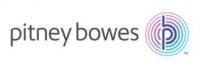


# Introduction to MapBasic



# Course Overview

This course has been designed for individuals who wish to learn how to benefit from MapBasic coding to power-use MapInfo Pro, automate repetitive tasks and customise MapInfo Pro's user interface to their advantage.

Our instructors are both product experts and qualified in teaching adult learners. We pride ourselves on the fact that our training standards are high and we have consistently achieved the Gold Standard Award from the Learning & Performance Institute who have monitored and assessed our training materials, course delivery and methodologies over many years.

# Course Details

This 2 day course costs £750 per person and lunch is provided.

The course is taught using the version of MapBasic currently being shipped.

# To Book a Course

To book a place on a training course, please contact us via email:

UKtraining@pb.com

Or via telephone: 0800 840 0001

If you require a bespoke private course either run at your company site or using our training facilities please contact us. We will be happy to discuss your training requirements.







# Course Content

## **Introduction and Concepts**

Understanding the use of MapBasic within MapInfo Pro, including workspaces and the MapBasic Window. The capabilities of MapBasic. Using the MapBasic documentation and online help. Using the MapBasic development environment. Understanding the structure of a MapBasic programme. Creating and using sub-procedures. Compiling your programme and dealing with syntax errors.

#### **Dialog Boxes**

How to create your own dialog boxes. The types of controls (buttons, list boxes, pop-up menus, etc.) available in dialogs. Positioning and naming controls. Getting input from the user via a dialog control, including reading control values and placing values from a dialog box into a variable. Using a control in a dialog box (such as a button) to call a subprocedure. As part of this course you will receive a free dialog library. This dialog library contains over 95 pre-built dialog boxes that you can copy and paste into your programmes.

#### Menus

How to create your own menu and add new menu commands to an existing menu. How to have your menu command call a sub-procedure in your programme. How to add, remove or relocate individual menu commands. How to add or remove entire menus from MapInfo Pro's standard menu bar. Altering the appearance of menu items, such as making a menu item available or unavailable ('greyed out') and adding dividing lines into the menu.

#### **ButtonPads**

Using the different types of buttons available in MapBasic: push but-tons, tool buttons and toggle buttons. How to create your own custom ButtonPads and add new buttons to an existing ButtonPad. How to find and use the buttons from the MapBasic's library of custom button icons. How to remove buttons from an existing ButtonPad. Creating a new button for an existing menu command and creating a new button to call a sub-procedure in your programme. Controlling the location and appearance of the ButtonPads.

# **Obtaining System Information**

MapBasic includes a number of functions that can be used to find out about the current state of the system environment. A MapBasic programmer can use this information in many ways. Examples of information that you can obtain are how many tables are open, the name of a table, the type of a table (permanent, query, raster, etc.), how many columns a table has and information about the column (the name and type of column). It is also possible to find out how many windows are open, what type of windows they are, what layers are in a map window or what type of window is the active window.

### Working with Tables in MapBasic

Fundamentals of working with tables in MapBasic, including opening tables, reading values from a table (the "Fetch" statement), writing values into a table and displaying a table in a Browser window. Also creating a new table and modifying the structure of an existing table. Using selection tables.

#### Introduction to Objects

Object and table fundamentals, creating tables, adding objects to tables. Understanding projections and co-ordinate systems. Declaring and using object variables to store an object. Using MapBasic to create map objects in a table. Using a drawing tool and storing the object that is drawn by a user into a table.

#### **System Event Handlers**

System event handlers give the programmer the ability to have their application respond automatically to specific user actions or events. For example, a MapBasic programme can respond automatically if the user closes a window, makes or changes a selection, pans or zooms a map window, or changes the window that has the focus (or in other words the window that is "in front"). This section will describe the particular system events and event handler procedures that are available in MapBasic.

# **Thematic Mapping**

Using MapBasic to create thematic maps. Particular emphasis will be given to a ranged thematic map. Using array variables and the Create Ranges and Create Styles commands to leverage Map-Info Professional's range calculation and automatic colour spread capabilities.

# In summary, the major topic areas of the course are:

- 1. The fundamentals of MapBasic programming
- Setting up the User Interface, creating dialogue boxes, menus and buttons
- 3. Capturing and storing data input
- Using MapBasic to check for events, read tables and more

