



«MICROSOFT EXCEL. VISUAL BASIC FOR APPLICATIONS», 5 days

COURSE OBJECTIVE:

Development of professional competencies in use of “Visual Basic for Applications” programming utility of Microsoft Excel.

ACQUIRED ABILITIES:

- Use advanced options of Microsoft Excel for tables construction with Visual Basic for Applications;
- Apply Visual Basic for Applications Excel in economy, personal and professional tasks solving;
- Master methods and technics of working with code of Visual Basic for Applications Microsoft Excel;
- Understand main principles of work with built-in modules and user forms;
- Make tables, workbooks, and format data with program codes;
- Design an activity with the use of ICT and Microsoft Excel enhanced options;
- Apply special modules and functions of Visual Basic for Applications Excel for practical tasks solving.

COURSE CONTENT:

Module Name	Content
Fundamentals of electronic worksheet app development	Stages of apps development. Design of usable interface. Key combinations, apps testing.
Introduction into Visual Basic for Applications	Macro recording. VBA. Entities, gallery and properties of VBA. Range, Cells, Offset entities.
Programming in Visual Basic for Applications	VBA elements and design. Variables, data types and constants. Study of assignment operators, arrays, built-in functions. Objects and gallery management by construct and circles.
Working with Sub procedure	Sub performing: start, call. Arguments passing. Errors handling. Case studies.
Function making	Procedures and functions. Function syntax. Function arguments. Enhanced options for dates operation. Functions adjustment.
Excel event concept	Event types. Events of WORKBOOK, WORKSHEET, APPLICATION objects.
Methods and ways of	Work with cell ranges. Workbook and sheets management. VBA

programming with Visual Basic for Applications	programming practice.
PivotTables	Modes of PivotTables operation: construction of complicated tables, several tables, reverse table.
Diagrams control	Diagrams operation with VBA. Diagram export, signature display. Deletion of objects from ChartObjects or Charts galleries. Examples of Chart event application.
Interworking with other apps	Methods of Access, Word, PowerPoint applications management through Excel – data transfer, data transformation.
Operation with external files and data	Connection to external data. ADO and VBA for external data acquisition. Case studies of text files management.
Create user forms	Input boxes application (InputBox, MsgBox functions). Working with user forms – new UserForm insert. Addition of control components to Toolbox panel (CheckBox, ComboBox, CommandButton, Label, etc.). Examples of interactive windows creation. Supplementary technics.
Excel apps development	Creation and application of add-ins (XLSM, XLAM files). Working with ribbon, context menu. Development of online help for applications. Class modules control principles. Compatibility principles.