



BUILDING TRAINING SOLUTIONS  
FOR THE IT WORLD

# SharePoint 2010 Business Intelligence

**Days:** 5  
**Format:** Instructor-Led  
**Class Code:** 50429

## Recommended Course Sequence

Knowledge of prerequisites  
noted below.

*Course content is subject to change  
without notice.*

## Course Description:

This 5-day instructor-led course explores how to use SharePoint as your platform for Business Intelligence. Journey through the SharePoint Business Intelligence Center, Excel Services, Reporting Services, Analysis Service, Performance Point and PowerPivot to implement your BI Strategies and enable your decision makers to see data in new and dynamic ways! This course will take you down a path of building a BI environment from scratch to full interactive dashboards using the Microsoft BI Stack.

## Target Student:

Sr Business Intelligence Architects and Consultants, Sr Business Analysts, anyone responsible for implementing BI with SharePoint.

## Prerequisites:

Before attending this course, students must have:

- Understanding of SharePoint 2010 User Interface, database reporting concepts and familiarity with Data Marts and Data Warehouses.

## At Course Completion:

After completing this course, students will be able to:

- Explore the new Business Intelligence Center, Analysis Services, Excel Services, Business Connectivity Services, Visio Services, Access Services, Power Pivot, Performance Point and Bing Maps.

# SharePoint 2010 Business Intelligence

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## Course Outline

### Module 1: Overview

A simple introduction module.

After completing this module, students will be able to:

- Understand your course, classroom, classmates, facility and instructor.

### Module 2: Business Intelligence

In this module we review what Business Intelligence (BI) is and what the typical BI goals are. We also explore how Microsoft BI tools are enabling more advanced Business Intelligence features to filter down/up to the decision makers and Information Workers in general.

<b>Lessons</b>
■ Business Intelligence
<b>Lab : Business Intelligence Worksheet</b>
■ Answer Business Intelligence Questions
<b>After completing this module, students will be able to:</b>
■ Define Business Intelligence
■ Understand what P=R-C means to BI
■ Accept that empowering end users is a GOOD thing
■ Understand your BI will only be as good as your data, tools and processes

### Module 3: Business Intelligence Center

In this module we are going to explore the Business Intelligence Center site definition that comes with SharePoint 2010.

<b>Lessons</b>
■ Business Intelligence Center
<b>Lab : Business Intelligence Worksheet</b>
■ Explore SharePoint Business Intelligence Center
■ Explore Dashboard Designer
<b>After completing this module, students will be able to:</b>
■ Navigate the Business Intelligence Center Site Definition
■ Understand what a SharePoint Dashboard is
■ Understand what a KPI is and what data they can analyze
■ Understand what integration points are compatible with the Business Intelligence Center

# SharePoint 2010 Business Intelligence

## Module 4: Data Mart and Data Warehouses

In this module we explore what data is and some of the many forms that it takes. We then explore and define the terms Data Warehouse and Data Mart. This module is important in that as we move through the remainder of the course, we will need to have data to manipulate and work with to build our BI components.

<b>Lessons</b>
<ul style="list-style-type: none"> <li>■ Understanding Data and Data Formats</li> <li>■ Building Data Marts and Data Warehouses</li> </ul>
<b>Lab - Data and Data Formats</b>
<ul style="list-style-type: none"> <li>■ Explore Data Formats</li> </ul>
<b>Lab : Build A Data Warehouse</b>
<ul style="list-style-type: none"> <li>■ Create a Simple Data Warehouse</li> </ul>
<b>Lab : Extract and Load</b>
<ul style="list-style-type: none"> <li>■ Explore the Extract stage</li> </ul>
<b>Lab : Transform and Load</b>
<ul style="list-style-type: none"> <li>■ Explore Transform and Load stages</li> <li>■ Realize the importance of primary/unique keys</li> </ul>
<b>Lab : Granularity</b>
<ul style="list-style-type: none"> <li>■ Create Data Warehouse Granularity Levels</li> </ul>
<b>Lab : Build A Data Mart</b>
<ul style="list-style-type: none"> <li>■ Create a Data Mart</li> </ul>
<b>Lab : SQL Server to SharePoint Lists</b>
<ul style="list-style-type: none"> <li>■ Populate a SharePoint List with SQL Server data</li> </ul>
<b>After completing this module, students will be able to:</b>
<ul style="list-style-type: none"> <li>■ Differentiate between multiple data formats</li> <li>■ Understand differences between data warehouse and data marts</li> <li>■ Be able to describe what happens in an Extract, Transform and Load (ETL) process</li> </ul>

## Module 5: Business Connectivity Services

In this module we are going to take a look at the new Business Connectivity Services.

<b>Lessons</b>
<ul style="list-style-type: none"> <li>■ Business Connectivity Services</li> </ul>
<b>Lab : BCS Basics</b>
<ul style="list-style-type: none"> <li>■ Explore External Content Types</li> <li>■ Create a new External Content Type</li> <li>■ Create an External List</li> </ul>
<b>Lab : BCS With Data Warehouse</b>
<ul style="list-style-type: none"> <li>■ Create an Large External List using ECTs</li> <li>■ Using Filters and External lists</li> <li>■ Creating and Configuring Entity Profile Pages</li> </ul>
<b>Lab : Office and BCS for BI</b>

# SharePoint 2010 Business Intelligence

<ul style="list-style-type: none"> <li>■ Explore Office and BCS Integration</li> </ul>
<b>After completing this module, students will be able to:</b>
<ul style="list-style-type: none"> <li>■ Understand how BCS works</li> <li>■ How to build new BCS applications</li> <li>■ How to Upgrade your older BDC applications</li> </ul>

## Module 6: Analysis Services

In this module we will explore the feature of SQL Server called Analysis Services (SSAS). When regular SQL queries can't handle your data, MDX queries in SSAS can

<b>Lessons</b>
<ul style="list-style-type: none"> <li>■ Analysis Services</li> </ul>
<b>Lab : Analysis Services</b>
<ul style="list-style-type: none"> <li>■ Create Dimension and Fact tables with SSIS</li> </ul>
<b>Lab : Building An Analysis Services Database</b>
<ul style="list-style-type: none"> <li>■ Create a Analysis Services Database</li> <li>■ Create a Cube</li> <li>■ Create Dimensions</li> <li>■ Create Fact Tables</li> <li>■ Create a KPI</li> </ul>
<b>After completing this module, students will be able to:</b>
<ul style="list-style-type: none"> <li>■ Describe OLAP terms</li> <li>■ Understand how to navigate Analysis Services</li> <li>■ How to build a simple cube</li> <li>■ How to write simple MDX queries</li> <li>■ How to use data mining models</li> </ul>

## Module 7: Filter Web Parts

In this module we will explore Filter Web Parts and the important role they play in building Business Intelligence portals.

<b>Lessons</b>
<ul style="list-style-type: none"> <li>■ Filter Web Parts</li> </ul>
<b>Lab : Filter Web Parts</b>
<ul style="list-style-type: none"> <li>■ Use each of the Filter Web Parts</li> </ul>
<b>Lab : UserProfiles and Filters</b>
<ul style="list-style-type: none"> <li>■ Integrate User Profiles with Filters and Reports</li> </ul>
<b>After completing this module, students will be able to:</b>
<ul style="list-style-type: none"> <li>■ Describe what Filter Web Parts are</li> <li>■ Work with Filter Web Parts</li> <li>■ Understand how to integrate Filter Web Parts into other BI technologies</li> </ul>

# SharePoint 2010 Business Intelligence

## Module 8: Excel Services

In this module we will explore and work with the various features of SharePoint's Excel Services.

<b>Lessons</b>
<ul style="list-style-type: none"> <li>■ Excel Services</li> </ul>
<b>Lab : Create An Excel Report</b>
<ul style="list-style-type: none"> <li>■ Create An Excel Report</li> </ul>
<b>Lab : Excel Services</b>
<ul style="list-style-type: none"> <li>■ Learn to use Excel Services</li> <li>■ Create/Publish to Excel Services</li> <li>■ Configure Excel Services</li> <li>■ Shared Data Connections</li> </ul>
<b>Lab : MDX</b>
<ul style="list-style-type: none"> <li>■ Explore Excel 2010 MDX features</li> <li>■ Create a Slicer</li> <li>■ Create an MDX Set</li> </ul>
<b>Lab : Sparklines</b>
<ul style="list-style-type: none"> <li>■ Use Excel 2010 Sparklines</li> </ul>
<b>Lab : Filters and Excel Services</b>
<ul style="list-style-type: none"> <li>■ Explore Filter Web Parts and Excel Services</li> </ul>
<b>Lab : REST and Web Services</b>
<ul style="list-style-type: none"> <li>■ Explore REST features of Excel ServicesExplore the Excel Services Web Service</li> </ul>
<b>After completing this module, students will be able to:</b>
<ul style="list-style-type: none"> <li>■ Setup and configure Excel Services</li> <li>■ Use the Excel Services Web Parts</li> <li>■ Use Excel to modify MDX queries</li> <li>■ Use Excel to create Sparklines</li> <li>■ Use Excel Services REST-ful APIs</li> </ul>

## Module 9: PowerPivot

In this module we explore the new PowerPivot tools of SQL Server 2008 R2 and Excel 2010.

<b>Lessons</b>
<ul style="list-style-type: none"> <li>■ PowerPivot For SharePoint</li> <li>■ PowerPivot For Excel</li> </ul>
<b>Lab : Install Power Pivot</b>
<ul style="list-style-type: none"> <li>■ Install PowerPivot for Excel</li> <li>■ Install PowerPivot for SharePoint 2010</li> <li>■ Configure PowerPivot for SharePoint</li> </ul>
<b>Lab : Use PowerPivot</b>
<ul style="list-style-type: none"> <li>■ Explore PowerPivot Functions</li> <li>■ Use Basic PowerPivot</li> <li>■ Use PowerPivot with Large DataSets</li> </ul>

# SharePoint 2010 Business Intelligence

<ul style="list-style-type: none"> <li>■ Create PowerPivot Linked Tables</li> <li>■ Publish to SharePoint</li> <li>■ Automating Data Refresh</li> <li>■ Analyzing Usage Data</li> </ul>
<b>After completing this module, students will be able to:</b>
<ul style="list-style-type: none"> <li>■ Create PowerPivot enabled spreadsheets</li> <li>■ Utilize common PowerPivot functions and tools</li> </ul>

## Module 10: PowerPivot

In this module we explore the new PowerPivot tools of SQL Server 2008 R2 and Excel 2010.

<b>Lessons</b>
<ul style="list-style-type: none"> <li>■ Reporting Services</li> <li>■ Reports</li> </ul>
<b>Lab : Install Reporting Services</b>
<ul style="list-style-type: none"> <li>■ Configure Reporting Services</li> <li>■ Create a Reporting Services Report</li> <li>■ Configure Reporting Services Web Part</li> </ul>
<b>Lab : Building Reports with Reporting Services</b>
<ul style="list-style-type: none"> <li>■ Create Advanced Reporting Services report</li> <li>■ Filter Web Parts and Reports</li> </ul>
<b>Lab : Automating Reports with Reporting Services</b>
<ul style="list-style-type: none"> <li>■ Create Report Part Gallery</li> <li>■ Create a Report Library</li> <li>■ Create Report Parts</li> <li>■ Create a Report using Report Parts</li> <li>■ Automated Report Delivery</li> </ul>
<b>Lab : Reporting Services and PowerPivot</b>
<ul style="list-style-type: none"> <li>■ Setup Reporting Services RSS Feed</li> <li>■ Create and Use Data Feed Library</li> <li>■ Utilize Reporting Services data in PowerPivot</li> <li>■ Utilize PowerPivot data in Reporting Services</li> </ul>
<b>After completing this module, students will be able to:</b>
<ul style="list-style-type: none"> <li>■ Understand and describe the integration between reporting services and SharePoint</li> <li>■ Build Reporting Services reports</li> <li>■ Use the Reporting Services web part</li> <li>■ Create Report and Report Part Libraries</li> <li>■ Integrate Reporting Services and PowerPivot</li> </ul>

# SharePoint 2010 Business Intelligence

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## Module 11: Performance Point

In this module we will explore Performance Point and how it supercharges your BI Dashboards and Key Performance Indicators.

<b>Lessons</b>
<ul style="list-style-type: none"><li>■ Performance Point</li></ul>
<b>Lab : Performance Point</b>
<ul style="list-style-type: none"><li>■ Explore Performance Service Application</li><li>■ Explore the Dashboard Designer</li><li>■ Create A Scorecard</li><li>■ Create A PP KPI</li><li>■ Explore Time Intelligence</li><li>■ Create Performance Point Reports</li><li>■ Create Filters</li><li>■ Create A Dashboard</li></ul>
<b>After completing this module, students will be able to:</b>
<ul style="list-style-type: none"><li>■ Describe features of Performance Point</li><li>■ Create Performance Point Scorecards and KPIs</li><li>■ Use Time Intelligence features in your BI solutions</li><li>■</li></ul>

## Module 12: Visio and Access Services

In this module we will explore Visio and Access Services and how to integrate it into your Report process.

<b>Lessons</b>
<ul style="list-style-type: none"><li>■ Visio Services</li><li>■ Access Services</li></ul>
<b>Lab : Visio Services</b>
<ul style="list-style-type: none"><li>■ Use Visio Services</li><li>■ Publish a Visio to SharePoint</li><li>■ Tie report process to Visio</li></ul>
<b>Lab : Access Services</b>
<ul style="list-style-type: none"><li>■ Explore Access Services</li><li>■ Publish Access Database To SharePoint</li></ul>
<b>After completing this module, students will be able to:</b>
<ul style="list-style-type: none"><li>■ Create and deploy interactive Visio diagrams to SharePoint</li><li>■ Create and deploy Access databases to SharePoint</li></ul>

# SharePoint 2010 Business Intelligence

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## Module 13: GeoSpatial Data with Charts and Maps

In this module we will explore GeoSpatial data and how to use the new .NET Charts and Mapping features of SharePoint 2010.

<b>Lessons</b>
<ul style="list-style-type: none"><li>■ Charts and Maps</li><li>■ GeoSpatial Data</li></ul>
<b>Lab : GeoSpatial Data with SQL Server</b>
<ul style="list-style-type: none"><li>■ Populate a SQL Server Database using Shape2SQL</li><li>■ Utilize the new Spatial Data Types in SQL Server</li><li>■ Create a Reporting Services Report using Geospatial Data</li><li>■ Publish Geospatial Data to SharePoint 2010</li></ul>
<b>Lab : Bing Maps</b>
<ul style="list-style-type: none"><li>■ Utilize Bing Maps API</li><li>■ Create a Simple Map With Content Editor Web Part</li><li>■ Create an Advanced Map with Data Views</li><li>■ Explore Filters, Data Views and Bing Maps integration</li><li>■ Integrate Geospatial Customer data into SharePoint Sites</li></ul>
<b>Lab : NET Charts</b>
<ul style="list-style-type: none"><li>■ Utilize NET Charts</li></ul>
<b>After completing this module, students will be able to:</b>
<ul style="list-style-type: none"><li>■ Understand how .NET Charts are used in SharePoint 2010</li><li>■ How to build geospatial maps using BI data</li></ul>