MOC 55164 A Quick Powerful Graphics with Power View, PowerPivot, Power Query, Power Map and Power BI

Course Summary

Description
This course is designed to teach the participant how to combine the functionality of Power View, PowerPivot, Power Query, and Power BI into graphs, charts, KPIs, reports, and other visualizations for use in their business. This course is lab example intensive.

Objectives
At the end of this course, students will be able to:

- Navigate the Power View interface.
- Utilize Power View reports.
- Work with tables.
- Understand aggregations.
- Utilize matrix.
- Configure drill through.
- Use cards as a visualization.
- Apply filters.
- Create charts.
- Utilize tiles.
- Add slicers to reports.
- Utilize themes.
- Navigate the PowerPivot interface.
- Load data.
- Examine and configure relationships.
- Configure calculated columns are calculated fields.
- Create PivotTables.
- Understand and utilize DAX.
- Use KPIs.
- Work with hierarchies.
- Manage perspectives.
- Navigate the Power Query interface.
- Load data.
- Filter data.
- Merge datasets.
- Manage modifications.
- Perform data cleaning.
- Navigate the Power Map interface.
- Use Bing maps.
- Examine map data.
- Configure tours, scenes, and layers.
- Add time to a presentation.
- Navigate the Power BI interface.
- Utilize data sources.
- Understand querying with natural language.

Topics
- Course Overview
- Power View
- PowerPivot
- Power Query
- Power Map
- Introduction to Power BI

Audience
The course is targeted towards business analysts, business intelligence developers, and reporting professionals.

Prerequisites
Prior to taking this course, students should have a working knowledge of Excel.

Duration
Two days

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Course Outline

I. Course Overview
   This module explains how the class will be structured and introduces course materials and additional administrative information.
   A. Introduction
   B. Course Materials
   C. Facilities
   D. Prerequisites
   E. What We'll Be Discussing
   Lab: Course Overview

II. Power View
   In this module, we will explore Power View and its capabilities, then briefly walk-through the types of reports available and how to format them.
   A. Exploring the Power View Interface
   B. Visualizing Power View Reports
   C. Working with Tables
   D. Understanding Aggregations
   E. Utilizing Matrix
   F. Configuring Drill Through
   G. Using Cards
   H. Applying Filters
   I. Creating Charts
   J. Examining Tiles
   K. Adding Slicers to Reports
   L. Theming Reports
   Lab: Power View
   • Power View Interface
   • Working with Tables
   • Aggregations
   • Matrix
   • Drill Through
   • Cards
   • Filters
   • Charts
   • Tiles
   • Adding Slicers to Reports

III. PowerPivot
   In this module, we will explore PowerPivot and its capabilities, then briefly walk-through the options available and how to configure them.
   A. Exploring the PowerPivot Interface
   B. Loading Data
   C. Examining Relationships
   D. Configuring Calculated Columns and Calculated Fields
   E. Creating PivotTables
   F. Understanding DAX
   G. Utilizing DAX Functions
   H. Using KPIs
   I. Working with Hierarchies
   J. Managing Perspectives
   Lab: PowerPivot
   • Introduction to the PowerPivot Interface
   • Importing Data
   • Importing Large Datasets
   • Importing Data with a Query
   • Creating Relationships
   • Creating a Cascading Relationship
   • Hiding Columns, Change Data Type, Sorting, and Filtering
   • Calculated Columns and Calculated Fields
   • KPIs
   • Hierarchies
   • Perspectives

IV. Power Query
   In this module, we will delve into the benefits and features provided using Power Query. We will examine the options available within the ribbon, as well as explore and demonstrate importing, filtering, and merging data using Power Query.
   A. Exploring The Power Query Interface
   B. Loading Data
   C. Managing Modifications
   D. Examining Data Cleaning
   Lab: Power Query
   • Getting External Data
   • Data Filtering
   • Merging Datasets
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Course Outline (cont’d)

V. Power Map
In this module we will explore Power Map and its capabilities.
A. Exploring The Power Map Interface
B. Using Bing Maps
C. Examining Map Data
D. Reviewing Map Types and Presentation
Lab: Power Map
- View Power Map in Action
- Geocoding
- Tours, Scenes, and Layers
- Adding Time

VI. Introduction to Power BI
In this module, we will explore the Power BI interface and walk-through the options available.
A. Introducing Power BI
B. Explaining Excel and Power BI
C. Examining Data Sources
D. Querying with Natural Language
Lab: Introduction to Power BI
- Introduction to Power BI
- Data Sources