

EXCEL 2007 AND 2010 VBA

Unit Standard	115381
NQF Level	6
Credits	12
Duration	3 Days
Pre – Requisite Training	Microsoft Excel 2007/2010 Advanced

SYNOPSIS

This course teaches advanced techniques in VBA programming using Microsoft's Excel 2007/2010 Spreadsheet application. It provides an introduction to VBA and Excel VBA before proceeding through to programming projects using Excel to illustrate programming techniques.

COURSE OUTLINE - 2007

- Introducing Visual Basic for Applications in Excel 2007/2010:
 - Displaying The Developer Tab in the Ribbon;
 - Recording a Macro;
 - Saving a Macro-Enabled Workbook;
 - Running a Macro;
 - Editing a Macro in the Visual Basic Editor;
 - Understanding the Development Environment;
 - Using Visual Basic Help;
 - Closing the Visual Basic Editor;
 - Understanding Macro Security.
- Working with Procedures and Functions:
 - Understanding Modules;
 - Creating a Standard Module;
 - Understanding Procedures;
 - Creating a Sub Procedure;
 - Calling Procedures;
 - Using the Immediate Window to Call Procedures;
 - Creating a Function Procedure;
 - Naming Procedures;
 - Working With the Code Editor.
- Understanding Objects:
 - Navigating the Excel Object Hierarchy;
 - Understanding Collections;
 - Using the Object Browser;
 - Working with Properties;
 - Using the With Statement;
 - Working with Methods;
 - Creating an Event Procedure.

- Using Expressions, Variables and Intrinsic Functions:
 - Understanding Expressions and Statements;
 - Declaring Variables;
 - Understanding Data Types;
 - Working with Variable Scope;
 - Using Intrinsic Constants;
 - Using Message Boxes;
 - Using Input Boxes;
 - Declaring and Using Object Variables.
- Controlling Program Execution:
 - Understanding Control-of-Flow Structures;
 - Working with Boolean Expressions;
 - Using the If ...End If Decision Structures;
 - Using the Select Case...End Select Structure;
 - Using the Do..Loop Structure;
 - Using the For...To...Next Structure;
 - Using the For Each...Next Structure;
 - Guidelines for use of Control-of-Flow Structures.
- Working with Forms and Controls:
 - Understanding UserForms;
 - Using the Toolbox;
 - Working with UserForm Properties, Events and Methods;
 - Understanding Controls;
 - Setting Control Properties in the Properties Window;
 - Working with the Label Control;
 - Working with the Text Box Control;
 - Working with the Command Button Control;
 - Working with the Combo Box Control;
 - Working with the Frame Control;
 - Working with the Options Button Controls;
 - Working with Control Appearance;
 - Setting the Tab Order;
 - Populating a Control;
 - Adding Code to Controls;
 - Launching a Form in Code.
- Working with the PivotTable Object:
 - Understanding PivotTables;
 - Creating a PivotTable Using Worksheet Data;
 - Working with PivotTable Objects;
 - Working with the PivotFields Collection;
 - Assigning a Macro to the Quick Access Toolbar.
- Debugging Code:
 - Understanding Errors;
 - Using the Debugging Tools;
 - Setting Breakpoints;
 - Stepping Through Code;
 - Using Break Mode during Run mode;
 - Determining the Value of Expressions.

- Handling Errors:
 - Understanding Error Handling;
 - Understanding VBA's Error Trapping Options;
 - Trapping Errors with the On Error Statement;
 - Understanding the Err Object;
 - Writing an Error-Handling Routine;
 - Working with Inline Error Handling.

COURSE OUTCOMES

Upon successful completion of this course, learners will be able to demonstrate their ability to:

- Understand the VBA world;
- Use the Object Browser;
- Understand properties and methods;
- Make Variables and understand Variable Data Types;
- Understand VBA Control Structures;
- Use special considerations;
- Create toolbars with VBA;
- Create a new Menu with VBA;
- Create a new Message Box;
- Construct User Forms;
- Automate Excel.