

40 HORAS

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.

AUDIENCIA

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.

AT COURSE COMPLETION

After completing this 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.

PREREQUISITES

Before attending this course, students must 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.

COURSE OUTLINE

Module 1: Introduction to Business Intelligence and Data Modeling

- Introduction to Business Intelligence
- The Microsoft Enterprise BI Platform

Module 2: Creating Multidimensional Databases

- Introduction to Multidimensional Analysis
- Creating Data Sources and Data Source Views
- Creating a Cube
- Overview of Cube Security

Module 3: Working with Cubes and Dimensions

- Configuring Dimensions
- Defining Attribute Hierarchies
- Sorting and Grouping Hierarchies

Module 4: Working with Measures and Measure Groups

- Working with Measures
- Working with Measure Groups

Module 5: Introduction to MDX

- MDX fundamentals
- Adding Calculations to a Cube
- Using MDX to Query a Cube

Module 6: Customizing Cube Functionality

- Implementing Key Performance Indicators
- Implementing Actions
- Implementing Perspectives
- Implementing Translations

Module 7: Implementing an Analysis Services Tabular Data Model

- Introduction to Tabular Data Models
- Creating a Tabular Data Model
- Using an Analysis Services Tabular Data Model in an Enterprise BI Solution

Module 8: Introduction to Data Analysis Expression (DAX)

- DAX Fundamentals
- Using DAX to Create calculated Columns and Measures in a Tabular Data Model

Module 9: Implementing Reports with SQL Server Reporting Services

- Introduction to Reporting Services
- Creating a Report with Report Designer
- Grouping and Aggregating Data in a Report
- Showing Data Graphically
- Filtering Reports Using Parameters

Module 10: Automating Report Execution and Delivery

- Managing Report Security
- Managing Report Execution
- Delivering Reports with Subscriptions and Data Alerts
- Troubleshooting Reporting Services

Module 11: Delivering BI with SharePoint PerformancePoint Services

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

Module 12: Performing Predictive Analysis with Data Mining

- Overview of Data Mining
- Using the Data Mining Add-in for Excel
- Creating a Custom Data Mining Solution
- Validating a Data Mining Model
- Connecting to and Consuming Data Mining Data