UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Vba Programming

2324-1-F5602M001-F5602M002M

Learning objectives

The course aims at providing attendant students a number of useful standard programming skills using MATLAB software. Relevant topics cover some mathematical applications for economics.

Contents

Basic MATLAB programming

Detailed program

1. MATLAB IDE;
2. Data and variables types
3. Plotting mathematical objects
4. MATLAB Programming: loops, logical operators, scripts and functions development
5. Symbolic calculus and linear algebra with MATLAB
6. Constrained and unconstrained optimization
7. MATLAB programming for Economic modelling

Prerequisites

Basic knowledge of real analysis and linear algebra

Teaching methods

In-presence classes held in a Campus PC Lab

Assessment methods

A written and in-presence end of course assessment that will be held in a Campus PC Lab
This exam will evaluate correctness of the solved exercises as well as skills and knowledge acquired during the course.
Students might in addition hand a brief project that examines in more details one of the topics the course covers.

Textbooks and Reading Materials

Suggested textbooks are:
Pocci, C., Rotundo G. and De Kok, R. (2017). MATLAB for Applications in Economics and Finance. Apogeo Education, Maggioli Editore
Houcque, D. (2005). Introduction to Matlab for engineering students. Northwestern University, 1-64.
Lynch, S. (2004). Dynamical systems with applications using MATLAB. Boston: Birkhäuser

Semester

First semester

Teaching language

English

Sustainable Development Goals