

Cisco 700-020 Exam Prep 2026

Cisco 700-020 2026. Advanced enterprise routing, switching, security, and automation for sales and engineering pros.

[IT Certifications](#) Instructor: Jason Miller • 5 sections • 42 lessons • 13.25h total

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About this course

Preparing for the 700-020 exam can feel overwhelming with all the new technologies and concepts to cover. This course breaks down the 2026 exam objectives into manageable, real scenarios, focusing on what you will actually face in the field and on the test. We skip the fluff and get straight to the configurations and strategies that matter.

You will learn how to configure and troubleshoot advanced enterprise networks, apply modern switching principles, and understand the latest security and automation features. Each module includes step-by-step labs, downloadable configuration templates, and practical case studies.

Course curriculum

Foundations and Exam Overview

- **Navigating the 700-020 Exam Objectives for 2026 (12m)**
A clear breakdown of the key domains and weightings for the 2026 exam, so you know exactly where to focus your study time.
- **Setting Up Your Cisco Lab Environment (18m)**
Step-by-step guide to building a virtual lab using Cisco Packet Tracer or EVE-NG to practice configurations safely.
- **Essential CLI Refresher for Advanced Topics (9m)**
Quick review of crucial command-line interface commands you'll need before diving into complex configurations.
- **Understanding Enterprise Network Architecture (15m)**
We'll explore the core design principles for modern enterprise networks, including core, distribution, and access layers.
- **Key Terminology and Acronyms You Must Know (8m)**
A practical glossary of must-know terms and acronyms to help you decode exam questions with confidence.
- **Your Study Plan and Timeline Strategy (11m)**
How to structure your study schedule to cover all topics effectively without burning out before the exam date.
- **Common Exam Pitfalls and How to Avoid Them (14m)**
Learn from others' mistakes. We cover common traps, tricky question formats, and time management tips.

Core Concepts: Advanced Routing & Switching

- **Configuring OSPFv3 for IPv6 Environments (22m)**
Hands-on lab showing how to implement and verify OSPFv3, focusing on neighbor relationships and route advertisement.
- **Implementing EIGRP Advanced Features (25m)**
Deep dive into EIGRP named mode, stub routing, and variance for load balancing, with real-world use cases.
- **BGP Fundamentals for Enterprise Networks (32m)**
A practical look at BGP configuration, route maps, and path selection for multi-homed internet connections.
- **VLAN Trunking and Spanning Tree Deep Dive (28m)**
Master VTP, DTP, and the nuances of RSTP and MSTP to build resilient, loop-free switched networks.
- **Troubleshooting Inter-VLAN Routing Issues (16m)**
Problem-solving session: We diagnose and fix common Layer 3 switching and routing failures in a lab scenario.

- **First-Hop Redundancy Protocols in Action (19m)**
Configure and compare HSRP, VRRP, and GLBP to ensure high availability for your network's default gateway.
- **Understanding Route Redistribution (24m)**
Learn the correct way to redistribute routes between OSPF, EIGRP, and BGP while avoiding routing loops.
- **Configuring IPv4 and IPv6 Static Routes (10m)**
Beyond the basics: recursive routes, floating statics, and administrative distance explained with labs.
- **Link-State Routing Protocol Behavior (13m)**
Understand the OSPF database, LSA types, and how link-state protocols converge after a network change.

Deep Dive: Security and Automation

- **Implementing Basic Access Control Lists (ACLs) (20m)**
Standard and extended ACLs, including placement strategies for filtering traffic effectively without disrupting users.
- **Securing Switch Ports with Port Security (11m)**
How to configure sticky MAC addresses, violation modes, and protect your Layer 2 infrastructure from attacks.
- **Introduction to Network Device Hardening (17m)**
Practical steps for securing your Cisco devices: disabling unused ports, setting passwords, and configuring SSH.
- **Understanding VPN Concepts and IPsec (23m)**
A conceptual and practical overview of VPNs, encryption, and how to configure a basic site-to-site IPsec tunnel.
- **Automating Networks with Python Basics (26m)**
Get started with network automation using simple Python scripts to connect to devices and pull operational data.
- **Using Ansible for Configuration Management (30m)**
A beginner-friendly look at using Ansible playbooks to push standardized configurations to multiple routers.
- **APIs and RESTCONF/NETCONF Overview (15m)**
Learn how modern Cisco devices interact with controllers and automation tools using APIs.

Advanced Application: QoS and Services

- **Quality of Service (QoS) Models and Tools (21m)**
Compare Best Effort, IntServ, and DiffServ. Learn when to use policing vs. shaping for traffic management.
- **Configuring Classification and Marking (19m)**
Hands-on guide to using NBAR, MQC, and DSCP values to prioritize critical voice and video traffic.
- **Implementing Shaping and Policing (27m)**
Step-by-step configuration of traffic shaping (CBWFQ) and policing to manage bandwidth on rate-limited links.

- **Wireless LAN Controller (WLC) Basics (24m)**
Understanding how lightweight APs, WLCs, and CAPWAP tunnels work together in a modern wireless deployment.
- **Configuring SSIDs and Security Policies (18m)**
How to set up wireless networks with WPA3, RADIUS authentication, and guest portal integration.
- **DHCP and DNS for Enterprise Scale (12m)**
Configuring Cisco IOS DHCP servers and relays, plus best practices for internal and external DNS resolution.
- **Network Time Protocol (NTP) and Logging (9m)**
Why synchronized time is critical for security and troubleshooting, and how to configure NTP hierarchies.
- **High Availability with StackWise and VSS (16m)**
Explore Cisco's hardware redundancy technologies to build bulletproof switching infrastructures.
- **Monitoring with SNMP and Syslog (22m)**
Set up SNMPv3 and Syslog servers to proactively monitor network health and capture critical events.

Implementation & Final Review

- **Full-Scale Lab: Building a Branch Office Network (35m)**
A complete build-out scenario: configure routing, switching, security, and wireless for a simulated branch office.
- **Troubleshooting Complex Network Scenarios (38m)**
We throw three difficult, multi-layered problems at you and walk through the systematic troubleshooting process.
- **Exam Strategy: Reading Questions and Managing Time (14m)**
Pro tips for dissecting complex questions, eliminating wrong answers, and pacing yourself during the 700-020.
- **Key Configuration Drills (Cheat Sheet Creation) (20m)**
Let's build your personal quick-reference guide for the most critical commands you'll need to type from memory.
- **Final Mock Exam Walkthrough: Part 1 (32m)**
Solve a set of practice questions together, focusing on the 'why' behind each correct answer.
- **Final Mock Exam Walkthrough: Part 2 (30m)**
Continuing our mock exam review with more challenging questions on routing protocols and automation.
- **Reviewing Weak Areas: A Targeted Approach (13m)**
How to use your practice test results to identify and aggressively review your knowledge gaps before the test.
- **What to Expect on Exam Day (8m)**
A checklist for the day of the exam: what to bring, what to expect at the testing center, and mental prep.
- **Beyond the Exam: Continuing Your Cisco Journey (11m)**
Where to go after 700-020. We discuss specialization paths, professional certifications, and staying current.

- **Course Wrap-up and Next Steps** (7m)

Congratulations! A final review of the course resources and a clear plan for your final review sessions.

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