20413: Designing and Implementing a Server Infrastructure (Windows Server 2012)

Course Details

Course Outline

1. **Module 1: Planning Server Upgrade and Migration**
   - Upgrade and Migration Considerations
   - Creating a Server Upgrade and Migration Plan
   - Planning for Virtualization

2. **Module 2: Planning and Implementing a Server Deployment Infrastructure**
   - Selecting an Appropriate Server Imaging Strategy
   - Selecting a Deployment Automation Strategy
   - Implementing an Automated Deployment Strategy

3. **Module 3: Designing and Maintaining an IP Configuration and Address Management Solution**
   - Designing and Implementing DHCP
   - Planning and Implementing DHCP Scopes
   - Planning and Implementing an IPAM Provisioning Strategy

4. **Module 4: Designing and Implementing Name Resolution**
   - Designing a DNS Server Implementation Strategy
   - Designing the DNS Namespace
   - Designing and Implementing DNS Zones
   - Designing and Configuring DNS Zone Replication and Delegation
   - Optimizing DNS Servers
   - Designing DNS for High Availability and Security

5. **Module 5: Designing and Implementing an Active Directory Domain Services Forest and Domain Infrastructure**
   - Designing an AD DS Forest
   - Designing and Implementing AD DS Forest Trusts
   - Designing and Implementing AD DS Domains
   - Designing DNS Namespaces in AD DS Environments
   - Designing AD DS Domain Trusts

6. **Module 6: Designing and Implementing an OU Infrastructure and AD DS Permissions Model**

   - Planning the AD DS Administrative Tasks Delegation Model
   - Designing the OU Structure
   - Designing and Implementing an AD DS Group Strategy

7. **Module 7: Designing and Implementing a Group Policy Object Strategy**

   - Gathering the Information Required for a GPO Design
   - Designing and Implementing GPOs
   - Designing GPO Processing
   - Planning Group Policy Management

8. **Module 8: Designing and Implementing an AD DS Physical Topology**

   - Designing and Implementing AD DS Sites
   - Designing AD DS Replication
   - Designing the Placement of Domain Controllers
   - Virtualization Considerations for Domain Controllers
   - Designing Highly-Available Domain Controllers

9. **Module 9: Planning and Implementing Storage**

   - Storage Considerations
   - Planning and Implementing iSCSI SANs

10. **Module 10: Planning and Implementing File Services**

    - Planning and Implementing a Distributed File System
    - Planning and Implementing BranchCache
    - Planning and Implementing Dynamic Access Control

11. **Module 11: Designing and Implementing Network Access Services**

    - Designing and Implementing Remote Access Services
    - Designing RADIUS Authentication by Using a Network Policy Server
    - Designing a Perimeter Network
    - Planning and Implementing DirectAccess

12. **Module 12: Designing and Implementing Network Protection**

    - Overview of Network Security Design
    - Identifying and Mitigating Common Network Security Threats
    - Designing and Implementing a Windows Firewall Strategy
    - Designing and Implementing a Network Access Protection Infrastructure