



Academic Year 2021-2022

Syllabus

Excel Course

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Course Description

The course explores the main functions of Excel (including complex functions, what-if analysis, macros) through examples and targeted exercises that can be immediately applied in study and work. The aim of the course is to deepen the functionality of Microsoft Excel so that the student can fully understand the potential of the tool to be able to operate effectively and professionally in both the university and corporate settings.

At the end of the course participants will be able to:

- Apply advanced formatting options to the worksheet
- Use logical, statistical, financial and mathematical functions
- Create various types of graphs and function graphs
- Work with tables and lists to analyze, filter and sort data. Create and use scenarios
- Increase productivity by working with individual cell and cell range names, macros and templates.
- Use links between worksheets (even three-dimensional), import and organize data
- Collaborate on spreadsheets and apply security features to spreadsheets.

The Course is divided into two modules

- 1st Module, Techniques and tools to increase personal productivity
- 2nd Module, Data analysis to obtain information

1st Module

Topic 1	Cells: Insert, select, modify and sort. Copy, move, delete
Topic 2	Worksheet management: Rows and columns. Add, delete, link and format spreadsheets
Topic 3	Formulas and functions: Absolute, relative and mixed references. Arithmetic formulas. Financial functions. Logical functions. Search and reference functions. Mathematical and trigonometric functions. Nesting of functions
Topic 4	Formatting: Numbers and dates. Content. Alignment, borders and effects

Topic 5**Graphs:** Types of graphs, graphs of functions. Creation and modification

2nd Module**Topic 1****Analyses (*part one*):** Use of Tables. Pivot tables. Sorting and filters**Topic 2****Analyses (*part two - What If Analysis*):** Scenarios, Data Tables, Goal Seek. Automation. Record macros. Run macros**Teaching Method**

The lectures include theoretical explanations and numerous application exercises accompanied by simulations and reconstructions of real situations that will allow the student to develop the skills necessary to solve concrete problems of an economic and business nature.

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Information

To achieve more profitable results, students are encouraged to equip themselves with personal computers to actively participate in lessons.

The Microsoft Excel program, contained in the Microsoft Office 365 package, must be installed on the computer. Office 365 is free for Tor Vergata students.

To access the services made available to Tor Vergata students, connect from the Internet at the following link <https://login.microsoftonline.com/>. The Microsoft portal relating to Office 365 will appear. To access, simply enter the e-mail address provided by the University. Then follow the guided instructions.