

# Excel advanced

Lecturer: **Andrea Giussani**

## Language

English

## Course description and objectives

The course is aimed to analyze the main advanced features of Excel, including complex functions, what-if analysis, pivot tables and macros, with specific examples and exercises that can be immediately applied to one's study and work. The goal is to improve the advanced skills in basic Excel users, in order to give them the tools for an effective and qualified approach to both academic and professional activities. The course is also valuable as preparation for the ECDL Advanced Spreadsheets certification.

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

- Effectively organize data into a spreadsheet
- Analyze data using complex functions and tools
- Get external data into Excel
- Manage Excel charts in an advanced manner
- Apply advanced formatting to the worksheet

## Audience

The course is open to all Bocconi students. In particular, it is targeted at:

- Undergraduate students who have successfully passed Computer science, Computer skills or Computer skills for economics exam, and who aim to revise their skills and get the ECDL Advanced Spreadsheets (Excel) certification
- Undergraduate students who have passed with some difficulty Computer science, Computer skills or Computer skills for economics exam, and who want to become more nimble using Excel's advanced features
- Graduate students who have not attended their undergraduate studies at Bocconi and thus have not taken Computer science, Computer skills or Computer skills for economics exam
- All those who need to manage and process data in a professional manner for their academic or professional activities

## Prerequisites

To have achieved the ECDL Core or Full Standard or to have basic skills in Excel, including:

- How to manage data and worksheets
- How to build simple functions (e.g. SUM, AVERAGE, MAX, MIN, IF)
- How to create charts
- How to format cells

## Duration

16 hours

## Calendar

Lecture	Date	Time	Room
1	Tue 15/01/2019	18.00 - 19.30	Info 6
2	Thu 17/01/2019	18.00 - 19.30	Info 6
3	Fri 18/01/2019	18.00 - 19.30	Info 6
4	Tue 22/01/2019	18.00 - 19.30	Info 6
5	Thu 24/01/2019	18.00 - 19.30	Info 6
6	Fri 25/01/2019	18.00 - 19.30	Info 6
7	Tue 29/01/2019	18.00 - 19.30	Info 6
8	Thu 31/01/2019	18.00 - 19.30	Info 6

## Syllabus of the course

Lecture	Topics	Book and Syllabus references
1	<b>Tables and charts</b> <ul style="list-style-type: none"> <li>- Revision of some basic elements of Excel</li> <li>- Conditional formatting</li> <li>- Logical and nested functions</li> <li>- Charts advanced formatting</li> </ul> <b>Exercises</b>	<b>Section 2, Section 7, Section 14, Section 15</b> - <i>Syllabus: AM4.1 – AM4.3</i>

Lecture	Topics	Book and Syllabus references
2	<b>Organizing data</b> <ul style="list-style-type: none"> <li>- Importing data from text files (txt, csv)</li> <li>- Advanced table formatting</li> <li>- Worksheets management</li> <li>- Sort and Filter tools</li> <li>- Subtotal</li> </ul>	<b>Section 2, Section 11, Section 12</b> - <i>Syllabus: AM4.1 – AM4.4</i>
<i>Exercises</i>		
3	<b>Functions (part 1)</b> <ul style="list-style-type: none"> <li>- Mathematical functions</li> <li>- Statistical functions</li> <li>- Database functions</li> <li>- Working with references on different worksheets</li> </ul>	<b>Section 7, Section 14</b> - <i>Syllabus: AM4.2</i>
<i>Exercises</i>		
4	<b>Analyzing data</b> <ul style="list-style-type: none"> <li>- Analyzing data with Pivot tables</li> <li>- Creating and managing Scenarios and Summaries</li> <li>- Defining and using cells names</li> <li>- Other What-if analysis tools</li> </ul>	<b>Section 5, Section 9, Section 13, Section 16</b> - <i>Syllabus: AM4.4</i>
<i>Exercises</i>		
5	<b>Functions (part 2)</b> <ul style="list-style-type: none"> <li>- Date and time functions</li> <li>- Text functions</li> <li>- Financial functions</li> <li>- Creating custom number formats</li> </ul>	<b>Section 7, Section 14</b> - <i>Syllabus: AM4.2</i>
<i>Exercises</i>		
6	<b>Sharing spreadsheets</b> <ul style="list-style-type: none"> <li>- Lookup and reference functions</li> <li>- Data validation</li> <li>- Auditing tools</li> <li>- Security and protection options</li> </ul>	<b>Section 3, Section 14, Section 18</b> - <i>Syllabus: AM4.5 – AM4.7</i>
<i>Exercises</i>		

Lecture	Topics	Book and Syllabus references
7	<b>Link and automation</b> <ul style="list-style-type: none"> <li>- Linking data</li> <li>- Advanced copy and paste options</li> <li>- Automation with Macros</li> <li>- Reviewing tools</li> </ul> <i>Exercises</i>	<b>Section 10, Section 17, Section 19</b> - <i>Syllabus: AM4.6 – AM4.7</i>
8	<b>General review and final test</b>	

## Suggested bibliography

*ECDL Advanced Spreadsheet Software* (BCS ITQ L3) - Excel 2013 version (ISBN: 9780857410436), CiA Training Ltd, 2010

*Excel Workbook*, second edition, edited by Alberto Clerici, Egea, 2017

## Software

Microsoft Office Excel 2016

## Available seats

This activity is limited to **40** participants. Registrations cannot be carried out once this number has been reached or after closing of the registration period.

## Spreadsheet paths

This course can be intended as part of a wider path:

