

Computer Science III Python Programming

Level: Bachelor, 2nd year

Cursus: Bachelor in Economics

Teaching hours: 24h (TD)

Teachers: Richard BARON

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Course's objectives:

The teaching aims to acquire the basic principles of programming in Python. The teaching method aims at developing the students' autonomy. Students are invited to use the numerous online sources. Emphasis is also put on the notion of computational algorithms. The exercises are inspired by economic models and calculations.

Course outline:

- Different programming environments: Notebook, Jupyter, Spyder
- Python data types: *int*, *float*, *string*, *Boolean*
- Programming structures: *if*, *while*, *for*.
- Graphs with Python
- Files with Python

Skills at the end of the course:

- Use different programming environment to share documents and Python code
- Write Python code to help economic modelling and calculation
- Read and treat data from files

Evaluation: Programming project

Bibliography:

Learning Python, O'Reilly, M. Lutz (2015)

Python for economists, E. Gallic (2019)

Quantitative economics with Python, T. Sargent, J Starchuski (2020)