

# Microsoft Excel – Advanced Methods and Functions

Course code: MSEX3

Complete this course and get 90 days access to practice in e-learning version for free. You can choose the e-learning course in Czech, Slovak or English. This course is assigned for skilled Microsoft Excel users, who want to use special tools, techniques, methods and functions. You should already know Microsoft Excel on "Microsoft Excel - practical use" level. This course is suitable for users of every version of Microsoft Office products. Excel is a well-matured application and control of its interface has not changed significantly since the 2007 version. There will be current Excel version installed in the classroom.

## Who is the course for

This course is assigned for skilled Microsoft Excel users, who want to use special tools.

## What we teach you

You will learn all advanced techniques, methods and functions.

## Required skills

Microsoft Excel - practical use

## Course Outline

Conditions in formulas

- IF function, other logical functions
- CHOOSE function
- COUNTIF, SUMIF
- COUNTIFS, SUMIFS
- Advanced conditional formatting using formulas
- Functions available only in new versions of Excel

Database functions

- Criteria tables
- Kind of criteria
- Best practices

Lookup functions, joins of datasets

- VLOOKUP, HLOOKUP, XLOOKUP functions
- INDEX function
- MATCH function

Retrieving data from external databases

- Basic ways of external data importing in Excel
- Definition of datasource
- Configuration of external data range
- Import using PowerQuery addin

Datamodel

- Relations between Excel Tables
- Definition of Datamodel using PowerPivot addin (introduction to topic)
- Relation between datamodel and PivotTable (extension of PivotTable calculation power)

PivotTable reports

- Concept of PivotTables
- Aggregation functions, analytical calculations
- Additional calculations
- Calculated fields, ratio
- Data Consolidation using PivotTable

### GOPAS Praha

Na Strži 2097/63  
140 00 Praha 4 - Krč  
Tel.: +420 226 201 390  
[info@gopas.cz](mailto:info@gopas.cz)

### GOPAS Brno

Nové sady 996/25  
602 00 Brno  
Tel.: +420 530 513 590  
[info@gopas.cz](mailto:info@gopas.cz)

### GOPAS Bratislava

Dr. Vladimíra Clementisa 10  
Bratislava, 821 02  
Tel.: +421 902 903 132  
[info@gopas.sk](mailto:info@gopas.sk)



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- Synchronized controlling of PivotTables group

## Scenarios

- Scenario as attribute of sheet
- Stored cells

## Special mathematical methods

- Solver
- Goal seek
- Matrix formulas

## Advanced operations with worksheets/workbooks

- Named ranges
- Naming a range using a Name box
- Commands for working with names
- Global/local names
- Absolute/relative names
- Named formulas & constants
- Using of name in formula
- Comparison to labels
- 3D formulas (Workbook as 3D structure)
- Workbook window visibility
- Interactive dynamic graphical controls (Combobox, Checkbox, OptionButton, etc.) in forms, calculations, model and visual reports.

## Worksheet/Workbook protection

- Exceptions for specified users

## Macros

- Macro recorder
- Ways of macro execution
- Assignment to floating object in worksheet

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[info@gopas.sk](mailto:info@gopas.sk)



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