



# Microsoft Power BI Training



Scheduled courses in Peterborough and on-site training throughout the UK



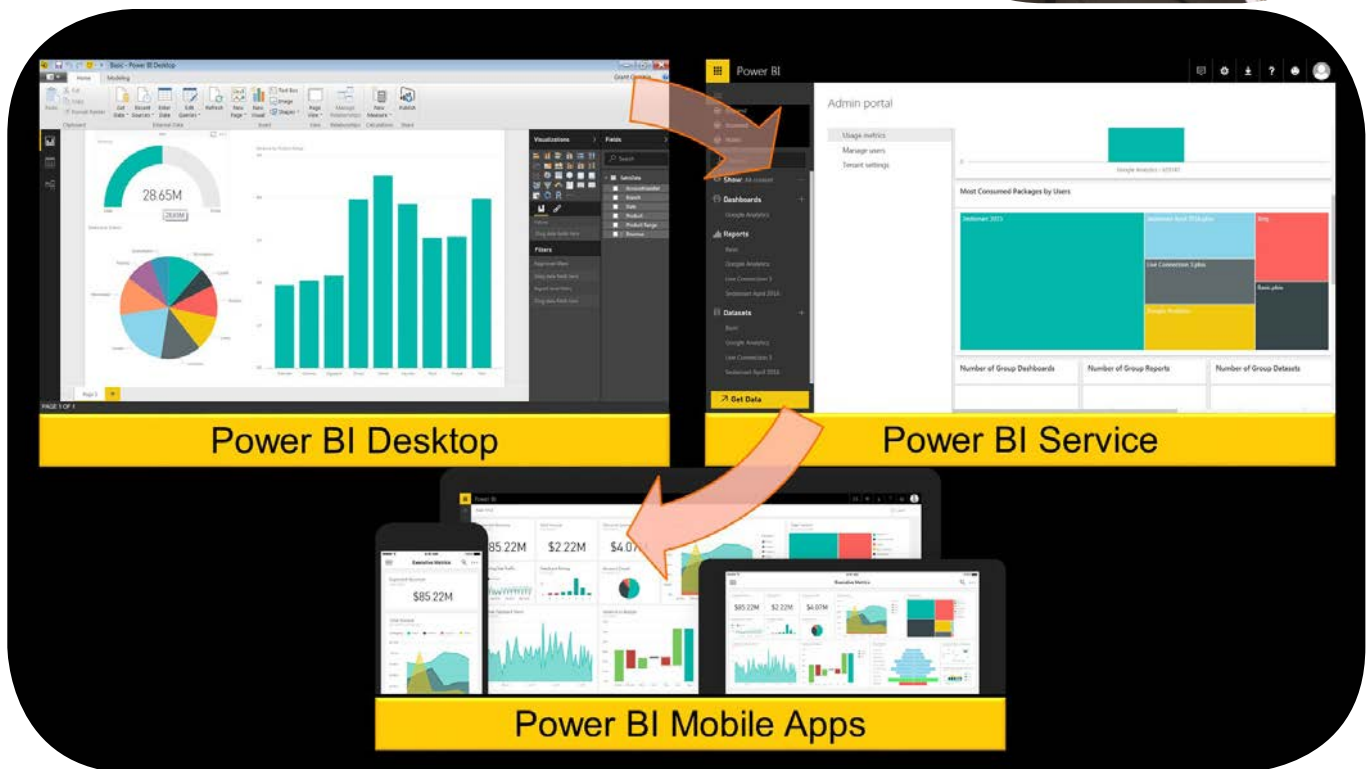
# Microsoft Power BI

Self service business intelligence for everyone

Microsoft Power BI is a cloud-hosted, business intelligence platform which makes business intelligence and advanced analytics accessible to everyone.

You can create interactive reports and dashboards using a wide range of built-in and third-party visualizations. Your reports can be distributed both internally, using the Power BI service, and to a wider audience, by embedding them into any web page.

Power BI consists of three main components: a downloadable desktop program called Power BI Desktop for data wrangling, modelling and creating reports; the Power BI cloud service, which is used for collaboration and for the creation and distribution of reports and dashboards; and Power BI mobile apps for Windows, iOS and Android devices.



Power BI provides users with a host of analytic and collaboration features; so, inevitably, there are a lot of moving parts. G Com Solutions provide training for beginners and experienced users alike. Our training is hands-on and always provides users with plenty of challenging practical exercise to ensure that they are assimilating the features and techniques being taught.

Our courses are run in Peterborough, a central location easily accessible from the midlands, north and south: London, 50 minutes; Leeds, 1 hour 30 minutes; Edinburgh, 3 hours 50 minutes. If you have suitable in-house facilities, we can also deliver Power BI courses on-site all over the United Kingdom. On-site training has the added benefit that it can be customized to suit your specific requirements and can include topics from all our courses.







## Power BI 1 Week Intensive Course (£1,250, or £1,495 inc. accomd, plus VAT)

Our Power BI 1 Week Intensive Training Course offers comprehensive coverage of both basic and advanced features of Microsoft Power BI. This course is designed for users who are new to Power BI, but who intend to use the program extensively in their business workflows.

The course consists of three courses: Power BI Introduction (2 days), Power BI Custom Visuals and Business Narratives (1 day) and Power BI Advanced (2 days).

### PETERBOROUGH COURSE DATES

|  |              |              |              |              |              |              |              |              |              |              |              |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|  | 13-17<br>Feb | 13-17<br>Mar | 24-28<br>Apr | 22-26<br>May | 19-23<br>Jun | 17-21<br>Jul | 21-25<br>Aug | 18-22<br>Sep | 23-27<br>Oct | 20-24<br>Nov | 11-15<br>Dec |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|

### Power BI Introduction (2 days)

This course is aimed at those who are still new to Power BI and aims to familiarize subscribers to Power BI and Power BI Pro with the key features and operations of the Power BI service, as well as with the use of Power BI Desktop to prepare reports.

### Power BI Custom Visuals and Business Narratives (1 day)

This one day intermediate level course is designed for users who are already familiar with Power BI, as well as those who have just completed the two day Introduction. The course explains how to use over 30 of the custom visuals developed by Microsoft and the Power BI developer community; and how to use these visuals to construct interactive data narratives for their audience.

### Power BI Advanced (2 days)

This 2 day Microsoft Power BI training course is aimed at experienced Power BI users. The course delves into the M language behind the Query Editor, as well as the use of advanced DAX formulas. Delegates will also learn how to improve the user experience through the use parameter tables; how to customise the data model by including calculated tables; and how to work with advanced visuals and dashboard tiles.

### Staggering the three courses

If you plan to take all three courses, but would rather not take them back to back, you can book the five day intensive course (thus obtaining a discount), but attend only the two day introduction. You can then take the two remaining courses when you feel you have had sufficient practice in using the Power BI. (We run all of the courses once every month.)

### Including accommodation and taxi fares

The course costs £1,250, plus VAT (a saving of £265 compared with booking the three courses separately); and, if you are travelling to Peterborough then staying for the duration of the course, you can save even more by choosing our "including accommodation" option for £1,495, plus VAT.

This option includes 5 nights accommodation, with full English breakfast, at the Great Northern Hotel, a Peterborough landmark, opened on 1<sup>st</sup> April 1852. The hotel is located directly opposite Peterborough station (approximately 20 paces, door to door). The price also includes the ten minute taxi ride to and from our training centre each day. Additionally, when you check out, you can simply leave your luggage at the Great Northern Hotel; then collect it in the afternoon, when you are ready to leave Peterborough.

Similar offers are also available for anyone taking any of the three individual courses which make up the one week intensive workshop.





## **Power BI Introduction (2 days - £595, or £725 inc accomd, plus VAT)**

Power BI Pro is Microsoft's competitively-priced, cloud-based business analytics service. This Power BI training course aims to familiarize subscribers to Power BI and Power BI Pro with the key features and operations of the Power BI service, as well as with the use of Power BI Desktop to prepare reports.

| <b>PETERBOROUGH COURSE DATES</b> |              |              |              |              |              |              |              |              |              |              |              |
|----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 23-24<br>Jan                     | 13-14<br>Feb | 13-14<br>Mar | 24-25<br>Apr | 22-23<br>May | 19-20<br>Jun | 17-18<br>Jul | 21-22<br>Aug | 18-19<br>Sep | 23-24<br>Oct | 20-21<br>Nov | 11-12<br>Dec |

### **Getting started**

The key components of Power BI; What is Power BI Desktop; The Power BI service; Power BI free vs Power BI Pro; Power BI vs Excel add-ins; Dashboards, reports and datasets

### **Connecting to software services**

Understanding content packs for services; Google Analytics content pack; Salesforce content pack; Microsoft Dynamics CRM content pack

### **Getting data into Power BI**

Connecting to data sources in the Power BI service; Connecting to data sources in Power BI Desktop; Importing Excel workbooks; Importing Access databases; Connecting to SQL Server

### **Cleaning up and transforming data**

Using the Query Editor; Creating a query; Understanding query steps; Automatically generated steps; Removing query steps; Modifying query steps; Renaming columns; Reordering and removing columns; Changing data types; The Close & Apply command

### **Data modelling**

Working in data view; Working in relationship view; Auto-detection of table relationships; Creating table relationships manually; Setting cardinality; Cross filter direction

### **Using DAX**

Creating Calculated columns; Creating measures; Understanding row context; Understanding filter context; The SUMX function; The CALCULATE function; The ALL function; The FILTER function; Using time intelligence functions

### **Creating reports**

Working in report view; Creating tables and key metrics; Working with matrixes; Filtering data with slicers

### **Creating visualizations**

Creating column and bar charts; Creating line and area charts; Creating scatter charts; Treemap visualizations; Using charts as slicers; Using maps with geographical data; Using custom visuals

### **Publishing content**

Publishing Power BI Desktop reports; Printing and exporting dashboards and reports; Creating Groups in the Power BI service; Creating content Packs; Assigning groups to content packs; Sharing dashboards with your organization; Publishing reports to the web; Embedding a report in a web page

### **Creating Power BI Mobile Content**

Optimising visuals for small viewports; Creating a phone version of a dashboard; Creating phone-optimised reports

### **Consuming and customizing content**

Browsing group content; Using content packs; Creating read-only versions; Using Quick Insights in Power BI; Creating dashboards from your reports; Querying with natural language; Creating custom Q & A suggestions

### **Refreshing content**

Using personal gateways; Customizing dataset refresh settings; Scheduling refresh frequency; Using on premises gateways; Managing enterprise gateways; Adding and removing data sources, Live data connections



## Custom Visuals and Business Narratives (1 day - £325, or £395 inc accomd, plus VAT)

This one day intermediate level course is designed for users who are already familiar with Power BI and are looking to broaden their horizons when it comes to designing reports and dashboards. The course explains how to use over 30 of the custom visuals developed by Microsoft and the Power BI developer community; and how to use these visuals to construct interactive data narratives for their audience.

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|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
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|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|

### Introduction to custom visuals

Acquiring custom visuals, How custom visuals are developed, Installing custom visuals, Limitations of using custom visuals

### Slicers

Chiclet Slicer, Timeline, Advanced Time Slicer, Hierarchy Slicer

### Area Charts

Mekko Chart, Sankey, Brick Chart, Stream Graph

### Custom Graphics

Synoptic Panel, Waffle Chart

### Line, Scatter and Bubble

Percentile Chart, Box and Whisker, Force-Directed Graph, Enhanced Scatter, Hexbin Scatterplot, Bubble

### Columns and Bars

Sankey Barchart, Horizontal Funnel, Tornado, Dot Plot, Histogram

### Gauges and KPI

Linear Gauge, Circular Gauge, Card with States, Bullet Chart, KPI Indicator

### Maps

GlobeMap

### Tables and Text

Table Heatmap, WordCloud

### Radial charts

Aster Plot, Sunburst, Chord, Radar Chart

### Time

Gantt Chart, Calendar Visualization

### Planning narratives

Optimising field names, Q & A strategies, Creating narrative tables, Using narrative measures, Creating narrative tooltips

### Narrative visualizations

Self-running narratives, Interactive narratives, Using the Pulse chart visual, Using the Scroller visual, Using the Narratives for Power BI visual, Using video clips in your visuals

### PowerPoint integration

Constructing a narrative in PowerPoint, Using export to PowerPoint, Embedding live reports into a PowerPoint presentation

## **Power BI Advanced (2 days - £595, or £725 inc accomd, plus VAT)**

This 2 day Microsoft Power BI training course is aimed at experienced Power BI users. The course delves into the M language behind the Query Editor, as well as the use of advanced DAX formulas. Delegates will also learn how to improve the user experience through the use parameter tables; how to customise the data model by including calculated tables; and how to work with advanced visuals and dashboard tiles.

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### **The Power Query Formula Language**

Using The Formula Bar; Using The Advanced Editor; Overview Of The M Language; Exploring M using #shared

### **Understanding Automatically Generated Code**

Excel.Workbook; File.Contents; Table.TransformColumns; Table.TransformColumnTypes; Table.UnpivotColumns; Table.UnpivotOtherColumns

### **Creating custom functions in M**

Defining a function; Defining input parameters; The goes-to operator; Defining the function body; Using optional parameters; Calling functions

### **Iteration Techniques**

Benefit of generating lists; Generating lists of numbers; Generating lists of dates; Generating alphanumeric lists; Using the each function; Applying a function to a list of files

### **Advanced DAX**

Using DAX Studio, Writing complex formulas, Using variables, Calculating moving averages, Calculating running totals, Percentile calculations, Creating advanced time intelligence formulas, Using multiple date tables, Working with non-standard calendars

### **Working with calculated tables**

Creating calculated tables, DAX functions that return tables, The CALCULATETABLE function, The ADDCOLUMNS function, The SUMMARIZE function, SUMMARIZE with ROLLUP, VALUES and DISTINCT functions, The CROSSJOIN function, The TOPN function, The ROW function, Using calculated tables within the data model

### **Using parameter tables**

What is a parameter table, When to use parameter tables, Using the HASONEVALUE function, Using the VALUES function, Creating custom slicers, Creating multiple parameter table solutions

### **Using ArcGIS Maps for Power BI**

Overview of ArgGIS maps integration, Selecting a base map, Creating heat maps, Adding demographic layers, Searching for layers on ArgGIS online

### **Using R Visualizations and Datasets**

Overview of R integration, Configuring R Script Options, Using the R Script editor, Creating correlation plots, Creating predictive plots, Interacting with Power BI visuals

### **Advanced dashboard tiles**

Adding custom links to a dashboard, Using th web content widget, Using the video widget, Real-time streaming dashboard tiles

## How to find us

Our scheduled training courses take place at the following address:

G Com Solutions Limited  
Suite 2  
Pinnacle House  
4-5 Newark Rd  
Peterborough  
PE1 5WS.

The training centre can be reached by car or by a short taxi ride from Peterborough station. If you travel by car, free parking is available at the centre. (Naturally, lunch and refreshments are also provided.)

### By train

The training centre is just a short taxi ride from Peterborough station. Tell the driver that Pinnacle house is close to the junction of Newark Road and Vicarage Farm Road, opposite WeSellAnyCar.Com.



### By car

Follow the A1 to Peterborough; then exit at junction 17, onto Fletton Parkway (A1139) toward Wisbech; then continue to follow the A1139.

**A1139 Peterborough, Wisbech (A47)**  
**A605 N'hampton, Oundle**

At junction 5, exit toward Peterborough City Centre.

**City Centre**  
**Eastern Industry**  
**Services**

At the roundabout, take the 4th exit onto Boongate.

**Eastern Industry**

**Cinema**

**Hotel**



**Greyhound Stadium**

**Flag Fen**

**Activity World**

At the next roundabout, take the 2nd exit onto Newark Rd; then go through 2 roundabouts. You will find Pinnacle House on the right, almost immediately after the second roundabout.

We always have plenty of parking spaces available; so you may park in any vacant bay.



0845 129 2872

<https://gcomsolutions.co.uk>

Pinnacle House, 4-5 Newark Rd, Peterborough PE1 5YD