



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Basic Programming - 1

2021-1-F7702M038-F7702M002M-T1

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#### Learning objectives

The aim of the course is to provide to the students the skill for the use of VBA language to solve problems of medium complexity in their field of specialization and to translate them into automated procedures

#### Contents

VBA programming and applications to data manipulation and problem modeling

#### Detailed program

- Excel review
- Visual Basic for Applications (VBA)
  - language fundamentals
  - GUI and use of online documentation
  - operators, data types, variables and expressions
  - flow control
  - function and parameter passing
  - user defined functions
  - structured data types
  - Text file manipulation

#### Prerequisites

Mathematical-logical knowledge as acquired during high-school and basic concepts on algorithms.

## **Teaching methods**

Frontal lessons. Lessons take place in computer science lab to allow students to immediately apply the concepts explained.

During the Covid-19 emergency period, lessons will take place in synchronous videoconference.

## **Assessment methods**

Learning assessment includes a written exam and possibly an oral exam. The written exam will take place in the teaching laboratories to evaluate the student's skills in using Excel and their competence in solving simple problems.

In the Covid-19 emergency period, exams will only be online. They will be carried out using the WebEx platform and esamionline platform.

## **Textbooks and Reading Materials**

- UgoMoscato, Mauro Minella. Visual Basic for Application con Microsoft Excel. McGraw-Hill Education
- S. C. Chapra, Introduction to VBA for Excel, 2nd ed., Prentice Hall

## **Semester**

First semester

## **Teaching language**

Italian

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