

**Document Generated: 09/20/2024**

**Learning Style: On Demand**

**Provider:**

**Difficulty: Intermediate**

**Course Duration: 7 Hours**

## SQL Server Core 2016



### About this course:

The understudy will be presented to the most recent and freshest highlights that SQL Server 2016 brings to the table in this course. The understudy will find out

about temporal tables, data masking, Azure cloud technology, row-level security, live query statistics, stretch database configuration, and much more. With this experience, the understudy will have the option to manage, configure, deploy the most recent features that are just accessible in SQL Server 2016 and accordingly increase a bit of leeway over the other IT experts.

## **Course Objective:**

1. Explain the overview of the significant level architecture of SQL Server and its different parts.
2. Define the SQL Server execution waits, model, and queues.
3. Describe Storage Area Networks, core I/O concepts, and performance testing.
4. Describe the best practices identified with data files for user TempDB and databases and architectural concepts.
5. Describe concepts of architecture and best practices related to Transactions, Concurrency, Isolation Levels and Locking.
6. Describe how to identify and fix query plan issues and architectural concepts of the Optimizer.
7. Explain troubleshooting scenarios, architectural concepts, and best practices related to Plan Cache.
8. Describe troubleshooting strategy, architectural concepts, and usage scenarios for Extended Events.
9. Define data collection techniques and strategy to analyze collected data.
10. Comprehend techniques to diagnose and identify bottlenecks for overall performance improvement.

## **Targeted Audience:**

The Microsoft SQL Server 2016 Training Course's primary Targeted Audience is the people who maintain and administer SQL Server databases and are liable for the ideal execution of SQL Server cases that they oversee. These people additionally compose inquiries against information and need to makes sure the ideal execution of the work burdens.

The Microsoft SQL Server 2016 Training Course secondary Targeted Audiences are people who create applications that convey content from SQL Server databases.

## Prerequisite:

With their professional experience, applicants who go to this training should have the accompanying specialized information:

- Working information on database maintenance and administration.
- Essential information on the Microsoft Windows working framework and its core functionality.
- Working information on Transact-SQL.

## Course Outline:

### Chapter 01 - Getting Started

- **Topic A: Introducing SQL Core 2016 - Part 1**
- Introducing SQL Core 2016 - Part 2
- Introducing SQL Core 2016 - Part 3
- **Topic B: Using SSMS - Part 1**
- Using SSMS - Part 2
- Using SSMS - Part 3
- **Topic C: Installing and Exploring the Sample Database - Part 1**
- Installing and Exploring the Sample Database - Part 2
- Installing and Exploring the Sample Database - Part 3

### Chapter 02 - SSMS and Data Tools

- **Topic A: Database Objects - Part 1**
- Database Objects - Part 2
- Database Objects - Part 3
- **Topic B: SSMS Features and Help - Part 1**
- SSMS Features and Help - Part 2
- SSMS Features and Help - Part 3
- **Topic C: SQL Server Data Tools - Part 1**
- SQL Server Data Tools - Part 2
- SQL Server Data Tools - Part 3
- **Topic D: Working with Tables - Part 1**
- Working with Tables - Part 2
- Working with Tables - Part 3
- **Topic E: Creating a View - Part 1**
- Creating a View - Part 2
- Creating a View - Part 3

### Chapter 03 - Installation

- **Topic A: Preparing to Install - Part 1**
- Preparing to Install - Part 2

- Preparing to Install - Part 3
- **Topic B: Upgrading - Part 1**
- Upgrading - Part 2
- Upgrading - Part 3
- **Topic C: Installation - Part 1**
- Installation - Part 2
- Installation - Part 3
- **Topic D: Customizing Installation - Part 1**
- Customizing Installation - Part 2
- Customizing Installation - Part 3
- **Topic E: Performing Installation - Part 1**
- Performing Installation - Part 2
- Performing Installation - Part 3

## Chapter 04 - Server Configuration

- **Topic A: Install SSMS and SSDT - Part 1**
- Install SSMS and SSDT - Part 2
- Install SSMS and SSDT - Part 3
- **Topic B: Configure the Server - Part 1**
- Configure the Server - Part 2
- Configure the Server - Part 3
- **Topic C: More Server Config - Part 1**
- More Server Config - Part 2
- More Server Config - Part 3

## Chapter 05 - Using Management Studio

- **Topic A: SQL Server Management Studio - Part 1**
- SQL Server Management Studio - Part 2
- SQL Server Management Studio - Part 3
- **Topic B: SSMS Options - Part 1**
- SSMS Options - Part 2
- SSMS Options - Part 3
- **Topic C: Configure SSMS Windows - Part 1**
- Configure SSMS Windows - Part 2
- Configure SSMS Windows - Part 3
- **Topic D: Object Explorer - Part 1**
- Object Explorer - Part 2
- Object Explorer - Part 3
- **Topic E: Edit Objects in Designer - Part 1**
- Edit Objects in Designer - Part 2
- Edit Objects in Designer - Part 3

## Chapter 06 - Writing and Executing Queries

- **Topic A: Working with the Query Editor - Part 1**
- Working with the Query Editor - Part 2
- Working with the Query Editor - Part 3
- **Topic B: Scripting with Management Studio - Part 1**

- Scripting with Management Studio - Part 2
- Scripting with Management Studio - Part 3
- **Topic C: Debugging TSQL Code - Part 1**
- Debugging TSQL Code - Part 2
- Debugging TSQL Code - Part 3
- **Topic D: Executing Queries - Part 1**
- Executing Queries - Part 2
- Executing Queries - Part 3