# Partner Microsoft SharePoint 2013 End to End Business Intelligence Boot Camp

Silver

Microsoft

# **Course Details**

# **Course Outline**

# 1. Module 1: Course Overview

- Introduction
- Course Materials
- Facilities
- Prerequisites
- What We'll Be Discussing
- Lab 1: Course Overview
- 2. Module 2: The Business Intelligence Stack
  - Business Intelligence in Three Ways
  - SQL 2012 Business Intelligence
  - SharePoint 2010 Business Intelligence
  - PowerPivot
- Lab 1: The Business Intelligence Stack
  - SQL 2012 Multidimensional Model Basics
  - SQL 2012 Tabular Model Basics
- 3. Module 3: SQL Server Integration Services (SSIS) 2012
- . What--s New?
  - Overview of Extract, Transform, and Load (ETL)
  - SSIS Tools
  - Change Data Capture
  - SQL Server Integration Services Scripting
  - Variables, Parameters, and Expressions
  - Package Deployment
- Lab 1: SQL Server Integration Services (SSIS) 2012
  - Explore the SQL Server Data Tools



- Explore SQL Server Management Studio and Back Up a Database
- Run the Import Export Wizard
- Create a Project for the Exercises
- Add Connections to the Control Flow
- Add Execute SQL Tasks and Connect Precedence Constraints
- Add Data Flow and Use the Destination Assistant
- Copy a Package and Reuse Project Connection Managers
- Data Conversion
- Conditional Split
- Multicast
- Aggregate
- Derived Column and Sort
- Lookup
- Project Deployment
- 4. Module 4: SQL 2012 Business Intelligence Semantic Model (Multidimensional Mode)
  - The Data Warehouse/Data Mart
  - The Tools
  - Key Concepts
  - Data Sources
  - Data Views
  - Cubes
  - Data Profiler
  - Proactive Cache
  - Deployment
  - Wizards
- Lab 1: SQL 2012 Business Intelligence Semantic Model (Multidimensional Mode)
  - Create a Sample or Test Database
  - Explore the Key Objects
  - Creating a Server-Side Time Dimension
  - Create a Data Source and Data View



- Explore the Cube
- Partitions
- Aggregations
- Data Profiler
- Proactive Cache
- Deploy and Process
- Build a Cube
- 5. Module 5: Microsoft Multidimensional Expressions
  - Concepts in Multidimensional Space
  - Basic MDX Statements
  - SQL Server Management Studio MDX Query Editor
  - Navigating Hierarchies
  - Working with Time
  - MDX Calculations
  - Lab 1: Microsoft Multidimensional Expressions
  - Explore MDX
  - Write MDX (Optional)
  - Explore MDX -- Immediate Relatives
  - Write MDX -- Immediate Relatives (Optional)
  - Working with Time
  - Writing MDX Working with Time (Optional)
- 6. Module 6: SQL 2012 Business Intelligence Semantic Model (Tabular Mode)
  - The Tabular Model
  - Data Analytic Expressions (DAX)
  - The Editor
  - Data Connections
  - Creating a Tabular Project
  - Relationships
  - Measures and Calculated Columns
  - Hierarchies



- Perspectives
- KPIs
- Partitions
- Processing
- Deployment
- Lab 1: SQL 2012 Business Intelligence Semantic Model (Tabular Mode)
  - Creating a Project and Importing Data
  - Manually Add a Relationship
  - Create Measures and Calculated Columns
  - Create Hierarchies
  - Create a Perspective
  - Create a KPI
  - Process Data and Deploy
  - Connect to a Tabular Model

### 7. Module 7: SQL Server 2012 Reporting Services

- Report Lifecycles
- Installation Modes
- Report Creation Tools
- Data Sources
- Datasets
- Basic Reports
- Graphics
- Maps
- Report Parts
- Lab 1: SQL Server 2012 Reporting Services
  - Using Report Manager
  - Using Report Designer
  - Data Sources and Datasets
  - Basic Reports
  - Graphics

- Basic Maps
- Basic Maps with Color
- Report Parts
- 8. Module 8: Master Data Services
  - What is Master Data Management?
  - System Roles
  - Master Data vs. Transactional Data
  - Master Data Services ETL
  - Master Data Services Key Concepts

#### • Lab 1: Master Data Services

- Create a Model
- Create Entities
- Create Members
- Create Attributes
- Create a Business Rule
- Deploy Model
- Load Data
- Create a Subscribing View
- 9. Module 9: Data Mining/Predictive Analytics
  - Definitions for Our Purpose
  - Problems Addressed
  - Business Analytics
  - CRISP-DM
  - Key Concepts
  - Microsoft Data Mining Process
  - Data Mining Tasks
  - Microsoft Algorithms
  - Matching the Tasks to the Algorithm
  - Data Mining Add-in for Excel
  - PowerPivot for Excel

#### • Lab 1: Data Mining/Predictive Analytics

• Using the Data Mining Add-in for Excel

### 10. Module 10: SharePoint 2013 Business Intelligence Center

- User Interface
- Libraries and Lists (Apps)
- Permissions
- Quick Architecture
- Central Administration

### **o** Lab 1: SharePoint 2013 Business Intelligence Center

- Introduction to the Business Intelligence Center
- Libraries, Lists, and Content Types
- Permissions and Sharing
- Central Administration Tour and Web Application Creation

#### 11. Module 11: SharePoint 2013 Excel Services

- New 2013 Excel Services Features
- Core Components
- Excel Web Access (EWA)
- What Excel Web Access is Not
- SharePoint Libraries to Store Workbooks
- Power View Excel 2013 and SharePoint 2013
- Excel Web Access Web Part
- Excel Interactive View
- Best Practices

### Lab 1: SharePoint 2013 Excel Services

- Creating a Library to Hold Excel 2013 Workbooks
- Power View
- Creating a Web Part Page and Adding an Excel Web Part

## 12. Module 12: SharePoint 2013 PerformancePoint 2013

- What--s New?
- PerformancePoint Object Hierarchy



- Dashboard Designer
- Dashboards (Web Part Page)
- Indicators
- Data Sources
- Key Performance Indicators as PerformancePoint Objects
- Scorecards
- Filters
- Dashboards (Web Part Page) Revisited
- Dashboard Designer Management
- Lab 1: SharePoint 2013 PerformancePoint 2013
  - Dashboard Designer Introduction
  - Dashboard (Web Part Page Creation)
  - Data Sources SQL Server Analysis Services (SSAS)
  - Data Sources SQL, List, Excel Services
  - KPI Basics Connect to a List and SQL
  - KPI Multidimensional Scoring Patterns
  - KPI Using Dimensional Slicers
  - KPI Change the --Worst-- Value
  - Objective KPI
  - Configure Time Intelligence
  - Analytic Charts or Grids
  - Other Reports
  - Reporting Services Report
  - KPI Details Report
  - Connected Scorecards
  - Combining Connected and Standard KPIs
  - Scorecard Settings
  - MDX Query (Optional)
  - Member Selection Filter
  - Named Set Filter

- Time Intelligence Filter
- Cascading Filters
- Dashboards (Web Part Pages)
- Dashboard Designer Management

# 13. Module 13: SharePoint 2013 Visio Services

- What--s New in Visio Services 2013?
- Visio Graphics Service
- Visio Drawings in the Browser
- Visio Graphics Web Access Part
- Visio Drawings with Data Connections

### • Lab 1: SharePoint 2013 Visio Services

- Visio Drawing in the Browser
- Visio Services Data-Connected Drawing
- PerformancePoint Dashboard Strategy Maps

# 14. Module 14: PowerPivot

- PowerPivot and Excel 2013
- PowerPivot and SharePoint
- Enterprise Business Intelligence and PowerPivot
- Enriching Data

### • Lab 1: PowerPivot

- Import Data from SQL
- Review and Edit the Imported Relationships
- Hide Unused Columns
- Create a PivotTable

### 15. Module 15: SharePoint 2013 Business Connectivity Services

- What is Business Connectivity Services?
- BCS Terminology
- Business Connectivity Services and Apps From SharePoint 2013
- Using SharePoint Designer with BCS
- Surfacing the BCS Data

### • Lab 1: SharePoint 2013 Business Connectivity Services

- Setting Permissions on the BDC Store
- Creating an External Content Type
- Creating an External List

## 16. Module 16: Dashboards

- Dashboard Design
- Capabilities Summarization
- Three Types of Dashboards
- Successful Dashboards
- Tables or Graphs
- Types of Graphs
- Choosing a Chart Type
- Key Performance Indicators
- Pitfalls In Dashboard Design
- Microsoft Report Builder 3.0
- Plan Your Reports
- Datasets
- SharePoint Web Parts

## Lab 1: Dashboards

- Explore the Report Builder 3.0 Interface (Optional)
- Create an Embedded Data Source into SQL 2012 Engine (Optional)
- Create an Embedded Dataset into SQL 2012 Engine (Optional)
- Create an Embedded Data Source into SQL 2012 Analysis Services (Optional)
- Create an Embedded Dataset into SQL 2012 Analysis Services (Optional)
- Create a Shared Data Source Using Reporting Services (Optional)
- Create a Shared Dataset Using the Shared Data Source (Optional)