Excel VBA Intermediate

Duration: 12 h

Prerequisites:
- Good working knowledge of Excel

Teaching methods:
- Remote training
- Demonstrations
- Training materials included

Recognized certificate upon completion: yes

Target audience: Analysis, management and administration professionals who use Excel regularly and want to automate repetitive tasks and master common functions.

Skills acquired by the end of the training:
- Record and use a macro
- Edit an existing macro
- Identify and declare variables
- Design conditions
- Design loops and iterations
- Use VBA collections and objects
- Create functions and procedures
- Use built-in dialog boxes
- Debug and resolve errors

DESCRIPTION

Excel VBA is the programming language built into Excel that lets you create macros and automate repetitive tasks. In this training, you will learn to use the macro recorder, program in the VBA editor, work with the main Excel objects, structure your code and fix errors. You will also complete a hands-on project to apply the concepts you have learned.

PROGRAM

1. Introduction to macros and automation

- What is a macro? Concept and purpose
- Using the macro recorder
- Practical automation examples
- Assigning a macro to a button, an object or a toolbar
- Generating a chart with a macro
- Saving a macro in the Personal Macro Workbook (Personal.xlsb)

2. VBA development environment

- Exploring the Visual Basic Editor (VBE)
- Object-Oriented Programming Concepts
- Creating a procedure
- Understanding procedure syntax
- Assigning a button to a procedure
- Using modules and organizing code
- Useful VBE shortcuts

3. VBA and Excel objects

- The Range object and its extensions
- The Worksheet object
- The Workbook object
- Interaction between worksheets and workbooks
- How to structure and comment your code

4. VBA programming fundamentals

- Variables: declaration, data types and scope
- Object variables
- Programming statements:
  - Conditions
  - Loops
- Built-in dialog boxes (MsgBox, InputBox)
- Functions

5. Debugging and error handling

- Types of errors
- Using step-by-step execution
- Setting watches to identify problems
- Immediate Window

6. Professional project

- Developing a mini automation project in Excel
- Presenting results and documenting the project

QUESTIONS AND ANSWERS