

## **PowerShell for SQL Server Administrators (MS-55069)**

**Modality: Virtual Classroom**

**Duration: 2 Days**

**SATV Value: 2**

### **About this Course:**

Our brief yet highly intensive IT Ops Training program is designed to help students gain professional knowledge of PowerShell. This course is taught by professional instructors from the industry to help you gain the knowledge and skills required to become efficient SQL Server Administrators for PowerShell.

With the knowledge and exercises taught in the course, you will be able to efficiently manage a number of maintenance tasks on SQL Server 2012, 2014, and 2016. The purpose of this course is to allow students to gain adequate learning of the administration, Integration Services, and Analysis Services of the platform.

### **Course Objectives:**

After completing this course, students will be able to:

- Install and Configure SQL Server and all its components using PowerShell
- Manage day-to-day SQL Server Administration with PowerShell
- Maintain the SQL Server environment using PowerShell scripting and programming options

### **Audience:**

This IT Ops training program is designed for students who want to or are willing to work as SQL Server Administrators in Windows. You must have a minimum of one year of experience as a PowerShell administrator.

### **Prerequisites:**

Before attending this course, students must have:

- Experience working on Windows desktops or servers
- Experience working in a Windows domain environment
- Experience Administering SQL Server Servers
- Fundamental experience with PowerShell or Course 10961B - Automating Administration with Windows PowerShell

### **Course Outline:**

## Course outline

### Module 1: Install and Configure SQL Server with PowerShell

This module explains how to setup SQL Server components using PowerShell.

#### Lessons

- Module Objectives
- Lesson 1: Install SQL Server
- Lesson 2: Configure Database Settings
- Lesson 3: Configure SQL Server Settings
- Lesson 4: Configure SQL Server Policy-Based Management
- Review

#### Lab : Configuring SQL Server with PowerShell

After completing this module, students will be able to:

- Install SQL Server
- Add/Remove components to an existing instance (SSRS, SSIS, SSAS, etc.)
- Configure SQL Server and Database Settings
- Configure SQL Server Policy-Based Management

### Module 2: Administering SQL Servers with PowerShell

This module explains how to perform day-to-day administrative tasks on SQL Server Servers using PowerShell.

#### Lessons

- Module Objectives
- Lesson 1: Managing Users and Roles
- Lesson 2: Managing Database Performance
- Lesson 3: Managing Database Availability
- Lesson 4: Managing SQL Server Features
- Review

#### Lab : Administering SQL Servers with PowerShell

After completing this module, students will be able to:

- Manage Users and Roles
- Manage Database Performance
- Manage Database Availability with Clustering & AlwaysOn Availability Groups
- Manage Integration Services and Analysis Services

### Module 3: Maintaining SQL Server with PowerShell

This module explains how to perform maintenance tasks on SQL Servers using PowerShell.

## Lessons

- Module Objectives
- Managing Backups and Restores
- Maintaining Database Integrity and Performance
- Monitoring and Auditing
- Task Automation
- Generating Reports
- Review

## Lab : Maintaining SQL Servers with PowerShell

After completing this module, students will be able to:

- Manage SQL Server Backups and Restores
- Maintain Database Integrity and Performance
- Monitor and Audit changes to a SQL Server
- Task Automation on SQL Server
- Generate SQL Server Reports