



### 01

#### **Get or connect to data**

- Identify and connect to data sources or a shared semantic model
- Change data source settings, including credentials and privacy levels
- Choose between Direct Query and Import
- Create and modify parameters

### 02

#### **Profile and clean the data**

- Evaluate data, including data statistics and column properties
- Resolve inconsistencies, unexpected or null values, and data quality issues
- Resolve data import errors

### 03

#### **Transform and load the data**

- Select appropriate column data types
- Create and transform columns
- Group and aggregate rows
- Pivot, unpivot, and transpose data
- Convert semi-structured data to a table
- Create fact tables and dimension tables
- Identify when to use reference or duplicate queries and the resulting impact
- Merge and append queries
- Identify and create appropriate keys for relationships
- Configure data loading for queries

### 04

#### **Design and implement a data model**

- Configure table and column properties
- Implement role-playing dimensions
- Define a relationship's cardinality and cross-filter direction
- Create a common date table
- Identify use cases for calculated columns and calculated tables

### 05

#### **Create single aggregation measures**

- Use the CALCULATE function
- Implement time intelligence measures
- Use basic statistical functions
- Create semi-additive measures
- Create a measure by using quick measures
- Create calculated tables or columns
- Create calculation groups



06

### Optimize model performance

- Improve performance by identifying and removing unnecessary rows and columns
- Identify poorly performing measures, relationships, and visuals by using Performance Analyzer and DAX query view
- Improve performance by reducing granularity

07

### Create reports

- Select an appropriate visual
- Format and configure visuals
- Apply and customize a theme
- Apply conditional formatting
- Apply slicing and filtering
- Configure the report page
- Choose when to use a paginated report
- Create visual calculations by using DAX
- 

08

### Enhance reports for usability and storytelling

- Configure bookmarks
- Create custom tooltips
- Edit and configure interactions between visuals
- Configure navigation for a report
- Apply sorting to visuals
- Configure sync slicers
- Group and layer visuals by using the Selection pane
- Configure drill through navigation
- Configure export settings
- Design reports for mobile devices
- Enable personalized visuals in a report
- Design and configure Power BI reports for accessibility
- Configure automatic page refresh

09

### Identify patterns and trends

- Use the Analyze feature in Power BI
- Use grouping, binning, and clustering
- Use AI visuals
- Use reference lines, error bars, and forecasting
- Detect outliers and anomalies

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### 11

#### Data Gateways

- Introduction to Data Gateways
- How Data Gateways work
- Connect to an on premise Data Source by using a Data Gateway
- Download Data Gateway
- Installing a Data Gateway
- Manage Data Gateway
- Add and Remove Administrators
- Add Data Source, Add or Remove Users to a Data Source
- Refresh On Premise Data
- Configuring Automatic Refresh using Schedules

### 12

#### Create and manage workspaces and assets

- Create and configure a workspace
- Configure and update a workspace app
- Publish, import, or update items in a workspace
- Create dashboards
- Choose a distribution method
- Configure subscriptions and data alerts
- Promote or certify Power BI content
- Identify when a gateway is required
- Configure a semantic model scheduled refresh

### 13

#### Secure and govern Power BI items

- Assign workspace roles
- Configure item-level access
- Configure access to semantic models
- Implement row-level security roles
- Configure row-level security group membership
- Apply sensitivity labels

### 14

#### Introduction to Advanced Excel

- Navigating the Excel interface (cells, ranges, ribbons, sheets)
- Data types: text, numbers, dates
- Absolute vs. relative references
- Basic formulas: SUM, AVERAGE, COUNT, MIN, MAX
- Logical formulas: IF, AND, OR, IFERROR
- Lookup functions:
- VLOOKUP / HLOOKUP
- XLOOKUP



### 15

#### Dynamic Arrays and Pivot table

- What are dynamic arrays?
- SEQUENCE, SORT, SORTBY, FILTER, UNIQUE
- Creating Pivot Tables and Pivot Charts
- Row, Column, Values, and Filter areas
- Grouping data (dates, numbers)
- Calculated fields in PivotTables
- Slicers for filtering

### 16

#### Statistical Functions and Macros

- Descriptive stats: MEDIAN, MODE
- Percentile analysis: PERCENTILE, QUARTILE, RANK
- Correlation: CORREL

### 17

#### Project