Designing Business Intelligence Solutions with Microsoft SQL Server

40 hours

Course Overview:

This five-day instructor-led course teaches students how to implement self-service Business Intelligence (BI) and Big Data analysis solutions using the Microsoft data platform. The course discusses the rationale for self-service BI, and describes how to use Microsoft SQL Server Reporting Services, Microsoft Excel, Microsoft SharePoint Server, and Microsoft Office 365 Power BI to create self-service data models and reports. The course then goes on to describe how to use Windows Azure HDInsight to perform Big Data analysis.

Note: This course is designed for customers who are interested in learning SQL Server 2012 or SQL Server 2014. It covers the new features in SQL Server 2014, but also the important capabilities across the SQL Server data platform.

Who Should Attend:

The primary audience for this course is database and business intelligence (BI) professionals who are familiar with data warehouses and enterprise BI solutions built with SQL Server technologies. Experienced data analysts who want to learn how to use Microsoft technologies for self-service analysis and reporting will also benefit from attending this course.

Required Skills:

- Knowledge of data warehousing and data modeling principles.
- Familiarity with Microsoft Excel and Microsoft SharePoint Server 2013.

Course Contents:

Module 1: Planning a BI Delivery Solution

- Considerations for BI Delivery
- Choosing a Delivery Approach

Module 2: Designing a Reporting Services Solution

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

Module 3: Designing an Excel-Based Reporting Solution

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

Module 4: Planning a BI Solution

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

Module 5: Planning a BI Infrastructure

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

Module 6: Designing a Data Warehouse

- Designing a Logical Schema
- Designing a Physical Schema

Module 7: Designing an ETL Solution

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

Module 8: Designing Analytical Data Models

- Options for Analytical Models
- Data Model Design Considerations

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 Optimizing Analysis Services
- Monitoring and Optimizing Reporting Services

Module 11: Planning BI Operations

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