

Microsoft Business Intelligence Bootcamp Courses

**Bootcamp Title – MCSA: Business Intelligence (1 Cert)**  
Number of Days – 6   
Number of Exams – 2  
Number of Certifications – 1  
Cost - $5,595

Certifications:

MCSE: Business Intelligence

Exams:

**70-466:** Implementing Data Models and Reports with Microsoft SQL

**70-467:**Designing Business Intelligence Solutions with Microsoft SQL Server

Course Description:

The MCSE Data Platform certification boot camp is a 6 day comprehensive deep dive into the SQL Server covering topics such as implementing, developing and designing. This instructor led face to face training camp will teach you the skills needed to support a Data Platform environment.

Class Objectives (*Following information customized from Microsoft Learning Test Objectives)*

**Module 1: Introduction to Business Intelligence and Data Modeling**

As a SQL Server database professional, you may be required to participate in, or perhaps even lead, a project with the aim of implementing an effective enterprise BI solution. Therefore, it is important that you have a good understanding of the various elements that comprise a BI solution, the business and IT personnel typically involved in a BI project, and the Microsoft products that you can use to implement the solution.

**Lessons**

* Introduction to Business Intelligence
* The Microsoft Enterprise BI Platform

**Lab : Exploring a BI Solution**

After completing this module, you will be able to:

* Describe the elements of a typical BI solution.
* Select appropriate Microsoft technologies for a BI solution.
* Describe key considerations for planning a BI project.

**Module 2: Creating Multidimensional Databases**

This module provides an introduction to multidimensional databases and introduces the core components of an Online Analytical Processing (OLAP) cube.

**Lessons**

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

**Lab : Creating a Multidimensional Database**

After completing this module, you will be able to:

* Describe the considerations for a multidimensional database.
* Create data sources and data source views.
* Create a cube.
* Implement security in a multidimensional database.

**Module 3: Working with Cubes and Dimensions**

This module describes how to create and configure dimensions and dimension hierarchies in an Analysis Services multidimensional data model.

**Lessons**

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

**Lab : Working with Cubes and Dimensions**

After completing this module, you will be able to:

* Configure dimensions.
* Define attribute hierarchies.
* Sort and group attributes.

**Module 4: Working with Measures and Measure Groups**

This module describes measures and measure groups. It also explains how you can use them to define fact tables and associate dimensions with measures.

**Lessons**

* Working with Measures
* Working with Measure Groups

**Lab : Configuring Measures and Measure Groups**

After completing this module, you will be able to:

* Configure measures.
* Configure measure groups.

**Module 5: Introduction to MDX**

This module describes the fundamentals of MDX and explains how to build calculations, such as calculated members and named sets.

**Lessons**

* MDX Fundamentals
* Adding Calculations to a Cube
* Using MDX to Query a Cube

**Lab : Using MDX**

After completing this module, you will be able to:

* Describe MDX.
* Add calculations to a cube.
* Describe how to use MDX in client applications.

**Module 6: Customizing Cube Functionality**

This module describes how to enhance a cube with Key Performance Indicators (KPIs), actions, perspectives, and translations.

**Lessons**

* Implementing Key Performance Indicators
* Implementing Actions
* Implementing Perspectives
* Implementing Translations

**Lab : Customizing a Cube**

After completing this module, you will be able to:

* Implement Key Performance Indicators.
* Implement Actions.
* Implement Perspectives.
* Implement Translations.

**Module 7: Implementing an Analysis Services Tabular Data Model**

This module describes Analysis Services tabular data models and explains how to develop a tabular data model using the SQL Server Data Tools for Business Intelligence (BI) add-in for Visual Studio.

**Lessons**

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

**Lab : Implementing an Analysis Services Tabular Data Model**

After completing this module, you will be able to:

* Describe Analysis Services tabular data model projects.
* Implement an Analysis Services tabular data model.
* Use an Analysis Services tabular data model.

**Module 8: Introduction to Data Analysis Expression (DAX)**This module explains the fundamentals of the DAX language. It also explains how you can use DAX to create calculated columns and measures, and how you can use them in your tabular data models.

**Lessons**

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

**Lab : Creating Calculated Columns and Measures by using DAX**

After completing this module, you will be able to:

* Describe the fundamentals of DAX.
* Use DAX to create calculated columns and measures.

**Module 9: Implementing Reports with SQL Server Reporting Services**

This module introduces Microsoft SQL Server Reporting Services and discusses the tools and techniques that a professional BI developer can use to create and publish reports.

**Lessons**

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

**Lab : Creating a Report with Report Designer**

After completing this module, you will be able to:

* Describe the key features of Reporting Services.
* Use Report Designer to create a report.
* Group and aggregate data in a report.
* Publish and view a report.

**Module 10: Automating Report Execution and Delivery**

This module describes how to apply security and report execution settings, and how to create subscriptions to deliver reports.

**Lessons**

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

**Lab : Implementing Report Subscriptions**

After completing this module, you will be able to:

* Configure security settings for a report server.
* Configure report execution settings to optimize performance.
* Use subscriptions and alerts to automate report and data delivery.
* Troubleshoot reporting issues.

**Module 11: Delivering BI with SharePoint PerformancePoint Services**

This module introduces Microsoft SharePoint Server as a platform for BI, and then focuses on building BI dashboards and scorecards with PerformancePoint Services.

**Lessons**

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

**Lab : Implementing PerformancePoint Services**

After completing this module, you will be able to:

* Describe SharePoint Server as a BI platform.
* Use PerformancePoint Services to deliver BI functionality.
* Configure PerformancePoint Data Sources.
* Create Reports, Scorecards, and Dashboards.

**Module 12: Performing Predictive Analysis with Data Mining**

This module introduces data mining, describes how to create a data mining solution, how to validate data mining models, how to use the Data Mining Add-ins for Microsoft Excel, and how to incorporate data mining results into Reporting Services reports.

**Lessons**

* 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

**Lab : Using Data Mining to Support a Marketing Campaign**

After completing this module, you will be able to:

* Describe the key data mining concepts and use the Data Mining Add-ins for Excel.
* Create a data mining solution.
* Validate data mining models.
* Use data mining data in a report.

**Module 1: Introduction to Self-Service Business Intelligence**

This module introduces self-service BI.

**Lessons**

* Extending Enterprise BI
* Microsoft Self-Service BI and Big Data Technologies

**Lab : Exploring an Enterprise BI Solution**

After completing this module, you will be able to:

* Describe ways in which an enterprise BI solution can be extended.
* Identify Microsoft technologies for self-service BI and Big Data analysis.

**Module 2: Self-Service Reporting**

This module describes how to use Report Builder as a tool for self-service Microsoft SQL Server Reporting Services report authoring.

**Lessons**

* Introduction to Self-Service Reporting
* Shared Data Sources and Datasets
* Report Parts

**Lab : Implementing Self-Service Reporting**

After completing this module, you will be able to:

* Support self-service reporting with Report Builder.
* Create shared data sources and datasets for self-service reporting scenarios.
* Use report parts as reusable report elements.

**Module 3: Self-Service Data Modeling with PowerPivot**

This module describes how to use PowerPivot in Microsoft Excel to create self-service data models for analysis.

**Lessons**

* Creating Data Models in Excel with PowerPivot
* Using DAX in a PowerPivot Data Model

**Lab : Self-Service Data Modeling with PowerPivot**

After completing this module, you will be able to:

* Use PowerPivot to create tabular data models in Excel.
* Enhance data models with custom DAX expressions.

**Module 4: Importing Data with Power Query**

This lesson describes how to use Power Query in Microsoft Excel to find and import data.

**Lessons**

* Introduction to Power Query
* Using Power Query to Import Data

**Lab : Using Power Query**

After completing this module, you will be able to:

* Enable Power Query and use it to search for data online
* Use Power Query to import data from multiple data sources into an Excel data model

**Module 5: Visualizing Data with Power View in Microsoft Excel**

This module describes how to use Power View in Microsoft Excel to create interactive data visualizations.

**Lessons**

* Introduction to Power View
* Creating Dynamic Data Visualizations

**Lab : Visualizing Data with Power View**

After completing this module, you will be able to:

* Describe the features of Power View
* Use Power View to create interactive data visualizations in Excel

**Module 6: Visualizing Geographic Data with Power Map**

This module describes how to use Power Map in Microsoft Excel to create geographic data visualizations.

**Lessons**

* Introduction to Power Map
* Using Power Map

**Lab : Visualizing Geographic Data with Power Map**

After completing this module, you will be able to:

* Describe the features and usage scenarios of Power Map
* Use Power Map to create visualizations of geographic data

**Module 7: Collaborative BI with Microsoft SharePoint Server**

This module describes how to use Microsoft SharePoint Server in an enterprise environment to enable users to share PowerPivot workbooks and Power View reports.

**Lessons**

* Sharing PowerPivot Workbooks
* Managing PowerPivot Services in SharePoint Server
* Using Power View in SharePoint Server

**Lab : Using SharePoint Server for BI Collaboration**

After completing this module, you will be able to:

* Share a PowerPivot workbooks in SharePoint Server
* Manage PowerPivot services in SharePoint Server
* Use Power View to create interactive data visualizations in SharePoint Server

**Module 8: Introduction to Big Data and Microsoft Azure HDInsight**

This module introduces Big Data concepts and describes the key features of Windows Azure HDInsight.

**Lessons**

* Introduction to Big Data
* Windows Azure HDInsight

**Lab : Using Windows Azure HDInsight**

After completing this module, you will be able to:

* Describe key features of Big Data.
* Use Windows Azure HDInsight to process Map/Reduce jobs

**Module 9: Processing Big Data with Pig and Hive**

This module introduces Pig and Hive, and describes how you can use them to process Big Data in Windows Azure HDInsight.

**Lessons**

* Processing Big Data with Pig
* Processing Big Data with Hive

**Lab : Processing Big Data with Pig and Hive**

After completing this module, you will be able to:

* Use Pig to process Big Data
* Use Hive to process Big Data

**Module 10: Implementing Big Data Processing Solutions with Microsoft Azure HDInsight**

This module introduces key Windows Azure HDInsight technologies that enable you to design and implement automated, repeatable Big Data processing solutions that support self-service BI.

**Lessons**

* Automating Big Data Processing Tasks
* Integrating Windows Azure HDInsight with Enterprise Data

**Lab : Creating a Big Data Solution**

After completing this module, you will be able to:

* Design and implement an automated Big Data processing solution
* Integrate Windows Azure HDInsight with Self-Service BI Solutions