

# Cisco 500-220 Exam Preparation 2026

Cisco 500-220 2026. Study planning, troubleshooting techniques, and practical exam prep.

IT Certifications

Instructor: Brian Mitchell • 5 sections • 45 lessons • 13.50h total

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## About this course

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This course helps you prepare for the Cisco 500-220 exam with a practical approach. We will tackle the common challenges and knowledge gaps that professionals face, focusing on real-world application of the exam topics.

You will learn how to structure your study plan, understand key exam objectives, and apply troubleshooting techniques through step-by-step guides and real case study analysis. The course includes video lessons, practical exercises, and downloadable templates.

# Course curriculum

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## Exam Foundations and Planning

- **Understanding the 500-220 Exam Structure (12m)**  
Learn the exam format, question types, and scoring to plan your study effectively.
- **Creating Your Personalized Study Plan (18m)**  
Step-by-step guide to building a realistic study schedule that fits your busy work life.
- **Key Exam Domains and Objectives Overview (15m)**  
Break down the major topics covered on the exam and how they relate to real-world tasks.
- **Setting Up Your Practice Environment (8m)**  
How to configure a lab setup or use simulators for hands-on practice.
- **Essential Resources and Tools for 2026 (10m)**  
Review the latest study materials, including books, online resources, and practice tests.
- **Avoiding Common Study Pitfalls (9m)**  
Identify and overcome typical mistakes that derail exam preparation.
- **Tracking Your Progress Effectively (7m)**  
Use downloadable templates to monitor your study hours and topic mastery.

## Core Networking Concepts

- **TCP/IP Fundamentals for the Exam (20m)**  
Deep dive into TCP/IP layers and protocols with real-world examples.
- **Cisco IOS and Command-Line Basics (25m)**  
Hands-on session with essential Cisco IOS commands for configuration.
- **VLAN and Trunking Configuration (22m)**  
Step-by-step guide to setting up VLANs and trunks in a lab environment.
- **Spanning Tree Protocol (STP) Explained (18m)**  
Learn how STP works and how to troubleshoot common issues.
- **Routing Protocols: OSPF and EIGRP (30m)**  
Compare OSPF and EIGRP, with configuration examples and case studies.
- **IP Addressing and Subnetting Practice (15m)**  
Practice subnetting with real exam-style problems and solutions.
- **Wireless Networking Basics (12m)**  
Overview of wireless standards and Cisco wireless solutions for the exam.
- **Security Fundamentals for Network Engineers (16m)**  
Key security concepts like ACLs and port security, with practical examples.
- **IPv6 Implementation Overview (14m)**  
Understand IPv6 addressing and configuration for modern networks.

## Advanced Troubleshooting Techniques

- **Layer 1 and 2 Troubleshooting Methods (17m)**  
Systematic approach to diagnosing physical and data link layer issues.

- **Troubleshooting Routing Problems (21m)**  
Use show commands and logs to identify and fix routing failures.
- **Wireless Troubleshooting Scenarios (19m)**  
Real case study analysis of common wireless connectivity problems.
- **Using Cisco Packet Tracer for Practice (23m)**  
Hands-on lab to simulate and solve network issues in Packet Tracer.
- **Performance Monitoring and Analysis (16m)**  
Learn to use SNMP and NetFlow to monitor network health.
- **Security Incident Response Basics (13m)**  
Step-by-step guide to responding to security alerts on Cisco devices.
- **Problem-Solving Session: Complex Network Issues (28m)**  
Interactive session tackling multi-layer problems with downloadable checklists.

## **Cisco Solutions and Configuration**

- **Configuring Cisco Switches for Enterprise Networks (24m)**  
Real-world configuration examples for access and distribution switches.
- **Setting Up Cisco Routers for Routing (26m)**  
Hands-on lab to configure routers with OSPF and static routes.
- **Implementing Cisco Firewalls and VPNs (22m)**  
Step-by-step guide to setting up basic firewall rules and VPN tunnels.
- **Cisco DNA Center and Automation Basics (18m)**  
Introduction to network automation tools for the 2026 exam.
- **Quality of Service (QoS) Configuration (20m)**  
Learn to prioritize traffic with practical QoS examples.
- **Cisco Unified Communications Overview (14m)**  
Understand VoIP basics and Cisco collaboration tools.
- **Data Center Networking Concepts (25m)**  
Explore Nexus switches and data center designs relevant to the exam.
- **Cloud Integration with Cisco Meraki (17m)**  
How to use Meraki for cloud-managed networks, with case studies.
- **Exam-Style Configuration Scenarios (32m)**  
Practice configuring complex setups under timed conditions.
- **Reviewing Configuration Best Practices (15m)**  
Downloadable template for documenting and reviewing your configurations.

## **Practice, Review, and Exam Day Strategies**

- **Full-Length Practice Exam Walkthrough (35m)**  
Analyze a complete practice test with explanations for each question.
- **Analyzing Your Practice Test Results (19m)**  
Use a spreadsheet template to identify weak areas and focus your study.
- **Time Management During the Exam (12m)**  
Strategies to pace yourself and avoid rushing through questions.

- **Handling Exam Anxiety and Stress (10m)**  
Practical tips to stay calm and focused on exam day.
- **Last-Minute Review Techniques (8m)**  
Quick methods to reinforce key concepts the day before the exam.
- **What to Expect on Exam Day (9m)**  
Step-by-step guide to the testing center process and what to bring.
- **Post-Exam Analysis and Next Steps (11m)**  
How to interpret your score report and plan for recertification.
- **Building a Long-Term Career Plan (16m)**  
Use case studies to map out your career path after certification.
- **Advanced Troubleshooting Drills (28m)**  
Intensive problem-solving sessions with real-world scenarios.
- **Community Resources and Study Groups (7m)**  
How to join online forums and study groups for ongoing support.
- **Final Exam Simulation (40m)**  
Complete a timed simulation to build confidence and endurance.
- **Creating Your Personal Action Plan (13m)**  
Downloadable template to set goals for your next certification steps.

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