UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Informatica per la Finanza

2425-1-F1601M056

Learning objectives

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

Contents

Python programming and applications to data manipulation and problem modeling

Detailed program

- Introduction to PyCharm:
- Python programming:
  variables and data types (integers, decimals, booleans, lists, tuples, sets and maps)
  arithmetic, relational, and logical expressions
  basic function
  elementary instructions: assignment, return, break, continue, import
  compound statements: if, for, while, with
  reading and writing instructions: input, print, text file
  functions, parameter passing;
  classes;
  NumPy library;
  Pandas library;
  machine learning

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.

Assessment methods

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

Textbooks and Reading Materials

Paul J. Deitel, Harvey M. Deitel, Intro to Python for Computer Science and Data Science. Pearson, 2020

Semester

First semester

Teaching language

Italian

Sustainable Development Goals

QUALITY EDUCATION