# **Course Aims:**

This course is design to provide programmers with the essential skills and knowledge necessary to allow them to become competent in developing VB applications.

# **Course Outline:**

## The Microsoft Visual Basic IDE:

- The menus in the IDE
- The IDE toolbars
- The IDE Windows
- Objects, Forms and controls
- Coding Event procedures
- Naming Conventions

#### Controls:

- Textbox
- Label
- Command Button
- Option Button
- Frame
- Checkbox
- Listbox
- Combobox
- Scrollbars
- Timer
- Picturebox
- Toolbar
- Common Dialog
- Imagebox

#### Programming in VB:

- Procedures & Functions
- Arguments
- GoTo statement
- If statement
- Logical Operators
- Select Case statement
- Loop statements
- With statement
- Error trapping
- Comments

#### Variables:

- Declaration of Variables
- Initialisation
- Scope of variables
- Persistency
- Arrays
- Constants

## Control Arrays:

- Creating control arrays
- Adding & removing elements at run time
- Control array events
- Saving code using control arrays

#### Drag & Drop:

- The MouseMove event
- The DragOver event
- The DragDrop event

#### Menus:

- The Menu editor
- Design considerations

#### The Data Control:

- Properties & methods
- Binding
- Other data controls

#### Treeview & Listview controls:

- Treeview control
- Listview control

#### File I/O:

- Sequential (text) files
- Binary files
- File management
- The FileSystem Object

#### Error Handling

#### The Windows Clipboard:

- GetText
- SetText

#### MDI:

- MDI Parent forms
- MDI Child forms
- Menus & toolbars in MDI applications
- Coding MDI Applications

#### Debugging:

- Break mode
- Step by step execution
- Interrogating variables

#### Creating an executable file

## The VB MSDN help system

## OO Programming in VB:

- The OO Paradigm
- Class Modules
- The VB Class builder
- Object initialisation & termination

#### Collections:

- The Add method
- The Item method
- Iterating with For Each

#### More Databases:

• The VB Data Environment

#### Windows API:

- Declaring API functions
- Calling API functions

#### .INI files

### Windows registry:

- Overview of the Windows registry
- GetSetting & SaveSetting

### ActiveX OLE Server Objects:

- ActiveX projects
- Instancing
- Events

#### Reporting:

- The Printers collection
- The Printer object
- Data Report Designer
- Crystal Reports

# **Target Audience:**

Systems and applications programmers who will be developing systems in VB. Anyone who wants a practical understanding of VB will benefit from this course. It is suitable for software engineers who want to expand their knowledge in a powerful all-purpose language and managers who want to manage VB programming projects.

# **Assumed Knowledge:**

Participants should have a basic knowledge of programming techniques and at least one programming language such as COBOL, BASIC, FORTRAN or the like.