



# CCNA COURSE SYLLABUS

## V1.1 (200-301)

Total Duration-60 hours



## Career Opportunities After CCNA

- Kickstart your career as a Network Engineer, System Administrator, IT Support Specialist, or NOC Technician with global demand.
- This certification opens doors to high-paying roles in top IT firms, and lays the foundation for advanced tracks like Cybersecurity, Cloud, and DevOps.



## Expected Salary After CCNA

- Freshers can expect a starting package of **₹3–5 LPA**, while professionals with experience can scale up to **₹7–12 LPA** or more, depending on role and location.
- CCNA opens doors to global opportunities with competitive pay across networking, cloud, and security domains.

## Why Choose Innovative Academy for CCNA?

- Learn from Cisco-certified experts with real industry experience, hands-on labs, and 1:1 mentorship.
- We don't just train — we prepare you for global certification and help you land your first IT job.
- With 1000+ students trained and a 90% success rate, Innovative Academy is where networking careers begin.



## Meet Your CCNA Trainer

- Our lead trainer is a Cisco-certified professional (CCNA, CCNP) with over 10+ years of industry and teaching experience.
- Having trained **800+ students**, he brings real-world scenarios into every class, making complex networking concepts easy, practical, and exam-ready.
- Known for his doubt-clearing approach and mentorship, he's the backbone of our student success stories.

**"You don't just study CCNA—you live it, lab it, and lead with it."**

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## 1. Network Fundamentals

- Explain the role and function of network components
- Describe characteristics of network topology architectures
- Compare physical interface and cabling types
- Identify interface and cable issues (collisions, errors, mismatch duplex, and/or speed)
- Compare TCP to UDP
- Configure and verify IPv4 addressing and subnetting
- Describe private IPv4 addressing
- Configure and verify IPv6 addressing and prefix
- Describe IPv6 address types
- Verify IP parameters for Client OS (Windows, Mac OS, Linux)
- Describe wireless principles
- Explain virtualization fundamentals (server virtualization, containers, and VRFs)
- Describe switching concepts

## 2. Network Access

- Configure and verify VLANs (normal range) spanning multiple switches
- Configure and verify interswitch connectivity[VLAN]
- Configure and verify Layer 2 discovery protocols (Cisco Discovery Protocol and LLDP)
- Configure and verify (Layer 2/Layer 3) EtherChannel (LACP)
- Interpret basic operations of Rapid PVST+ Spanning Tree Protocol
- Describe Cisco Wireless Architectures and AP modes
- Describe physical infrastructure connections of WLAN components (AP, WLC, access/trunk ports, and LAG)
- Describe network device management access (Telnet, SSH, HTTP, HTTPS, console, TACACS+/RADIUS, and cloud managed)
- Interpret the wireless LAN GUI configuration for client connectivity, such as WLAN creation, security settings, QoS profiles, and advanced settings

## 3. IP Connectivity

- Interpret the components of routing table
- Determine how a router makes a forwarding decision by default
- Configure and verify IPv4 addressing and subnetting
- Configure and verify IPv4 and IPv6 static routing
- Configure and verify single area OSPFv2
- Describe the purpose of first hop redundancy protocol

## **4. IP Services**

- Configure and verify inside source NAT using static and pools
- Configure and verify NTP operating in a client and server mode
- Explain the role of DHCP and DNS within the network
- Explain the function of SNMP in network operations
- Describe the use of syslog features including facilities and levels
- Configure and verify DHCP client and relay
- Explain the forwarding per-hop behavior (PHB) for QoS such as classification, marking, queuing, congestion, policing, shaping
- Configure network devices for remote access using SSH
- Describe the capabilities and function of TFTP/FTP in the network

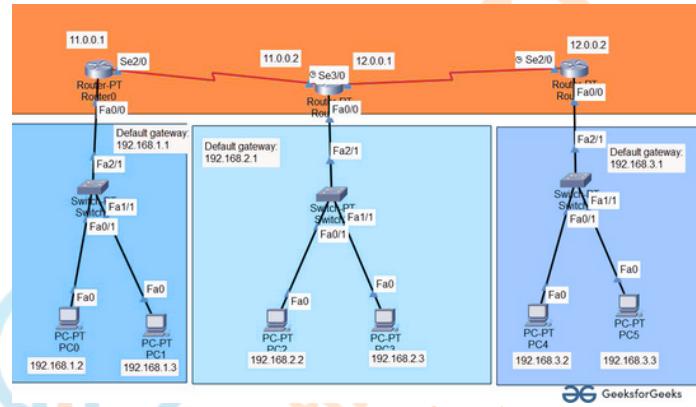
## **5. Security Fundamentals**

- Define key security concepts (threats, vulnerabilities, exploits, and mitigation techniques)
- Describe security program elements (user awareness, training, and physical access control)
- Configure device access control using local passwords
- Describe security password policies elements, such as management, complexity, and
- Describe IPsec remote access and site-to-site VPNs
- Configure and verify access control lists
- Configure Layer 2 security features (DHCP snooping, dynamic ARP inspection, and port security)
- Compare authentication, authorization, and accounting concepts
- Describe wireless security protocols (WPA, WPA2, and WPA3)
- Configure WLAN using WPA2 PSK using the GUI

## **6. Automation and Programmability**

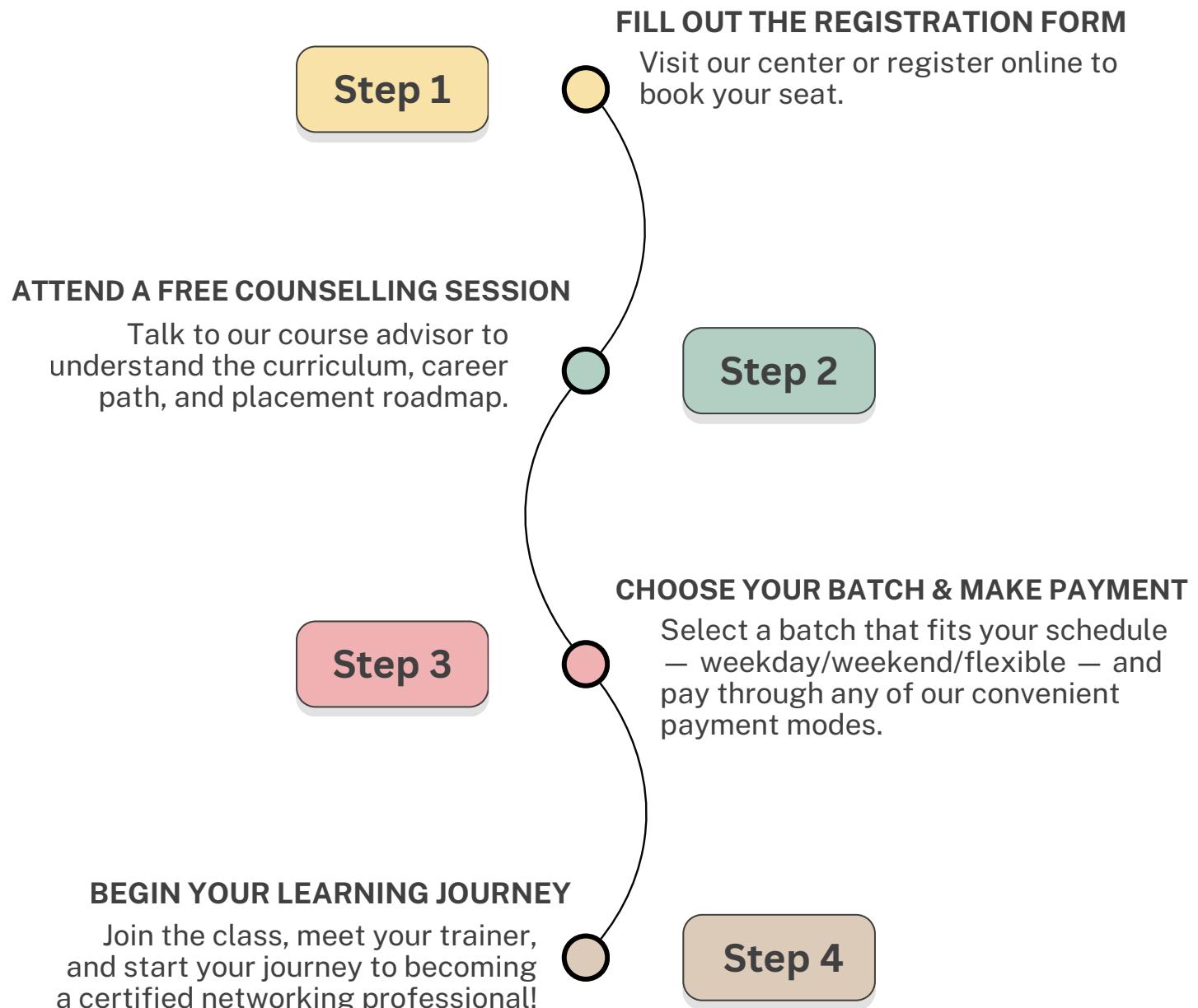
- Explain how automation impacts network management
- Compare traditional networks with controller-based networking
- Describe controller-based and software defined architectures (overlay, underlay, and fabric)
- Explain AI (generative and predictive) and machine learning in network operations
- Describe characteristics of REST-based APIs (CRUD, HTTP verbs, and data encoding)
- Recognize the capabilities of configuration management mechanisms Puppet, Chef, and Ansible
- Recognize components of JSON-encoded data

**Additional Hours-** Resume preparations, personality development sessions, technical round preparations and mock interview sessions. We ensure all our students from both IT and Non IT background are placed with decent package as fresher in the industry



# OUR ADMISSION PROCESS

GETTING STARTED AT INNOVATIVE ACADEMY IS SIMPLE AND STUDENT-FRIENDLY



**“THE SOONER YOU START, THE SOONER YOU SUCCEED.”**

# 🤝 HOW OUR PLACEMENT TEAM SUPPORTS YOU

AT INNOVATIVE ACADEMY, PLACEMENT ISN'T AN AFTERTHOUGHT — IT'S BUILT INTO THE JOURNEY.

## 1 Dedicated HR Support



Get 1-on-1 guidance from our in-house HR expert to help apply for jobs, understand interview formats, and improve communication.

## 2 Communication & Soft Skills Training



Build confidence with regular sessions focused on speaking clearly, answering smartly, and presenting yourself professionally.

## 3 Daily Job Alerts in WhatsApp Group



Access exclusive job openings, walk-ins, MNC hiring drives, and company updates posted regularly in our dedicated placement group.

## 4 Mock Interviews & Resume Building



Practice real-world interview scenarios and get help crafting a resume that gets noticed by recruiters.

 **Resume Help**

 **Mock Interviews**

 **Job Openings**

 **HR Mentorship**

 **WhatsApp Support**

 **Communication Classes**

# TESTIMONIALS

At Innovative Academy, we believe your background doesn't define your future—your determination does. Students from non-technical streams like B.Com, B.A., Diploma, and even Class 12 have started their journey with our CCNA course. Today, they confidently work with networking technologies and are building successful careers in the IT industry across India.



"Great CCNA training by Naveen Sir with live labs and clear explanations. I understood routing, switching, and subnetting well. This course boosted my confidence for interviews and gave me a strong start in networking."

**- Rahul B**



"The course covered all CCNA topics with practical labs. Trainers were supportive and explained concepts like VLANs, IP addressing, and protocols clearly. Placement support and mock interviews were really helpful for freshers like me."

**- Sneha R**



"I took the CCNA course during college. The hands-on training using Packet Tracer and Cisco devices was excellent. I cleared the CCNA exam on my first attempt. Highly recommend it to all beginners."

**- Arjun Nayak**

# MORE INFO

## CONTACT US



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[www.innovativeacademy.in](http://www.innovativeacademy.in)

### Why Choose Us?



Proven  
Success



Expertise



100%  
Placement

"From zero to network hero—your transformation starts here."