

SPRINGFIELD TECHNICAL COMMUNITY COLLEGE  
**ACADEMIC AFFAIRS**

Course Number: CSE-240      Class/Lect. Hours: 3      Lab Hours: 0      Credits: 3      Dept.: CSET  
Course Title: Windows Server Administration      Semester: Spring      Year: 2021

**Course Description, Prerequisite, Corequisite:**

This course will show the student how to plan the network infrastructure around features supported by Windows Server. Issues such as network protocols and services are compared based on the requirements of the company or organization. In addition, the importance of the Transmission Control Protocol/Internet Protocol (TCP/IP) for enterprise networks is emphasized. This includes using Active Directory, Domain Name System (DNS), Hyper-V Virtualization, Storage Management, Group Policy, File and Share Access, and Dynamic Host Configuration Protocol (DHCP). The student will also learn how to configure, manage, secure, and troubleshoot features and services for operating systems, including routing and remote access, file services, print services, updating and storage. A three-hour lab component is included to give hands-on experience with these topics. Three hours lecture.

Prerequisite(s): CSE-110

Corequisite(s): CSE 240L

**OBJECTIVES/COMPETENCIES**

<b>Course Objectives</b>	<b>Competencies</b>
Explain the features, capabilities, and purpose of Windows Server	Explore Windows Server
Evaluate the installation and setup process of Windows Server	Explore Windows Server GUI Interfaces

Course Objectives	Competencies
Design Networking implementations in Windows Server	Explore Windows Server installation processes and best practices
Implement and deploy storage solutions in Windows Server	Explore Windows Server upgrade and migration processes and best practices
Describe Windows Server Hyper-V virtualization platform	Explore and Deploy Windows Server Roles and Features
Describe, design, and implement of Windows Server Active Directory	Explore Server Core
Describe, design, and implement of Windows Server Active Directory Group Policy	Explore Remote Management
Describe, design, and implement of Windows Server Domain Name System (DNS)	Explore Server and Computer Imaging services
Describe, design, and implement File and Sharing services in Windows Server	Explore and Deploy Windows Server IPv4 and IPv6 Networking
Describe, design, and implement of Dynamic Host Configuration Protocol (DHCP) in Windows Server and how it ties to Active Directory and DNS	Explore and Deploy Windows Server firewall and network security measures
	Explore and Deploy Windows Server traditional, remote and virtual storage technologies
	Explore Windows Server Storage Pools, iSCSI and Data de-duplication technologies
	Explore and Deploy Windows Server Hyper-V virtualization hypervisor role
	Explore and Deploy Windows Server Hyper-V virtual machine, networking, & storage management
	Explore Windows Server Active Directory features

Course Objectives	Competencies
	<p>Explore Windows Server Active Directory Domain Controllers and Sites</p> <p>Explore and Deploy Windows Server Active Directory Organizational Units, User Accounts, Bulk User account creation, and groups</p> <p>Explore Windows Server Active Directory Azure</p> <p>Explore Windows Server Active Directory Group Policy</p> <p>Explore Windows Server Active Directory Group Policy Application restriction and deployment policies</p> <p>Explore and Deploy Windows Server Active Directory Group Policy Management, Security Policies, User Rights, and Audit Options</p> <p>Explore Windows Server Domain Name System (DNS) implementation</p> <p>Explore and Deploy Windows Server DNS Zones, Records, and troubleshooting</p> <p>Explore and Deploy Windows Server Files and Sharing options</p> <p>Explore and Deploy Windows Server File and Folder Permissions</p> <p>Explore Windows Server NFS shares, Access Based Enumeration, Volume Shadow Copy</p> <p>Explore and Deploy Windows Server DHCP setup, exclusions and reservations, centralization and troubleshooting</p> <p>Explore Windows Server WSUS, Backup, Malware Protection, System Restore, and Performance monitoring</p>