

Python Programming

Instructor: Juan F. Imbet *Ph.D.*

Paris Dauphine University

M203 (M1)

Evaluation

- 90% Final Project
- 10% Participation

As of M203 policies, attendance is mandatory.

This is an intermediate course on Python programming. It is designed for students with some prior programming experience. During the course the students and the instructor will develop jointly a python library, covering the steps, methodologies, and standards to produce high quality open-source code. At the end of the course, the students are expected to develop an independent new feature compatible with the project.

- Session 1 (03/09) Introduction, Methodology, and Tools.
- Session 2 (10/09) **PyBacktestChain**: A Backtesting framework for investment strategies that uses Blockchain technology to avoid overfitting.
- Session 3 (20/09) Data Module: Numpy, Pandas, and Object Oriented Programming.
- Session 4 (01/10) Strategy Module: Portfolio Optimization with SciPy
- Session 5 (08/10) Simulation and Risk Management
- Session 6 (15/10) Blockchain Module: Foundations, create a blockchain from scratch
- Session 7 (22/10) Blockchain Module: Storing backtests in the blockchain.
- Session 8 (19/11) User Interface and final project presentation.