

## 10986 - Updating Your Skills to SQL Server 2016

Duration: 3 days

### Overview:

This three-day instructor-led course provides students moving from earlier releases of SQL Server with an introduction to the new features in SQL Server 2016.

### Target Audience:

The primary audience for this course are existing database professionals with experience of SQL Server 2014 who want to update their skills to SQL Server 2016. Additional this course is for existing SQL Server 2014 MCSAs who want to prepare for the Upgrade exam for SQL Server 2016 certification.

### Pre-requisites:

In addition to their professional experience, students who attend this training should already have the following technical knowledge:

- Experience of building and managing database, data warehouse, and business intelligence (BI) solutions with SQL Server 2014.
- Familiarity with the Windows Server 2012 R2 operating system and networking.
- Familiarity with Microsoft Excel and Microsoft SharePoint Server 2013.

### At Course Completion:

After completing this course, students will be able to:

- Describe key capabilities and components of SQL Server 2016
- Describe new and enhanced features in SQL Server performance
- Describes new and enhanced features in SQL Server security
- Describe what's new in SQL Server Availability and Scalability
- Describe new and enhanced features in reporting and PowerBI in SQL Server 2016
- Describe new and enhanced data access features
- Describe new and enhanced features in SQL Server OLAP
- Describe new SQL Server cloud functionality

### Module 1: Introduction to SQL Server 2016

#### Lessons

- Overview of SQL Server 2016
- SQL Server 2016 Editions and Components
- Installing SQL Server 2016
- SQL Server Management Studio Enhancements

**Lab: Installing SQL Server 2016**

### Module 2: What's New in SQL Server Performance

#### Lessons

- Columnstore Indexes for Operational Analytics
- In-memory OLTP Enhancements
- The Query Data Store
- Native JSON
- Temporal Tables

**Lab: Implementing SQL Server 2016 Performance Improvements**

### Module 3: What's New in SQL Server Security?

#### Lessons

- Using Always Encrypted
- Row-level Security
- Dynamic Data Masking

**Lab: Implementing SQL Server 2016 Security Improvements**

### Module 4: What's New in SQL Server Availability and Scalability?

#### Lessons

- Enhanced AlwaysOn Availability Groups
- What's New in Database Caching?
- Using Windows Server 2016

**Lab: Availability and Scalability with SQL Server 2016**

### Module 5: What's New in SQL Server Reporting and BI

#### Lessons

- Reporting Services Enhancements
- PowerBI Enhancements

**Lab: Implementing PowerBI**

### Module 6: What's New in SQL Server Data Access?

#### Lessons

- PolyBase
- Enhancements to Integration Services

**Lab: Using PolyBase**

### Module 7: New and Enhanced Features in SQL Server OLAP

#### Lessons

- New and Enhanced Features in SQL Server OLAP
- What's New in SQL Server Analysis Services

**Lab: OLAP with SQL Server**

### Module 8: What's New for SQL Server in the Cloud?

#### Lessons

- Stretch Database
- Enhanced Backups to Azure
- Introduction to SQL Server 2016 Hybrid Cloud
- What's New in SQL Server Azure Database

**Lab: Using SQL Server in a Hybrid Cloud**