

# Applied Power BI Course Details



Power BI is a suite of products for personal business intelligence (BI). It brings the power of Microsoft's Business Intelligence platform to business users. At the same time, Power BI lets IT monitor and manage published models to track their usage, security, and estimate hardware and software resources. With Power BI, anyone can easily build personal BI models using the most popular tool - Excel, and share them on premises or the cloud!

## Syllabus

This 2-day class is designed to help you become proficient with the Microsoft self-service Power BI stack (Power Pivot, Power View, Power Query, Power Map, Power BI) and acquire the necessary skills to implement personal data models, perform data analysis, and share these models with other users. Attend this class and get a free paper copy (e-book version for international students) of the book Applied SQL Server 2012 Analysis Services (Tabular Modeling)! Ideal for both power users and BI professionals, this book features step-by-step instructions and demos for building personal BI models with PowerPivot for Excel, sharing these models with PowerPivot for SharePoint, and upgrading them for organizational use by deploying to Analysis Services Tabular.

## Introducing Power BI

- Understanding Microsoft Business Analytics Platform
- Understanding organizational BI
- Understanding self-service BI
- Choosing a design environment
- Understanding PowerPivot models
- Sharing and collaboration options
- Understanding the BI continuum

## Module 1: Introducing PowerPivot

- PowerPivot overview
- Understanding corporate and personal BI
- Understanding PowerPivot models

Introducing PowerPivot for Excel

Lab 1: Creating a basic PowerPivot model

Introducing PowerPivot for SharePoint

PowerPivot usage scenarios and limitations

Lab 2: Sharing PowerPivot models

## Module 2: Working with Data

Importing from relational data sources

Importing from multi-dimensional data sources

Lab 1: Importing data from databases

Importing flat files

Importing from Excel

Copying and pasting data

Importing from reports and data feeds

Lab 2: Importing from other data sources

## Module 3: Enhancing the Data Model

Understanding PowerPivot data types

Performing column operations

Lab 1: Working with columns

Understanding table relationships

Understanding data refresh

Lab 2: Working with relationships

## Module 4: Analyzing Data

Understanding PowerPivot data analysis

Understanding PivotTable and PivotChart

Understanding PowerPivot Field List

Lab 1: Creating PivotTable and PivotChart reports

Understanding slicers

Handling metadata issue and changes

Using other Excel features

Lab 2: Implementing dashboards

Working with dates, hierarchies, and perspectives

Lab 3: Implementing end-user features

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## Module 5: Data Analysis Expressions (DAX)

- Understanding Data Analysis Expressions
- Understanding row and filter context
- Understanding calculated columns
- Lab 1: Implementing calculated columns
- Understanding measures
- Understanding measure functions
- Lab 2: Implementing measures and KPIs

## Module 6: Publishing and Managing PowerPivot Models

- Understanding PowerPivot for SharePoint
- Publishing to SharePoint
- Viewing published models
- Lab 1: Publishing models and authoring reports
- Managing data refresh
- Understanding PowerPivot Management Dashboard
- Lab 2: Managing PowerPivot models

## Module 7: Importing Data with Power Query

- Introducing Power Query
- Understanding Power Query elements
- Viewing published models
- Lab 1: Importing and transforming data
- Understanding query sharing
- Discovering queries
- Demo: Sharing and discovering queries

## Module 8: Importing Data with Power Query

- Introducing Power Query
- Understanding Power Query elements
- Viewing published models
- Lab 1: Importing and transforming data
- Understanding query sharing
- Discovering queries
- Demo: Sharing and discovering queries

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## Module 9: Analyzing Data with Power View and Power Map

Introducing Power View

Understanding Power View visualizations

Understanding Power View filtering options

Lab 1: Implementing Power View reports

Introducing Power Map

Preparing geospatial data

Understanding Power Map visualizations

Lab 2: Geospatial reporting with Power Map

### Audience

Business users

Data analysts

BI consultants

### Prerequisites

Experience navigating the Microsoft Windows environment

Experience with Microsoft Excel pivot reports and formulas is preferable

### Hardware and software requirements

Windows 7 or above

Microsoft Excel 2013 or above

AdventureWorksDW database installed

(Optional) SharePoint Server with Power Pivot

Detailed software setup instructions will be sent before the event.

### Instructor



Teo Lachev is a consultant, author, and mentor, with a focus on Microsoft Business Intelligence. Through his Atlanta-based company “Prologika”, a Microsoft Gold Partner in Data Analytics, he designs and implements innovative solutions that unlock the power of data and bring tremendous value to his customers, ranging from small companies to Fortune 50 organizations. Teo has authored and co-authored several SQL Server BI books and he has been leading the Atlanta Microsoft Business Intelligence group since he founded it in 2010. Microsoft has recognized Teo's expertise and contributions to the technical community by awarding him the prestigious Microsoft Most Valuable Professional (MVP) award since 2004.