



Enterprise Computing Solutions - Education Services

TRAINING OFFERING

You can reach us at:

9201 Dry Creek Rd. Centennial, CO 80112, United States

Email: arrow_learning@arrow.com
Phone: 303 790 2330



Designing Business Intelligence Solutions with Microsoft SQL Server

CODE:	LENGTH:	PRICE:
MS-20467	5 days	\$2,975.00

Description

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.

Objectives

After completing this course, students will be able to:

- Describe key features and benefits of self-service BI.
- Use SQL Server Reporting Services to implement a self-service reporting solution.
- Use PowerPivot in Microsoft Excel to create analytical data models.
- Use Power Query in Microsoft Excel to import data into a data model.
- Use Power View in Microsoft Excel to create interactive data visualizations.
- Use Power Map in Microsoft Excel to create geographic data visualizations.
- Use Microsoft SharePoint Server to implement collaborative self-service BI solutions.
- Provision and use a Windows Azure HDInsight cluster for Big Data analysis.
- Use Pig and Hive to analyze big data in Windows Azure HDInsight.
- Design and implement Big Data processes to support self-service BI.

Audience

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.

Prerequisites

This course requires that you meet the following prerequisites:

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

Programme

Module 1: Planning a BI Solution

This module enables students to plan the components of a BI Solution.

Lessons

Elements of a BI Solution

Planning a BI Project

The Microsoft BI Platform

Lab : Planning BI Solutions

After completing this module, you will be able to:

Plan a BI Project.

Describe the components of a BI Solution.

Identify the components of a BI Solution.

Module 2: Planning BI Infrastructure

This module describes how to use plan appropriate BI Infrastructure given a set of BI Parameters.

Lessons

Considerations of BI Infrastructure

Planning Data Warehouse Hardware

Lab : Planning BI Infrastructure

After completing this module, you will be able to:

Describe the components of a BI Infrastructure and where you would use them.

Plan for the hardware requirements of a data warehouse implementation.

Module 3: Designing a Data Warehouse

This module describes how to design a data warehouse given a set of user requirements.

Lessons

Data Warehouse Design Overview

Designing Dimension Tables

Design FACT tables

Lab : Designing a Data Warehouse Logical Schema

After completing this module, you will be able to:

Design a data warehouse.

Design dimension tables.

Design Fact tables.

Design a logical schema for a data warehouse.

Module 4: Designing an ETL solution

This lesson describes how to design an extract, transform and load (ETL) solution.

Lessons

ETL Overview

Planning for Data Extraction

Planning for Data Transformations

Planning for Data Loading

Lab : Designing an ETL Solution

After completing this module, you will be able to:

Describe the components of an ETL solution.

Design an ETL solution.

Module 5: Designing Analytical Data Models

This module describes how to design analytical data models for specific BI scenarios.

Lessons

Introduction to Analytical data Models

Designing Analytical Data Models

Lab : Designing Analytical Data Model

Lab : Designing Dimensions and Hierarchies

After completing this module, you will be able to:

Describe the features of an analytical data model.

Design an analytical data model.

Module 6: Planning a BI Delivery Solution

This module describes how to choose an appropriate delivery solution for a given scenario.

Lessons

Considerations for BI delivery

Common Reporting Scenarios

Choosing a Reporting Tool

Lab : Planning a BI Delivery Solution

After completing this module, you will be able to:

Describe the components of a BI delivery solution.

Describe some common reporting scenarios.

Choose an appropriate delivery solution for a given scenario.

Module 7: Designing a Reporting Services Solution

This module describes how to design a reporting services solution.

Lessons

Planning a Reporting Solution

Designing Reports

Planning Report Consistency

Lab : Designing a Reporting Services Solution

After completing this module, you will be able to:

Plan for a reporting Services solution.

Design reports for a reporting services solutions.

Plan for consistency of reporting

Module 8: Designing an Excel Based reporting Solution

In this module students will learn how to design a reporting solution using Excel.

Lessons

Using Excel for Data Reporting and Analysis

PowerPivot in Excel

Power View in Excel

Lab : Designing and Excel Reporting Solution

After completing this module, you will be able to:

Describe key features of excel reporting solutions.

Use PowerPivot in Excel to create reports.

Use Power View in excel to create reports.

Module 9: Planning a SharePoint Server BI Solution

This module introduces the use of SharePoint Server as a BI solution.

Lessons

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

Lab : Implementing a SharePoint Server BI Solution

Lab : Implementing PerformancePoint Services

After completing this module, you will be able to:

Describe the components of a SharePoint Server BI solution.

Plan security for a SharePoint Server BI solution.

Plan reporting solutions for a SharePoint Server BI solution.

Describe the components of a PerformancePoint Solution.

Implement PerformancePoint services.

Module 10: Monitoring and Optimizing a BI Solution

At the conclusion of this module you will be able to optimize and monitor a BI solution.

Lessons

Overview of BI Monitoring

Monitoring and Optimizing the Data Warehouse

Monitoring and Analyzing Analysis Services

Monitoring and Optimizing Reporting Services

Lab : Monitoring and Optimizing a BI Solution

After completing this module, you will be able to:

Describe the options for monitoring and optimizing a BI solution.

Be able to monitor and optimize a BI solution.

Module 11: Operating a BI Solution

At the conclusion of this module you will be able to plan management and maintenance operations of a BI solution.

Lessons

Overview of BI Operations

ETL Operations

Data Warehouse Operations

Analysis Services Operations

Reporting Services Operations

Lab : Operating a BI Solution

After completing this module, you will be able to:

Describe the components to be managed in a BI Solution.

Be able to manage the components of a BI solution.

Session Dates

On request. Please [contact us](#)

Additional Information

[This training is also available as onsite training. Please contact us to find out more.](#)