

Cisco 100-490 2026 Certification Prep

Pass the Cisco 100-490 2026 exam. Practical networking skills, device configuration, and troubleshooting.

[IT Certifications](#) Instructor: Jason Miller • 5 sections • 46 lessons • 14.75h total

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About this course

This course is for IT professionals and career changers who need to pass the Cisco 100-490 exam in 2026. We will break down the exam objectives into manageable parts, focusing on the practical networking skills that Cisco expects you to know.

You will learn how to configure and troubleshoot Cisco devices, understand network fundamentals, and apply security practices. The course includes video lessons, real case studies, and hands-on configuration exercises that mirror what you will see on the actual exam.

Course curriculum

Section 1: Foundations and Exam Overview

- **Understanding the 100-490 Exam Structure (12m)**
Learn what to expect on the 2026 exam, including question types and scoring, with a downloadable exam blueprint checklist.
- **Setting Up Your Practice Lab Environment (18m)**
Step-by-step guide to creating a free virtual lab using Packet Tracer and Cisco's learning resources.
- **Networking Fundamentals You Must Know (25m)**
Cover essential concepts like IP addressing, subnetting, and OSI model layers with practical examples.
- **Cisco Device Basics and CLI Navigation (15m)**
How to access and navigate Cisco device command line interfaces for configuration tasks.
- **Common Exam Terminology Explained (10m)**
Demystify key terms you'll encounter on the exam, from 'port security' to 'routing protocols.'
- **Creating Your Study Schedule for Success (8m)**
A practical template for planning your 8-week study timeline with realistic daily goals.
- **Avoiding Common Exam Day Pitfalls (12m)**
Real advice from certified professionals on managing time and stress during the test.

Section 2: Core Networking Concepts

- **Configuring Basic IP Routing (22m)**
Hands-on configuration of static and default routes with a downloadable command reference sheet.
- **Switching Fundamentals and VLAN Setup (28m)**
Learn how to create and manage VLANs on Cisco switches with real case study examples.
- **Troubleshooting Connectivity Issues (24m)**
Problem-solving session using ping, traceroute, and show commands to diagnose network problems.
- **Wireless Network Basics for 100-490 (16m)**
Understanding wireless standards and basic configuration for the exam objectives.
- **Network Security Fundamentals (20m)**
Implementing basic security measures like port security and ACLs with practical examples.
- **Understanding Network Services (18m)**
How DHCP, DNS, and NTP work in Cisco environments with configuration walkthroughs.
- **IPv6 Configuration for Beginners (21m)**
Step-by-step guide to configuring IPv6 addresses and basic routing on Cisco devices.
- **Network Device Management (14m)**
Using Cisco's management tools and best practices for device maintenance.
- **Real Exam Question Walkthrough: Part 1 (19m)**
Analyze actual 100-490 style questions and learn the thought process for answering correctly.

Section 3: Advanced Configuration Skills

- **Advanced VLAN and Trunk Configuration (26m)**
Deep dive into VLAN trunking protocols and troubleshooting with lab exercises.
- **Implementing Spanning Tree Protocol (23m)**
Configure and verify STP to prevent network loops with real-world scenarios.
- **Link Aggregation with EtherChannel (17m)**
Step-by-step setup of LACP and PAgP for bandwidth aggregation on switches.
- **Inter-VLAN Routing Configuration (20m)**
Configure router-on-a-stick and layer 3 switch routing with downloadable templates.
- **Access Control Lists (ACLs) Deep Dive (25m)**
Create and apply standard and extended ACLs for network security with case studies.
- **NAT Configuration for Home and Business Networks (19m)**
Configure static, dynamic, and PAT on Cisco routers for real-world scenarios.
- **Troubleshooting Complex Network Issues (32m)**
Problem-solving session with multi-layer issues and resolution strategies.
- **Real Exam Question Walkthrough: Part 2 (15m)**
More practice with challenging 100-490 questions and answer justification.

Section 4: Security and Advanced Topics

- **Implementing Port Security on Switches (16m)**
Configure sticky MAC addresses and violation modes with practical examples.
- **Wireless Security Configuration (22m)**
Set up WPA2/WPA3 and understand wireless security best practices for the exam.
- **VPN Fundamentals for 100-490 (18m)**
Basic VPN concepts and configuration on Cisco devices with lab exercises.
- **Device Hardening Techniques (20m)**
Secure Cisco devices with password policies, service disabling, and logging.
- **Network Monitoring and Management (17m)**
Use SNMP and syslog for monitoring with configuration examples and templates.
- **QoS Basics for Network Traffic (19m)**
Implement basic Quality of Service to prioritize network traffic with real cases.
- **IPv6 Security Considerations (14m)**
Security aspects specific to IPv6 networks and configuration tips.
- **Troubleshooting Security Issues (28m)**
Problem-solving session on common security misconfigurations and fixes.
- **Real Exam Question Walkthrough: Part 3 (21m)**
Advanced question analysis with focus on security scenarios from the exam.
- **Downloadable Security Configuration Checklist (8m)**
A comprehensive checklist for implementing security measures on Cisco devices.

Section 5: Implementation and Exam Readiness

- **Full Network Design Project (35m)**
Apply all skills in a complete network design project with downloadable project template.
- **Practice Exam Strategy and Timing (15m)**
How to approach practice exams and manage your time effectively during the real test.
- **Common 100-490 Exam Scenarios (24m)**
Walk through typical exam scenarios you'll encounter with step-by-step solutions.
- **Final Review: Key Commands and Concepts (22m)**
Comprehensive review of all critical commands and concepts with flashcard format.
- **Lab Practice: Complete Configuration Task (30m)**
Hands-on lab where you configure a complete small network from scratch.
- **Troubleshooting Lab: Real-World Problems (28m)**
Practice diagnosing and fixing common network issues with guided solutions.
- **Exam Day Preparation Checklist (10m)**
Final preparation steps and mental readiness techniques for test day.
- **Post-Certification Career Path Guidance (18m)**
What to do after passing: job opportunities, next certifications, and salary insights.
- **Setting Up Your Home Lab for Continued Learning (20m)**
How to build a cost-effective home lab for ongoing skill development.
- **Accessing Cisco's Free Learning Resources (12m)**
Navigate Cisco's learning portal and find free materials to supplement your studies.
- **Community and Support: Finding Study Groups (10m)**
Where to find study partners, forums, and online communities for 100-490 candidates.
- **Final Q&A: Common Questions Answered (16m)**
Instructor answers the most common questions from students about the exam and preparation.

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