



Microsoft Office with VBA Programming Course



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Introduction:

In this course on Microsoft Office with VBA Programming, delve into the powerful intersection of Office applications and Visual Basic for Applications VBA. Discover leveraging VBA to automate tasks, enhance productivity, and customize functionalities across Microsoft Excel, Word, PowerPoint, and Outlook.

Explore the fundamentals of VBA syntax, macros, and advanced techniques tailored to streamline workflows and optimize data management within the Office suite. Whether you're a novice looking to unlock the potential of Office applications or an experienced user seeking to master VBA for intricate automation, this course equips you with essential skills to excel in today's dynamic workplace environment.

Targeted Audience:

This Microsoft Office with VBA Programming course is aimed at individuals with a basic grounding in Excel VBA and an advanced knowledge of Microsoft Excel who want to develop skills in introducing more sophisticated automation into their workflows.

Course Objective:

At the end of this Microsoft Office with VBA Programming course, participants will be able to:

- Variable types.
- Use object variables to represent worksheets and workbooks.
- Use count-based For-Next and conditional-based Do-Until, Do-While loops.
- If-Then-Else-End If and Select Case statements.
- Blocks.
- Use Range and Cells objects.
- Benefits.
- Upon completion of the course, delegates will have a good understanding of the significant components of VBA.
- Delegates will expand their reach using VBA to communicate with other Office applications, such as Word.
- In addition, the course also covers working with data from database applications such as Access and manipulating and presenting the data.

Targeted Competencies:

By the end of this Microsoft Office with VBA Programming training, participants' competencies will be able to:

- Automate routine tasks across Microsoft Office applications using VBA macros.
- Customize and extend functionality in Excel, Word, PowerPoint, and Outlook through VBA programming.
- Implement data manipulation and analysis techniques with VBA to enhance decision-making processes.
- Develop interactive user interfaces and forms for streamlined data input and retrieval.
- Troubleshoot and debug VBA code to ensure robust application performance.
- Integrate external data sources and APIs into Office applications using VBA.
- Optimize workflows and improve efficiency through advanced VBA techniques and best practices.

Course Outline:

Unit 1: The Excel Object Model:

- Explore the Range object in detail.
- The versatile Current Region object.
- Work with collections of Workbooks and Worksheets.
- Manipulating Charts through VBA.
- Manipulating PivotTables through VBA.

Unit 2: Arrays:

- Efficient variable storage with arrays.
- Array optimization.
- Dynamic arrays.
- The Array function.

Unit 3: Triggers and Events:

- Run macros automatically.
- Execute macros on a timer.
- Associate macros with other Workbook events.

Unit 4: Advanced Parameters:

- Pass parameters by reference and by value.



Unit 5: Working with Text Files:

- Import text files.
- Export text files.
- Use the FileStream object.

Unit 6: Linking with Office:

- Connect to other Office applications.
- Work with other Office applications.

Unit 7: Linking to data sources using ADO:

- Understanding ActiveX Data Objects.
- Use Excel to communicate with other data sources.
- Understand the connection string.
- Add, read, modify and delete data.

Unit 8: Add-Ins:

- How does macro security work?
- Password protecting your code.
- Distribute macros via an Add-In.