

# CCNP Data Center

## COURSE OUTLINE

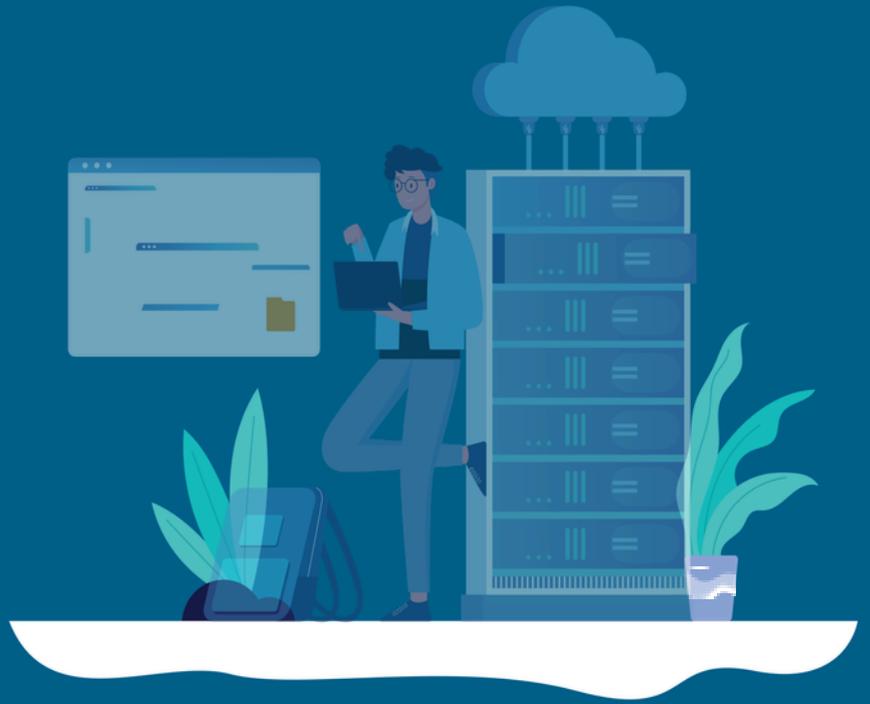
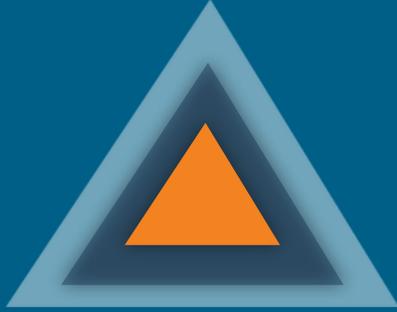


# TABLE OF CONTENT

|   |                           |      |
|---|---------------------------|------|
| 1 | Overview                  | 3    |
| 2 | Roadmap of Job Placements | 4    |
| 3 | USP's                     | 5    |
| 4 | Course Outline            | 6-10 |
| 5 | Our Placement Partner     | 11   |



# NS3EDU: BRIDGE YOUR IT DREAMS TO REALITY



## EMPOWERING CAREERS THROUGH KNOWLEDGE

Looking to make it big in the world of IT networking? Look no further than NS3Edu! We help beginners learn the ropes & experienced pros master new skills. Come join us and build your dream career!

## MISSION

The mission of NS3Edu is to

empower our candidates with in-depth knowledge of IT fundamentals along with real-time industry experience and also take 100% responsibility for the placement by making them Industry fit.

## CERTIFICATES



## VISION

In-depth knowledge + hands-on experience + analytical thinking = placement



Learning



Opportunity



Experience

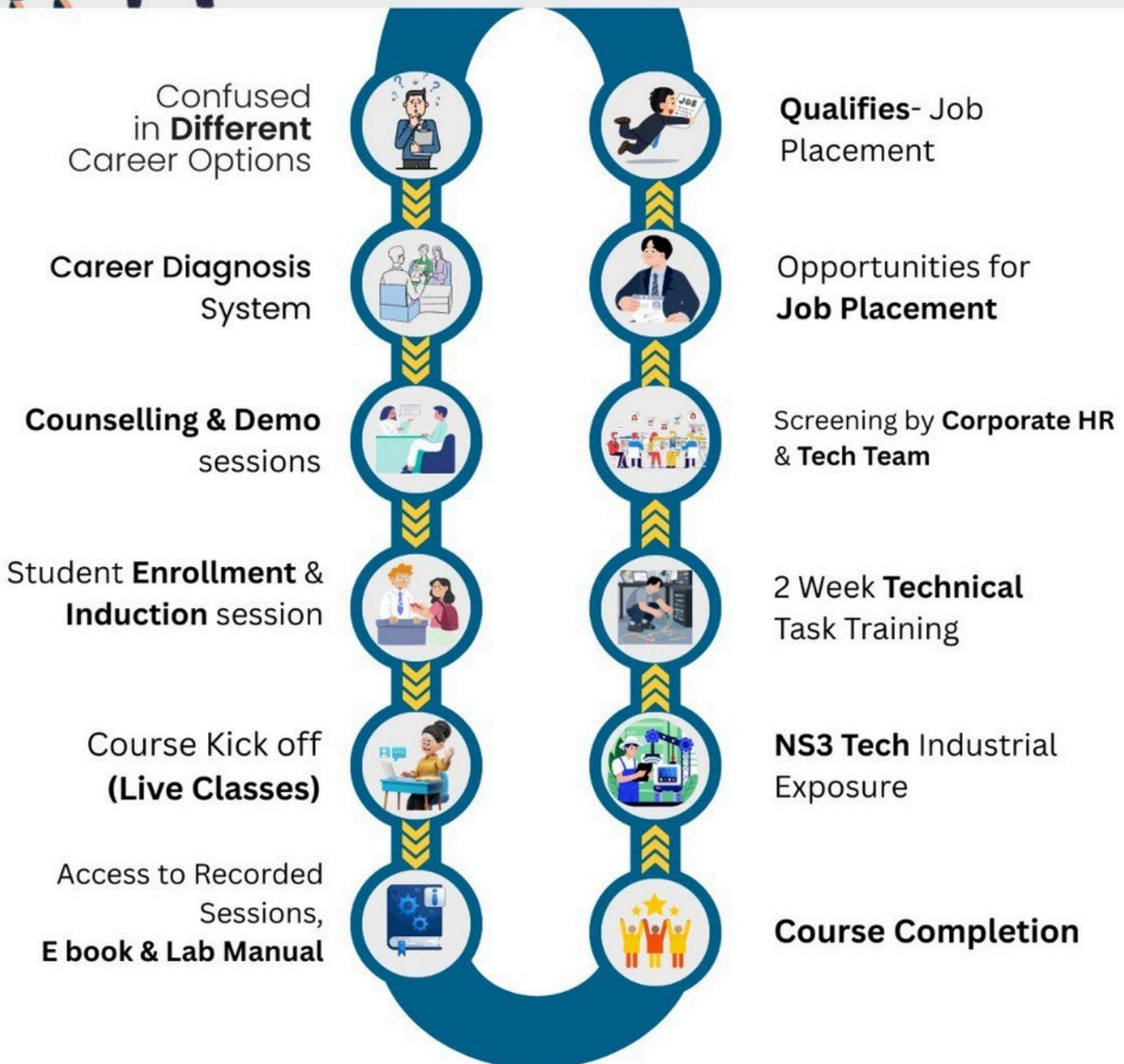


Career



# ROADMAP OF **JOB**

## PLACEMENT



# WHAT MAKES US UNIQUE?

## USP'S

Industry Demand &  
Customized Courses



# Course Outline

## LEVEL 1: Data Center Core

### Foundations (Professional Level)

#### **Part 1: Data Center Architecture & Design**

- Data Center Overview
- Traditional vs Modern Data Centers
- Three-Tier vs Spine-Leaf Architecture
- High Availability & Redundancy
- Data Center Cabling & Physical Design

#### **Part 2: Data Center Networking Basics**

- Role of Switching in Data Centers
- Nexus Switching Overview
- VLANs & Trunking in Data Centers
- vPC (Virtual Port Channel) Basics
- Redundancy & Loop Prevention

#### **Part 3: Advanced Data Center Switching**

- Cisco Nexus Features
- vPC Advanced Concepts
- STP vs vPC
- FabricPath Overview
- QoS in Data Centers

## **Part 4: Data Center Routing**

- Routing in Data Centers
- OSPF & BGP in Data Centers
- Anycast Gateway
- Route Optimization

# **LEVEL 2: Compute, Storage & Virtualization (Enterprise Level).**

## **Part 5: Cisco UCS (Unified Computing System)**

- UCS Architecture
- Fabric Interconnects
- Service Profiles
- Server Provisioning
- UCS Management

## **Part 6: Storage Networking**

- Storage Basics
- SAN vs NAS
- Fibre Channel Fundamentals
- FCoE Concepts
- Zoning & LUNs

## **Part 7: Virtualization & Hypervisors**

- Virtualization Concepts
- VMware ESXi Overview
- Virtual Switching (vSwitch, DVS)
- VM Networking Basics

## **Part 8: Data Center Security**

- Data Center Security Principles
- Network Segmentation
- Firewalls in Data Centers
- Micro-Segmentation Basics

# **LEVEL 3: Modern Data Center Technologies & Automation** **(Expert Level)**

## **Part 9: Cisco ACI (Application Centric Infrastructure)**

- ACI Architecture
- Spine-Leaf Fabric
- APIC
- Tenants, VRFs & Bridge Domains
- Application Profiles & Contracts

## **Part 10: Automation & Programmability**

- Automation in Data Centers
- REST APIs
- Python Basics
- Automation Use-Cases

## **Part 11: Monitoring & Troubleshooting**

- Data Center Monitoring Tools
- Performance & Capacity Monitoring
- Troubleshooting Methodology
- Common DC Issues

## **Part 12: Cloud & Hybrid Data Centers**

- Hybrid Data Center Concepts
- On-Prem to Cloud Connectivity
- Data Center in Multi-Cloud

## **Part 13: Real-World Data Center Projects**

- Enterprise Data Center Design
- UCS + Nexus Deployment Project
- ACI-Based Data Center Fabric
- Storage & Virtualization Integration
- Data Center Troubleshooting Scenarios

# Part 14: Career & Certification Preparation

- CCNP Data Center Certification Overview
- DCCOR Exam Blueprint
- Data Center Engineer Roles
- Interview Questions & Scenarios
- Resume & Project Portfolio Guidance
- Mock Interviews

# OUR PLACEMENT PARTNERS



## YOUR FUTURE OUR RESPONSIBILITY



Free consulting



Get trained with certified trainers



24X7 Lab access



Employability enhancement program



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AI ML LEARNING