



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

It For Finance

2021-1-F1601M056

Learning objectives

The aim of the course is to provide to the students the skill for the use of Matlab language to solve problems of medium complexity in their field of specialization and to translate them into automated procedures with one of the two languages depending on the type of problem

Contents

Matlab programming and applications of both languages to data manipulation and problem modeling

Detailed program

- matrix property review
- vectorial instructions
- Introduction to MatLab:
 - GUI;
 - MatLab programming: peculiarity.
- MatLab programming:
 - operators, data types, variables and expressions;
 - flow control;
 - functions, parameter passing, local and global variables;
 - script;
 - predefined functions for matrix, vector, polynomial manipulation ;
 - other data structures (basics);
 - data exchange with Excel File;
 - 2D graphics (basics).

Prerequisites

Mathematical-logical knowledge as acquired during high-school, linear algebra 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 Matlab 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 esameonline platform

Textbooks and Reading Materials

A.CAMPI, E.DI NITTO, D.LOIACONO, A.MORZENTI, P.SPOLETINI, **Introduzione alla PROGRAMMAZIONE IN MATLAB**. Società Editrice Esculapio, 2011 ISBN: 9788874884629

Semester

Second semester

Teaching language

Italian
