapter 18 "Mitigation Technologies for E-Mail-Based and Web-Based Threats"
 - Chapter 19 "Mitigation Technologies for Endpoint Threats"
 - Complete Beginning Chapter Quiz 17–18

Week 10

- Practice Exam



- Cisco Official Certification Guide Chapter 20
 - Chapter 20 "Final Preparation"
- Complete Beginning Chapter Quiz 20
- Practice Test A in [uCertify](#)
- Boson Practice Exam (Start)

Week 11

- Initial Review
 - Practice Test B in [uCertify](#)
 - Boson Practice Exam (Finish)
 - Review low scoring areas based on exams/labs

Week 12

- Final Review
 - Watch CBT Nuggets Videos:
 - [Putting on the Parka](#) (5:25) and review the [Parka Document 210-260](#)
 - Review any exam changes in [the CCNA Links](#)
 - Final review low scoring areas based on exams/labs
 - Complete exam within 1 week

*CBT Nuggets and the official certification guide are independent resources and may not match exactly. This pacing guide is just one suggested road map to the course; some students prefer their own strategy. (Review all videos before reviewing the cert guide, 8-week total time frame, etc.)

Note: This pacing guide does not replace the course. Please continue to refer to the course for a comprehensive list of the resources and activities.

Final Assessment Tips

One of the many things that makes WGU unique is its competency-based education model. If you know the material, all you have to do is prove it by passing the exam. If you can do this, you can accelerate the receipt of your degree.

To make sure you have the best possible chance of passing the exam on your first attempt, the following steps should be completed before you refer to take it:

1. Review the CBT Nuggets videos and complete the pre-assessments and post-assessments.
2. Review the *Official Cert Guide CCNA Security 210-260*, completing the "Do I know this already?" of chapter quizzes and reviews.



3. Make sure you have a thorough understanding of the major exam topics. Cisco maintains a complete list of topics with exact percentages: [IINS Exam Topics](#)
4. Test your exam readiness with the online Boson practice exam. Don't just try for a passing score, review the questions you missed and understand why you got them wrong.

If you have completed the steps above and you feel comfortable with all of the concepts presented, you are most likely ready to attempt the exam.

If you fail your first attempt, you will be required to contact the course instructor to see what went wrong and how you can prepare to ensure a successful second attempt. After determining you are ready, your course instructor will approve your request to make another exam attempt.

Outside Vendor Assessment Information to complete the Cisco IOS Network Security Exam (IINS 210-260):

For directions on how to receive access to outside vendor assessments, see the "[Accessing Objective and Outside Vendor Assessments](#)" page.

Submitting Outside Vendor Assessment Scores

After completing an outside vendor assessment, follow the directions for submitting a score report on the "[Following Outside Vendor Assessments](#)" page.

Assessment Details

Complete the Implementing Cisco IOS Network Security Exam (IINS 210-260).

- Number of questions: 60–70 (including simulation questions)
- Time Limit: 90 minutes