# 20465: Designing Solutions for Microsoft® SQL Server® 2012/2014

**Duration: 3 Days**
**Method: Instructor-Led Training (ILT) | Live Online Training**

## Course Description

The focus of this course is on planning and implementing enterprise database infrastructure solutions by using SQL Server and other Microsoft technologies. It describes how to consolidate SQL Server workloads and how to plan and implement high availability and disaster recovery solutions.

## Target Audience

This course is intended for:

- Database professionals who need to plan, implement, and manage database solutions.

## Prerequisites

To attend this course, attendees should have:

- At least **two** (2) years' experience of working with relational databases, including:
  o Planning and implementing databases.
  o Managing databases.
  o Querying with Transact-SQL.
  o Some basic knowledge of high availability and disaster recovery.

## Course Objectives

Upon successful completion of this course, attendees will be able to:

- Assess an existing enterprise environment.
- Plan and implement Policy-Based Management.
- Describe the considerations for consolidating workloads with SQL Server 2014.
- Describe the considerations for including SQL Server 2014 in a private cloud.

# Course Topics

## Module 1: Introduction to Enterprise Data Architecture
- Considerations for Enterprise Data
- Assessing an Existing Infrastructure

## Module 2: Multi-Server Configuration Management
- Policy-Based Management
- Microsoft System Centre

## Module 3: Monitoring SQL Server 2014 Health
- Introduction to Health Monitoring
- Data Collector
- SQL Server Utility

## Module 4: Consolidating Database Workloads with SQL Server 2014
- Considerations for Database Server Consolidation
- Managing Resources in a Consolidated Database Infrastructure

## Module 5: Introduction to Cloud Data Solutions
- Overview of Cloud Computing
- SQL Server in a Private Cloud

## Module 6: Introduction to High Availability in SQL Server 2014
- High Availability Concepts and Options in SQL Server 2014
- Log Shipping

## Module 7: Clustering with Windows Server and SQL Server 2014
- Introduction to Windows Server Failover Clustering
- SQL Server AlwaysOn Failover Cluster Instances

## Module 8: AlwaysOn Availability Groups
- Introduction to AlwaysOn Availability Groups
- Working with AlwaysOn Availability Groups
- Considerations for Using AlwaysOn Availability Groups

## Module 9: Planning High Availability and Disaster Recovery
- High Availability and Disaster Recovery with SQL Server 2014
- SQL Server High Availability and Disaster Recovery Solutions

## Module 10: Replicating Data
- SQL Server Replication
- Planning Replication

## LABS INCLUDED