

Course Name

Microsoft Enterprise Infrastructure & Operations Bootcamp (2022+)

Course Overview

This 6-day intensive bootcamp equips IT professionals with end-to-end expertise in Microsoft's enterprise infrastructure platforms. Covering Active Directory, Exchange Server, Endpoint Configuration Manager, and the System Center suite (DPM, VMM, SCOM), the program blends theory with hands-on labs to build practical skills in deployment, management, security, monitoring, and disaster recovery.

Participants will learn to:

- Design and configure Active Directory forests, domains, and trusts.
- Deploy and manage Exchange Server databases, recipients, and compliance policies.
- Implement Endpoint Configuration Manager for modern device and application management.
- Protect workloads with Data Protection Manager and optimize virtualization with Virtual Machine Manager.
- Monitor enterprise environments using System Center Operations Manager with custom dashboards and alerts.

By the end of the course, learners will be able to plan, deploy, and manage Microsoft enterprise IT environments aligned with modern best practices.

Prerequisites

- **Windows Server Administration Basics** Familiarity with Windows Server roles, services, and basic administration tasks.
- **Networking Fundamentals** Understanding of TCP/IP, DNS, DHCP, and routing concepts.
- **Active Directory Essentials** Prior exposure to AD concepts (users, groups, OUs) is recommended.
- **PowerShell Basics** Ability to run and understand basic scripts for automation and bulk operations.
- **SQL Server Fundamentals** Basic knowledge of SQL Server, as it underpins SCCM and System Center components.
- **Virtualization Concepts** Understanding of Hyper-V or similar virtualization platforms.
- **Enterprise IT Experience** At least 1–2 years of experience in IT infrastructure, system administration, or enterprise support roles.

Day 1 – Active Directory

- **Role of AD in enterprise IT**
- **AD architecture: forests, domains, controllers, DNS**
- **Object management: users, groups, computers, OUs**
- **Group Policies: creation, linking, filters**
- **Replication & trusts: multi-site, trust types**

Day 2 – Exchange Server

- **Exchange architecture & AD integration**
- **Installation: prerequisites, schema updates, topologies**
- **Mailbox databases: design, storage, DAGs**
- **Recipient management: mailboxes, groups, shared mailboxes, policies**
- **Security & compliance: transport rules, DLP**
- **High availability: failover, backup & restore**

Day 3 – Endpoint Configuration Manager

- **SCCM vs Intune**
- **Planning: site hierarchy, SQL integration**
- **Device management: collections, queries, OS deployment**
- **Application deployment: packages vs applications, monitoring**
- **Compliance & protection: baselines, endpoint security**

Day 4 – Backup & Virtualization (DPM + VMM)

- **Data Protection Manager: backup strategy, storage pools, protection groups**
- **Workload protection: SQL, Exchange, SharePoint, Hyper-V**
- **Backup & recovery: short-term vs long-term, recovery scenarios**
- **Virtual Machine Manager: virtualization, Hyper-V integration**
- **VM lifecycle: templates, cloning, optimization**
- **Service management: service templates, multi-tier apps**

Day 5 – Operations Manager (SCOM)

- **SCOM architecture & role in monitoring**
- **Planning: servers, agents, gateways**
- **Monitoring: rules vs monitors, alert tuning**
- **Notifications: email, SMS, subscriptions**
- **Custom monitoring: management packs, dashboards**