UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Vba Programming

2021-1-F5602M001-F5602M002M

Learning objectives

To acquire the skills for programming on the scientific software MATLAB, with a focus on Mathematical applications for Economics

Contents

MATLAB Programming

Detailed program

·   The MATLAB IDE

·   Data and variables types

·   Plots generation

·   MATLAB Programming: loops, logical operators, scripts and functions development

·   Symbolic calculus and linear algebra on MATLAB

·   Root-finding algorithms

·   Constrained and unconstrained optimization

- Dynamical systems on MATLAB (First-order linear and nonlinear difference Equations and systems)

- Economic models

Prerequisites

Basic math

Teaching methods

Lessons in the Computer Laboratory

Assessment methods

Written exam

Textbooks and Reading Materials

Pocci, C., Rotundo G. and De Kok, R. (2017). MATLAB for Applications in Economics and Finance. Apogeo Education, Maggioli Editore

Other resources:

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