

# (20467D) –Designing Business Intelligence Solutions with Microsoft SQL Server 2014

## OBJECTIVE

This training course teaches database and business intelligence (BI) professionals how to plan and design a BI solution that is based on Microsoft SQL Server 2014 and other Microsoft BI technologies

## COURSE TOPICS

### Module 1: Planning a BI Solution

- Elements of a BI Solution
- Planning a BI 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 Loadings

### Module 5: Designing Analytical Data Models

- 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

### **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 Services Operations
- Reporting Services Operations

## **PREREQUISITES**

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

- A basic understanding of dimensional modeling (star schema) for data warehouses
- Basic server hardware knowledge
- The ability to create Integration Services packages that include control flows and data flows
- The ability to create a basic multidimensional cube with Analysis Services
- The ability to create a basic tabular model with PowerPivot and Analysis Services
- The ability to create Reporting Services reports with Report Designer

- The ability to implement authentication and permissions in the SQL Server database engine, Analysis Services, and Reporting Services
- Familiarity with SharePoint Server and Microsoft Office applications – particularly Excel

### TRAINING APPROACH

This course includes lectures, course notes, exercises and hands-on practice.

### COURSE DURATION

24 Hours (in 3 days)

Time: 9:00am to 6:00pm

Lunch Time: 1:00pm to 2:00pm

### CERTIFICATION COMPLETION

A certificate of completion is provided for all trainees attending the course