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Training & Solutions

aws

AWS CLOUD COURSE

Course Curriculum

Module 1: IT Fundamentals

A. Basic Concepts of Information Technology

- Understanding IT
- Types of Computers
- Data and Information
- Understanding Computer Hardware and Software

B. Introduction to Operating Systems

- OS Fundamentals
- File Systems and Management
- System Maintenance and Optimization

Module 2: Introduction to Server Hardware

A. Types of Servers and Their Applications

- Overview of Server Types
- Server Functions and Roles
- Server Operating Systems

B. Server Hardware Components

- Central Processing Unit (CPU)
- Memory and Storage
- Lesson 3: Peripheral Components

C. Server Configuration and Management

- BIOS and Firmware
- Remote Management
- Health and Performance Monitoring

Module 3: Windows and Server Administration

A. Windows OS Architecture

- Windows OS Fundamentals
- Windows File System
- Windows Registry

B. User, File, and Disk Management

- User Accounts
- File and Folder Management
- Disk Management

C. Windows Server Administration

- Active Directory (AD)
- Group Policy
- Windows PowerShell

Module 4: Linux Fundamentals

A. Linux OS Architecture

- Understanding Linux OS
- Linux File System
- Shell and Kernel Interaction

B. Basic Linux Commands and Operations

- Command Line Basics
- Process Management
- Package Management

C. User and Group Management

- Users and Groups
- File Permissions and Access Control
- Sudo and Root Access

Module 5: Database Fundamentals with MS SQL Database

A. Basic Concepts of Database

- Understanding Databases
- Relational Database Concepts
- SQL Language Fundamentals

B. MS SQL Database Architecture

- MS SQL Server Components
- Databases and Objects
- Security and Permissions

C. SQL Queries and Operations

- Writing Basic SQL Queries
- Advanced SQL Queries
- Data Modification

Module 6: VMware vSphere: Install, Configure, Manage

A. Introduction to VMware vSphere

- Overview of VMware vSphere
- ESXi and vCenter Server
- Virtual Machines (VMs)

B. Configuring and Managing Virtual Machines

- VM Creation and Modification
- VM Resource Management
- VM Snapshots and Cloning

C. Virtual Network and Storage Management

- Virtual Networking
- Virtual Storage
- Storage and Network Performance

Module 7: Network & Security Fundamentals

A. Network Architecture and Protocols

- Internetworking Basics
- OSI and TCP/IP Models
- IP Addressing and Subnetting

B. Network Devices and Configuration

- Routers and Switches
- VLANs and Inter-VLAN Routing
- NAT and PAT

C. Introduction to Cybersecurity

- Threats and Vulnerabilities
- Security Protocols and Algorithms (Overview)
- Firewalls and IDS/IPS

Module 8: Cloud Essentials with Azure

A. Introduction to Cloud Computing

- Understanding Cloud Computing
- Azure Cloud Services
- Virtual Machines in Azure
- Azure Kubernetes Service
- Azure App Service

B. Azure Storage and Databases

- Azure Storage Services
- Azure SQL Database
- Data Migration to Azure

C. Azure Networking and Security

- Azure Virtual Networks
- Load Balancer and Application Gateway
- Azure Security Services
- Monitoring and Compliance

D. Azure Resource Manager (ARM)

- ARM Templates and Deployment
- Role-Based Access Control (RBAC)
- Azure Policy

E. Cost Management and Optimization

- Azure Cost Management
- Azure Advisor
- Governance Best Practices

Module 9: Cyber Security Fundamentals

(Add-on: Fundamentals will be covered in 7. Network & Security Fundamentals)

A. Introduction to Cyber Security

- Understanding Cyber Security
- Security Technologies and Tools

- Security Policies and Laws

B. Identifying and Mitigating Threats

- Malware and Phishing
- Network Security
- Application and Data Security