

## Power Pivot for Excel – 2 day course

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### About the course

CMBI's "Power Pivot for Excel" course is aimed at analysts and developers who want to learn how to automate data processing and improve analysis and reporting in Excel using Power Pivot. The session focuses on teaching you the skills required to build a completely automated end-to-end reporting solution in Excel, to improve efficiency and drive better insight and decision-making in your organisation.

This **2-day course** takes a deep-dive into Power Pivot, Power Query and the next generation of tools in Excel. At the end of the session, you will have all the required skills to automate routine data processing tasks, as well as creating informative reports for your whole team to use.

### Who should do this course?

This course is designed for analysts, developers or managers wanting to learn how to develop automated reporting solutions using Power Pivot in Excel. No prior experience of Power Pivot is required, although an understanding of Excel Pivot Tables is an advantage.

### Delivery Method

CMBI presents each training workshop as a series of practical exercises, giving attendees hands-on experience with personalised one-on-one support in each session.

Training can either be hosted onsite at your premises or remotely, using industry-leading video conferencing software.

### Materials and support

CMBI's course materials support learning and re-enforcement well beyond the workshop.

Each session includes an associated set of support materials to help attendees complete the tasks on the day, as well as provide support after course completion:

- Printed and bound booklet with supporting course notes (approximately 80 pages, depending on selected content)
- Complete Excel data models for all exercises
- Datasets for all examples
- Optional Q&A time at the end of the session for anyone interested in asking specific questions

### How it works

**Location:** we come to you or host remotely

**Duration:**  
2 days, 9am - 4pm (onsite) or  
2 x 4 hour sessions (remote)

**Price:** \$2,998 + GST per team

#### Materials & support:

Each session includes:

- ✓ Printed and bound supporting course notes (approx. 80 pages)
- ✓ Excel data models and datasets for all exercises
- ✓ Interactive exercises with personalised support

## Unit 1: Introduction to Power BI in Excel

- ✓ What is Power BI?
- ✓ Understand the different components in Power BI
- ✓ Benefits of using Power BI in Excel
- ✓ Navigating an Excel report built with Power BI
- ✓ The Power BI family:  
Power BI in Excel vs. Power BI Desktop

## Unit 3: Transforming Data with Power Query

- ✓ Use first row as headers
- ✓ Change data types
- ✓ Replace values
- ✓ Replace errors
- ✓ Remove top/bottom rows
- ✓ Capitalise each word
- ✓ Transform text to upper or lower case
- ✓ Clean/trim text values
- ✓ Split columns
- ✓ Merge columns
- ✓ Add conditional columns
- ✓ Add custom columns
- ✓ Add index columns
- ✓ Add prefix/suffix to column values
- ✓ Add date columns (eg, month name, quarter, year...)
- ✓ Add a comment to a transformation step
- ✓ Rename a transformation step
- ✓ Rename a column
- ✓ Remove columns vs. Remove other columns

## Unit 6: Loading Data into Excel

- ✓ Explore the Close & Load To... options
- ✓ Load data from Power Query into Excel
- ✓ Disable data load to Excel with 'Only Create Connection'
- ✓ Change the Power Query Data Load options
- ✓ Refresh the data

## Unit 8: Relationships

- ✓ Data tables vs. lookup tables
- ✓ Why create relationships?
- ✓ Create a relationship
- ✓ Inspect a relationship
- ✓ Identify the keys in a relationship
- ✓ Understand the cardinality of a relationship
- ✓ Active vs. Inactive relationships
- ✓ Understand the cross filter direction
- ✓ Identify & troubleshoot problematic relationships

## Unit 2: Extracting Data with Power Query

- ✓ Understand the different ways to get data into Excel
- ✓ What is Power Query?
- ✓ Navigate the Get & Transform ribbon in Excel
- ✓ Load a csv file with Power Query
- ✓ Load an Excel file with Power Query
- ✓ Navigate the Power Query environment
- ✓ Change a query name
- ✓ Add a new transformation step
- ✓ Create parameterised queries

## Unit 4: Reshaping Data with Power Query

- ✓ Filter data
- ✓ Group data
- ✓ Unpivot data

## Unit 5: Integrating Data with Power Query

- ✓ Merge multiple datasets together
- ✓ Understand the advantages of PQ's Merge function over Excel VLOOKUP
- ✓ Append data from two or more tables into a single table
- ✓ Load data from a folder location
- ✓ Combine file contents of a folder into a single table
- ✓ Modify data privacy settings
- ✓ View query dependencies
- ✓ View the advanced editor

## Unit 7: Introduction to Power Pivot

- ✓ What is Power Pivot?
- ✓ Advantages of using Power Pivot to model data in Excel
- ✓ Load data into a Power Pivot data model
- ✓ Navigate the Power Pivot environment
- ✓ Data view vs. Relationship view
- ✓ Hiding tables/columns in Power Pivot
- ✓ Create a PivotTable or PivotChart from Power Pivot

## Unit 9: Introduction to DAX

- ✓ What is DAX?
- ✓ Understand DAX syntax and common DAX functions
- ✓ Create a calculated column
- ✓ Calculated columns vs. Measures
- ✓ Understand why we need to create measures
- ✓ Understand filter context
- ✓ Create measures using SUM, AVERAGE, COUNTROWS, DISTINCTCOUNT, DIVIDE, MIN and MAX
- ✓ Create measures using the AutoSum function



## Unit 10: Creating Measures with CALCULATE()

- ✓ Use CALCULATE() to create filtered measures
- ✓ Add measures with different filter contexts to a single visualisation
- ✓ Use ALL() with CALCULATE() to ignore report filters

## Unit 11: Time Intelligence

- ✓ What is Time Intelligence?
- ✓ Load a Date table
- ✓ Mark a table as a Date table
- ✓ Create relationships with the Date table
- ✓ TOTALYTD() for calendar and financial years
- ✓ SAMEPERIODLASTYEAR()
- ✓ DATEADD()
- ✓ DATESINPERIOD()
- ✓ Calculating Growth and Variance
- ✓ Set alternative Sort By column
- ✓ Add conditional formatting to reports (data bars, icons)

## Unit 12: Creating an Automated Dashboard in Excel

- ✓ Create a PivotTable and PivotChart from the Power Pivot data model
- ✓ Create and format a Column Chart
- ✓ Create and format a Bar Chart
- ✓ Create and format a Line Chart
- ✓ Create and format a Pie/Donut Chart
- ✓ Create and format Slicers and Timelines
- ✓ Create and format Sparklines
- ✓ Create named ranges in Excel
- ✓ Format data as a Table
- ✓ Add a Top N filter to PivotTables and PivotCharts
- ✓ Add conditional formatting to reports (data bars, icons)
- ✓ Edit Report Connections to connect a Slicer to multiple data sources
- ✓ Refresh data in PivotTables, PivotCharts and reports

## Unit 13: Creating a Corporate Look-and-Feel in Excel

- ✓ Add a corporate logo
- ✓ Add conditional formatting
- ✓ Explore out-of-the-box themes
- ✓ Save customised colours, fonts and effects into a custom theme file
- ✓ Import a custom theme file

## Unit 14: Preparing an Excel Report for Publishing

- ✓ Remove column and row labels
- ✓ Remove scrollbars
- ✓ Remove gridlines
- ✓ Lock Slicers to prevent against Edit Mode
- ✓ Hide data sheets
- ✓ Protect the workbook from changes

## Unit 15: Introduction to Power BI Desktop

- ✓ What is Power BI Desktop?
- ✓ Power BI for Excel vs. Power BI Desktop
- ✓ Loading data into Power Query with Power BI Desktop
- ✓ Loading an Excel data model into Power BI Desktop
- ✓ Explore some key features in a Power BI report:
  - Slicers
  - Tooltips and custom report Tooltips
  - Cross filter behaviour
  - Drilldown
  - Drillthrough

## Unit 16: Create a Report in Power BI Desktop

- ✓ Explore the different types of Slicers (dropdown, list, timeline, horizontal tiles)
- ✓ Create and format Cards
- ✓ Create and format a Column Chart
- ✓ Create and format a Bar Chart
- ✓ Create and format a Line Chart
- ✓ Create and format a Pie/Donut Chart
- ✓ Create and format a Table
- ✓ Create and format a Gauge Chart
- ✓ Create and format a Map
- ✓ Add a logo
- ✓ Add Drilldown functionality to a visualisation
- ✓ Create a Drillthrough page
- ✓ Add Tooltips
- ✓ Understand cross-filtering behaviour
- ✓ Edit interactions between visualisations in a report