

## Course Details

# Course 20467A

## Designing Database Solutions for Microsoft SQL Server 2012

Length: 5 Days

Published: January 14, 2013

Language(s): English

Audience(s): IT Professionals

Level: 300

Technology: Microsoft SQL Server 2012

Type: Course

Delivery Method: Instructor-led (classroom)

## Prerequisites

A basic understanding of dimensional modeling (star schema) for data warehouses.

- 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.

Students who attend this training can meet the prerequisites by attending the following courses, or obtaining equivalent knowledge and skills:

- 10777A: Implementing a Data Warehouse with Microsoft SQL Server 2012
- 10778A: Implementing Data Models and Reports with Microsoft SQL Server 2012

## Course Outline

### Module 1: Planning a BI Solution

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

### Module 2: Planning a BI Infrastructure

- Planning a Data Warehouse Infrastructure
- Planning an ETL Infrastructure
- Planning Analysis Services Infrastructure
- Planning Reporting Services Infrastructure

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### Module 3: Designing a Data Warehouse

- Designing a Logical Schema
- Designing a Physical Schema

### Module 5: Designing Analytical Data Models

- Options for Analytical Models
- Data Model Design Considerations

### Module 7: Designing a Reporting Services Solution

- Designing Reports
- Considerations for Report Execution
- Planning a Reporting Solution

### 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 11: Planning BI Operations

- Overview of BI Operations
- Automating ETL Tasks
- Post ETL Tasks
- Planning a Backup Strategy for a BI Solution

### Module 4: Designing an ETL Solution

- Planning for Data Extraction
- Planning for Data Transformation
- Planning for Data Loading
- Planning for SSIS Package Deployment

### Module 6: Planning a BI Delivery Solution

- Considerations for BI Delivery
- Choosing a Delivery Approach

### Module 8: Designing an Excel-Based Reporting Solution

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

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

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