



Microsoft Server Administration I

2023-2024 Catalog

[ARCHIVED CATALOG]

SVAD 231 - Microsoft Server Administration I

PREREQUISITES: [SVAD 121 - Enterprise Computing](#)

PROGRAM: Cloud Technologies

CREDIT HOURS MIN: 3

LECTURE HOURS MIN: 2

LAB HOURS MIN: 2

DATE OF LAST REVISION: Fall, 2016

First of a three-course sequence in which Microsoft server is used for building a server-based infrastructure in an existing enterprise environment. The student will install and configure servers in various roles. Students will install and configure Nano Server, create and manage images for deployment, implement storage technologies, work with Hyper-V, Windows Containers and high availability solutions.

MAJOR COURSE LEARNING OBJECTIVES: Upon successful completion of this course the student will be expected to:

1. Plan server installation, roles, and upgrades.
2. Install and configure servers and services.
3. Design and implement storage solutions.
4. Implement Hyper V.
5. Create and configure virtual machine settings, storage, and network.
6. Implement Windows Containers.
7. Plan and configure high availability solutions.
8. Create and manage Active Directory users, groups, organizational units and computers.
9. Maintain and monitor server environments.

COURSE CONTENT: Topical areas of study include -

- PowerShell
- Windows Server Core
- Remote Management
- Key Management
- Nano Server
- Windows MMC
- Virtual Hard Disks (VHD)
- Desired State Configuration (DSC)
- iSCSI and iSNS services
- GUID partition table (GPT) disks
- Manage volumes
- Image Management
- NTFS permissions
- Data Deduplication
- Virtual Machine Configuration
- Virtual Machine Storage (VHD and VHDx)
- Storage Spaces

- Share permissions
- ReFS and NTFS File Systems
- VM Clustering
- Network Load Balancing
- Patching (WSUS)
- Backups
- Performance Monitor
- Event Viewer
- Resource Monitor



[Course Addendum - Syllabus \(Click to expand\)](#)
