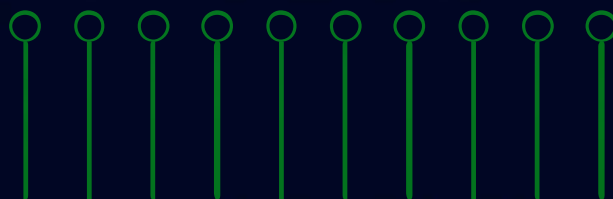




Cloud



**CERTIFIED
CLOUD & NETWORK
ENGINEER**
(C C N E)





THE SYNNEFO ADVANTAGE

NETWORKING • CLOUD COMPUTING • LINUX • SECURITY

Synnefo Solutions is an IT company-based academy delivering industry focused training with real world projects and expert mentorship



100% JOB GUARANTEED
SYNNEFO SMARTSPACE – KERALA'S FIRST LAAS
INTENSIVE INTERNSHIP PROGRAM
REALTIME PROJECTS

CLASS MODE DETAILS



ONLINE



OFFLINE



HYBRID

Course Duration

10 Months

[Including 4 month internship program]

ABOUT THE COURSE

Cloud & Network Engineering focuses on designing, implementing and managing modern IT infrastructure using networking fundamentals, system administration, cloud platforms, and security practices.

This program trains you to work like real Cloud & Network Engineers using

- ▶ Linux & Windows environments
- ▶ Enterprise networking concepts
- ▶ Cloud infrastructure (AWS/Azure/GCP)
- ▶ Server, firewall & security configurations
- ▶ Monitoring and troubleshooting practices

What You Will Learn

You will gain hands-on experience with networking, Linux administration, cloud computing, server management, and infrastructure security, following real industry workflows and best practices.

Suitable for

Freshers • Students • IT Support Professionals
Network Engineers • System Administrators
Cloud Aspirants • Career Switchers

FEATURES

Training Features

LIVE INFRASTRUCTURE PROJECTS & CASE STUDIES

HANDS-ON CLOUD & NETWORK LAB ACCESS
[SYNNEFO SMARTSPACE]

ONE-TO-ONE MENTORING SUPPORT

RECORDED SESSIONS (ONLINE / HYBRID)

MOCK INTERVIEWS & CAREER GUIDANCE

INDUSTRY-EXPERIENCED TRAINERS

Key Modules

SYSTEM ADMINISTRATION (A+)

NETWORKING ESSENTIALS (NETWORK+)

CISCO NETWORKING (CCNA)

WINDOWS SERVER 2022/25

MICROSOFT 365 MANAGEMENT

LINUX ADMINISTRATION (RHCSA & RHCE)

AUTOMATION WITH ANSIBLE & GIT

WEB HOSTING & SERVER MASTERY

ITSM & TICKETING SERVICES

CLOUD PLATFORMS (AWS / AZURE / GCP)

ADVANCED NETWORK SECURITY

CAREERS

Opportunities

- ▶ **CLOUD ENGINEER**
- ▶ **NETWORK ENGINEER**
- ▶ **NETWORK ADMINISTRATOR**
- ▶ **SYSTEM ADMINISTRATOR**
 - ▶ **LINUX ENGINEER**
 - ▶ **NOC ENGINEER**
- ▶ **INFRASTRUCTURE SUPPORT ENGINEER**
 - ▶ **IT SUPPORT ENGINEER**
- ▶ **FREELANCE CLOUD & NETWORK CONSULTANT**

Certifications



**Synnefo
Certificate**



**NACTET
Certificate**



**Internship
Certificate**

ABOUT US

Synnefo is an ISO 9001:2015 certified, IT company based academy offering 100% job-guaranteed programs, supported by 50+ recruitment partners and NACTET affiliation. With 5000+ students trained, we deliver industry-driven learning through live projects and internships. Students gain hands-on exposure in real-time lab facilities with integrated NOC, SOC, and Data Center environments, along with an exclusive SDLC Hub. Our programs are further strengthened by soft-skill training, mock interviews, international testing centers, and lifetime placement support, ensuring complete career readiness.



+91 773 601 3411



Near Maharajas
Metro Station, Kochi



www.synnefo.in



CLOUD & NETWORK ENGINEERING SYLLABUS





Network Engineering

A+

- ▶ Computer hardware basics and components
- ▶ System assembling
- ▶ Operating System installation
- ▶ BIOS/UEFI
- ▶ Virtualization
- ▶ File sharing
- ▶ Basic commands
- ▶ Troubleshooting Hardware and Software Issues

N+

- ▶ Basic Networking Concepts
- ▶ Types of networks
- ▶ Basic Components to Form a Network
- ▶ Network Interface Cards (NIC)
- ▶ Media
- ▶ Networking Devices
- ▶ Network Topology
- ▶ MAC address and IP address
- ▶ Subnetting
- ▶ OSI reference model
- ▶ Network Protocols
- ▶ DHCP and DNS
- ▶ Crimping

RHCE

- ▶ **Introduction to Linux**
 - Advantages and disadvantages of Linux
 - GNU / Linux
 - Linux Distribution
 - Architecture of Linux OS
 - Linux Directory Structure
 - Linux Distro Installation
- ▶ **Introduction to Terminal**
- ▶ **Basic Commands**
- ▶ **Text Editors**
 - Nano
 - VIM
- ▶ **File Management commands**
- ▶ **File Management tools**
- ▶ **Links**
- ▶ **Archiving**
- ▶ **Finding Files**
- ▶ **Working with Text Files**
 - GREP
 - Cut
 - Awk
 - Sed
- ▶ **User management**
- ▶ **Group Management**
- ▶ **Ownership and permissions**
 - Basic Permissions
 - Special Permissions
 - ACL

- ▶ **Network Management**
- ▶ **Process Management**
- ▶ **Systemd**
- ▶ **Firewalld**
- ▶ **Booting Process**
- ▶ **SSH**
 - Key-Based Login
- ▶ **Scheduling Tasks**
- ▶ **Web Hosting**
 - Apache HTTPD
- ▶ **Storage Management**
 - Parted
 - Fdisk
 - LVM
- ▶ **Password recovery**
- ▶ **File Sharing**
- ▶ **Automation**
 - Bash Scripting

Windows Server

- ▶ **Server Fundamentals**
- ▶ **Installation**
- ▶ **ADDS**
- ▶ **Group Policy Objects (GPO)**
- ▶ **Storage Administration**
- ▶ **Networking**
 - DNS
 - DHCP

- ▶ **Hyper-V**
- ▶ **Server Monitoring**
- ▶ **Powershell For Administration**
- ▶ **Client management**

AWS

- ▶ **Introduction to AWS**
- ▶ **Billing**
- ▶ **Compute**
 - EC2
- ▶ **VPC**
- ▶ **Load Balancers**
- ▶ **IAM**
- ▶ **S3**
- ▶ **RDS**
- ▶ **Cloudwatch**
- ▶ **AWS CLI**
- ▶ **SNS**

AZURE

- ▶ **Introduction to Azure**
- ▶ **Billing**
- ▶ **Compute**
 - Azure Virtual Machines

- ▶ Azure Vnet
- ▶ Load Balancers
- ▶ Azure AD
- ▶ RBAC
- ▶ Azure Storage
- ▶ Azure SQL Database
- ▶ Azure Monitor
- ▶ Azure CLI

GCP

- ▶ Introduction to Google Cloud Platform
- ▶ Billing
- ▶ Compute
 - Compute Engine
- ▶ VPC
- ▶ Load Balancers
- ▶ IAM
- ▶ Log Explorer

NETWORK SECURITY

- ▶ Introduction to Cyber Security
 - Threats
 - Vulnerabilities
 - Attacks
 - CIA triad
- ▶ Cybersecurity Domains
 - Network Security
 - Application Security
 - Cloud Security
 - SOC
 - GRC

- ▶ **Hacking and Ethical Hacking**
- ▶ **Pentest vs VA**
- ▶ **Scoping & Network Discovery tools**
- ▶ **OSINT**
- ▶ **NMAP**
- ▶ **Advanced Scanning and Best Practices**
- ▶ **Hydra**
- ▶ **Metasploit**

CCNA

- ▶ **Network Fundamentals**
- ▶ **Network topology architectures**
- ▶ **IP addressing**
- ▶ **Introduction to routers**
- ▶ **Routing**
 - Static Routing
 - Dynamic Routing
 - OSPFv2
- ▶ **NAT**
- ▶ **ACL**
- ▶ **Introduction to switches**
- ▶ **Switching**
 - VLAN
 - Inter VLAN
 - DTP
 - STP
- ▶ **Port Security**
- ▶ **Cisco Wireless Architectures**
- ▶ **Gateway Redundancy Protocols**

- HSRP
- VRRP
- GLBP
- ▶ TACACS+/RADIUS
- ▶ QoS profiles
- ▶ Services
 - CDP
 - LLDP
 - SYSLOG
 - SNMP
 - NTP
 - DHCP
 - DNS
- ▶ IPsec
- ▶ Security
- ▶ Automation

ANSIBLE

- ▶ Ansible Introduction
- ▶ Ad-Hoc Commands
- ▶ Playbook
- ▶ Templates, loops and facts
- ▶ Roles

GIT

- ▶ Git Intro
- ▶ Git Commands

MICROSOFT 365

- ▶ Introduction to M365
- ▶ OneDrive Administration
- ▶ Admin Center
- ▶ Identity
- ▶ Entra
- ▶ Security
- ▶ Powershell for M365
- ▶ Teams & Communication
- ▶ Exchange Online Administration
- ▶ Security and Compliance
- ▶ Troubleshooting
- ▶ Reports

HOSTING AND TICKETING

- ▶ **Hosting**
 - Virtual Host
 - Apache
 - Nginx
 - IIS
 - Wordpress
 - Joomla
 - Drupal
- ▶ **Ticketing**
 - ITSM and Service Now
 - Incident Management
 - Request Fulfilment
 - L2 Management
 - SLAs
 - Dashboards
 - Reporting