

# 20467: Designing Business Intelligence Solutions with Microsoft<sup>®</sup> SQL Server<sup>®</sup> 2012/2014

**Duration: 5 Days** 

Method: Instructor-Led Training (ILT) | Live Online Training

## **Course Description**

This course teaches participants how to plan and design a Business Intelligence (BI) solution that is based on Microsoft SQL Server 2014 and other Microsoft BI technologies.

### **Target Audience**

This course is intended for:

- Database Professionals
- BI professionals with experience of implementing solutions with SQL Server database engine, SQL Server Integration Services, SQL Server Analysis Services, and SQL Server Reporting Services.

### Prerequisites

To attend this course, attendees should have professional experience in addition to the following technical knowledge:

- Basic understanding of dimensional modelling (star schema) for data warehouses
- Basic server hardware knowledge
- The ability to:
  - Create Integration Services packages that include control flows and data flows
  - o Create a basic multidimensional cube with Analysis Services
  - o Create a basic tabular model with PowerPivot and Analysis Services
  - o Create Reporting Services reports with Report Designer
  - Implement authentication and permissions in the SQL Server database engine, Analysis Services, and Reporting Services

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• Familiarity with SharePoint<sup>®</sup> Server and Microsoft Office applications – particularly Excel<sup>®</sup>.

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# **Course Objectives**

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

- Plan a BI solution.
- Plan SQL Server BI infrastructure.
- Design a data warehouse.
- Design an extract, transform and load (ETL) solution.
- Design analytical data models.
- Plan a BI delivery solution.
- Design a Reporting Services solution.
- Design a Microsoft Excel-based reporting solution.
- Plan a SharePoint Server BI solution.
- Monitor and optimize a BI solution.
- Operate a BI solution.

# **Course Topics**

#### Module 1: Planning a BI Solution

- Elements of a BI Solution
- Planning a Bl Project
- The Microsoft BI Platform

### Module 2: Planning SQL Server Business Intelligence Infrastructure

- Considerations of BI Infrastructure
- Planning Data Warehouse Hardware

#### Module 3: Designing a Data Warehouse

- Data Warehouse Design Overview
- Designing Dimension Tables
- Design FACT tables

## Module 4: Designing an ETL solution

- ETL Overview
- Planning for Data Extraction
- Planning for Data Transformations
- Planning for Data Loading

#### Module 5: Designing Analytical Data Models

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- Introduction to Analytical Data Models
- Designing Analytical Data Models

# Module 6: Planning a BI Delivery Solution

- Considerations for BI Delivery
- Common Reporting Scenarios
- Choosing a Reporting Tool

# Module 7: Designing a Reporting Services Solution

- Planning a Reporting Solution
- Designing Reports
- Planning Report Consistency

# Module 8: Designing an Excel Based reporting Solution

- Using Excel for Data Reporting and Analysis
- PowerPivot in Excel
- Power View in Excel

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#### **Course Topics** *Continued* Module 9: Planning a SharePoint Server BI Solution

- Introduction to SharePoint Server as a BI Platform
- Planning Security for a SharePoint Server BI Solution
- Planning Reporting Services Configuration
- Planning PowerPivot Configuration
- Planning for PerformancePoint Services

#### Module 10: Monitoring and Optimizing a BI Solution

- Overview of BI Monitoring
- Monitoring and Optimizing the Data Warehouse
- Monitoring and Analyzing Analysis Services
- Monitoring and Optimizing Reporting Services

#### Module 11: Operating a BI Solution

- Overview of BI Operations
- ETL Operations
- Data Warehouse Operations
- Analysis of Services Operations
- Reporting Services Operations

## LABS INCLUDED







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