

CCNA Networking & Ethical Hacking

A comprehensive, hands-on course designed to build world-class network engineers and cybersecurity professionals.

FACULTY: ARYAN

ARYANTECH INSTITUTE





Introduction to Networking & Ethical Hacking

What You'll Learn

→ CCNA Fundamentals

Cisco Certified Network Associate core concepts – the gold standard in networking.

→ Ethical Hacking

Master the mindset of White Hat hackers – defend networks by thinking like an attacker.

Meet Your Instructor

Aryan – Expert faculty with

Networking Basics: Foundations for Security

Before you can defend a network, you must understand how it works. This module builds the essential technical foundation.



IP Addressing

IPv4 & IPv6 addressing, subnetting, and CIDR notation explained clearly with practical examples.



Network Devices

Routers, switches, hubs, and firewalls – their roles, differences, and security implications.



OSI & TCP/IP Models

How data travels securely across networks – from physical transmission to application-layer protocols.



MODULE 3

LAN Switching & VLANs

Segmentation and traffic management are at the heart of secure enterprise networks.

VLANs & Trunking

Configure VLANs and inter-switch trunking on Cisco switches for logical network segmentation.

Spanning Tree Protocol

Implement RSTP & PVSTP to eliminate dangerous network loops and ensure redundancy.

Practical Lab

Set up and secure a full LAN environment using Cisco Packet Tracer and live hardware.

Routing Technologies & Network Security Essentials

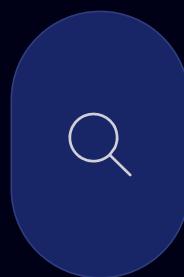


What This Module Covers

- **Static & Dynamic Routing:** OSPF and EIGRP protocols for efficient, scalable routing.
- **Access Control Lists:** Craft ACLs to filter inbound/outbound traffic and block threats.
- **Cisco IOS Hardening:** Real CLI commands to secure routers and switches against attacks.

Ethical Hacking Fundamentals

Reconnaissance and vulnerability scanning are the first phases of any professional penetration test.



Reconnaissance

Passive & active info gathering using OSINT tools and Kali Linux.



Scanning & Mapping

Port scanning and network topology discovery with **Nmap**.



Traffic Analysis

Deep packet inspection and protocol analysis using **Wireshark**.



Penetration Testing & Exploitation Techniques

Pentest Methodology

01

Planning & Scoping

Define engagement boundaries and legal authorization.

02

Exploitation

SQL injection, password attacks, and privilege escalation.

03

Reporting

Document findings and remediation recommendations professionally.



- ❑ **CTF Exercises:** Apply your skills in Capture The Flag challenges – real-world simulations that test and sharpen your ethical hacking techniques.

Certifications & Career Pathways



CCNA Certification

Cisco's globally recognized credential validating network associate-level skills.



CEH Certification

EC-Council's Certified Ethical Hacker – the industry benchmark for offensive security.



Career Roles

Network Engineer, Security Analyst, Penetration Tester – **99% placement rate** for AryanTech graduates.

Practical Labs & Course Structure

AryanTech's unique learning environment is built around **hands-on experience** and **personalized mentorship**.

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Max Batch Size

Small groups ensure every student gets individual attention from Aryan directly.

100%

Hands-On Labs

Router & switch config, live hacking simulations, and real Cisco hardware.

3

Assessments

Quizzes, project milestones, and a comprehensive final capstone challenge.

Join Aryan's Course & Secure Your Future

Why AryanTech?

- Expert faculty with 15+ years of industry experience
- Job guarantee with **99% placement record**
- Ethical, hands-on, industry-aligned training
- Dual certification prep: CCNA + CEH

Enroll Today

Begin your comprehensive CCNA & Ethical Hacking journey with Faculty Aryan. Limited seats available – maximum 6 students per batch.

- [Visit **aryantech.in**](http://aryantech.in) to register and learn more about upcoming batch schedules.

