# Implementing and Administering Cisco Solutions (CCNA) Training

Duration: **5 Day**

BİLGİNÇ IT Academy
info@bilginc.com
bilginc.com

This instructor-led training provides a **comprehensive introduction to modern networking**. Participants will learn how to **install, configure, operate, and verify** basic IPv4 and IPv6 networks. The course also explores **AI and machine learning applications** in network operations — preparing learners for the future of intelligent networking.

You'll gain **hands-on experience** working with Cisco switches, routers, and wireless LAN controllers (WLC), and be ready to take the **Cisco Certified Network Associate (CCNA) 200-301 v1.1** exam.

## Prerequisites

No formal prerequisites.
However, learners should have:

- Basic computer literacy
- Understanding of IP addressing
- Familiarity with operating systems and internet navigation

## Who Should Attend

This course is ideal for:

- Entry-level Network Engineers
- Network Administrators
- Network Support Technicians
- Help Desk Technicians
- Anyone pursuing **Cisco CCNA Certification**

# Implementing and Administering Cisco Solutions (CCNA) Training

Duration: **5 Day**

BILGINC IT Academy
info@bilginc.com
bilginc.com

## What You Will Learn

By the end of this training, you will have gained knowledge and skills in the following areas:

- Describe the architecture of computer networks
- Configure LANs, switches, and routers
- Implement IPv4/IPv6 addressing and subnetting
- Configure VLANs, trunks, and OSPF routing
- Apply ACLs and security measures
- Configure DHCP, NAT, and QoS
- Manage wireless LAN controllers
- Understand SDN, virtualization, and automation
- Explore AI and ML in network operations

## Training Outline

**Networking Foundations**

- Components and models of computer networks
- Cisco IOS overview

**LANs and Ethernet Switching**

- Ethernet principles and troubleshooting
- VLAN configuration

**TCP/IP and Routing Fundamentals**

- IPv4 and IPv6 addressing
- Transport and application layers

**VLANs, Inter-VLAN Routing, and OSPF**

- VLAN trunking and dynamic routing with OSPF

**Network Redundancy and Security**

- STP, RSTP, and EtherChannel configuration
- ACLs and device hardening

BİLGİNÇ IT Academy

info@bilginc.com

bilginc.com


**WAN and Wireless Connectivity**

- DHCP, NAT, VPN, and QoS
- Wireless configuration and WLC management

**Emerging Technologies**

- Virtualization, SDN, automation, and AI in networking

## Certification Exam

- **Cisco 200-301 CCNA v1.1**
- Duration: 120 minutes
- Covers: Fundamentals, Access, IP, Security, Automation
- Certification: **Cisco Certified Network Associate (CCNA)**

## Hands-on Labs

Learners will configure and troubleshoot:

- Cisco switches and routers
- VLANs, OSPF, NAT, and DHCP
- Security and access control policies
- Network monitoring tools and AI-driven diagnostics