

# Excel advanced

**Lecturer: Massimo Ballerini**

## 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 Spreadsheet 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 review and improve their skills and get the ECDL Advanced Spreadsheet (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 standard certification (ECDL Core or New ECDL) or have equivalent skills. In particular, it is required to know:

- How to enter data in Excel
- How to manage worksheets
- How to build simple functions
- How to create charts
- How to format data

## Duration

16 hours

## Calendar

Lecture	Date	Time	Room
1	Mon 12/11/2018	18.00 - 19.30	Info AS04
2	Sat 17/11/2018	09:30 - 12:45	Info AS04
3	Mon 19/11/2018	18.00 - 19.30	Info AS04
4	Sat 24/11/2018	09:30 - 12:45	Info AS04
5	Mon 26/11/2018	18.00 - 19.30	Info AS04
6	Wed 28/11/2018	18.00 - 19.30	Info AS04

## 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>- Logic 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>- Advanced table formatting</li> <li>- Worksheets management</li> <li>- Sort and Filters tools</li> <li>- Subtotal</li> </ul>	<b>Section 2, Section 11, Section 12</b> - <i>Syllabus: AM4.1 – AM4.4</i>
	<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>	
3	<b>Analyzing data</b> <ul style="list-style-type: none"> <li>- Analyze data with Pivot tables</li> <li>- Create and manage Scenarios and Summaries</li> <li>- Define and use 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>	
4	<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>- Create custom number formats</li> </ul>	<b>Section 7, Section 14</b> - <i>Syllabus: AM4.2</i>
	<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
5	<b>Data gathering and automations</b> <ul style="list-style-type: none"> <li>- Importing and linking data</li> <li>- Advanced copy and paste options</li> <li>- Automation with Macros</li> <li>- Reviewing tools</li> </ul> <p><i>Exercises</i></p>	<b>Section 10, Section 17, Section 19</b> - <i>Syllabus: AM4.6 – AM4.7</i>
6	<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

110 – Students in graduate programs: 70; all other students: 40

## Spreadsheet paths

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

