Price:	$2,295
Length:	35 Hours (5 days)

Introduction: The focus of this five-day instructor-led course is on creating managed enterprise BI solutions. It describes how to implement multidimensional and tabular data models, deliver reports with Microsoft SQL Server Reporting Services, create dashboards with Microsoft SharePoint Server PerformancePoint Services, and discover business insights by using data mining.

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.

Target Audience: This course is intended for database professionals who need to fulfill a Business Intelligence Developer role to create analysis and reporting solutions. Primary responsibilities include:
- Implementing analytical data models, such as OLAP cubes.
- Implementing reports, and managing report delivery.
- Creating business performance dashboards.
- Supporting data mining and predictive analysis.

Prerequisites: Before attending this course, the student should have:
- At least 2 years' experience of working with relational databases, including:
- Designing a normalized database.
- Creating tables and relationships.
- Querying with Transact-SQL.
- Some basic knowledge of data warehouse schema topology (including star and snowflake schemas).
- Some exposure to basic programming constructs (such as looping and branching).
- An awareness of key business priorities such as revenue, profitability, and financial accounting is desirable.

Objectives: At the end of the course, students will be able to:
- Describe the components, architecture, and nature of a BI solution.
- Create a multidimensional database with Analysis Services.
- Implement dimensions in a cube.
- Implement measures and measure groups in a cube.
- Use MDX Syntax.
- Customize a cube.
- Implement a Tabular Data Model in SQL Server Analysis Services.
- Use DAX to enhance a tabular model.
- Create reports with Reporting Services.
- Enhance reports with charts and parameters.
- Manage report execution and delivery.
- Implement a dashboard in SharePoint Server with PerformancePoint Services.
- Use Data Mining for Predictive Analysis.

Course Outline

I. Introduction to Business Intelligence and Data Modeling
- A. Elements of an Enterprise BI Solution
- B. The Microsoft Enterprise BI Platform
- C. Planning an Enterprise BI Project

II. Creating Multidimensional Databases
- A. Introduction to Multidimensional Analysis
- B. Creating Data Sources and Data Source Views
- C. Creating a Cube
- D. Overview of Cube Security

III. Working with Cubes and Dimensions
- A. Configuring Dimensions
- B. Defining Attribute Hierarchies
- C. Sorting and Grouping Hierarchies

IV. Working with Measures and Measure Groups
- A. Working with Measures
- B. Working with Measure Groups

V. Introduction to MDX
- A. MDX Fundamentals
- B. Adding Calculations to a Cube
- C. Using MDX to Query a Cube

VI. Enhancing a Cube
- A. Working with Key Performance Indicators
- B. Working with Actions
- C. Working with Perspectives
- D. Working with Translations

VII. Implementing an Analysis Services Tabular Data Model
- A. Introduction to Analysis Services Tabular Data Model Projects
- B. Creating a Tabular Data Model
- C. Using an Analysis Services Tabular Data Model in the Enterprise

VIII. Introduction to DAX
- A. DAX Fundamentals
- B. Enhancing a Tabular Model with DAX

IX. Implementing Reports with SQL Server Reporting Services
- A. Introduction to Reporting Services
- B. Creating a Report with Report Designer
- C. Grouping and Aggregating Data in a Report
- D. Publishing and Viewing a Report

X. Enhancing Reports with SQL Server Reporting Services
- A. Showing Data Graphically
- B. Filtering Reports by Using Parameters

XI. Managing Report Execution and Delivery
- A. Managing Report Security
- B. Managing Report Execution
- C. Subscriptions and Data Alerts
- D. Troubleshooting Reporting Services

XII. Delivering BI with SharePoint PerformancePoint Services
- A. Introduction to SharePoint Server as a BI Platform
- B. Introduction to PerformancePoint Services
- C. PerformancePoint Data Sources and Time Intelligence
- D. Reports, Scorecards, and Dashboards

XIII. Performing Predictive Analysis with Data Mining
- A. Overview of Data Mining
- B. Creating a Data Mining Solution
- C. Validating a Data Mining Solution
- D. Consuming a Data Mining Solution