

Computer sciences and numerical methods



In brief

➤ **Course language:** English

Presentation

Prerequisites

Basic algorithmics, elementary coding in Python, linear algebra, differential calculus, differential equations, Taylor series.

Description of the programme

The course serves a first purpose of bringing students operational level in Python coding. Fundamental aspects of the language are presented and illustrated in practical sessions. The course then covers some fundamental aspects for the numerical solutions of:

- linear systems,
- convex optimization problems,
- ordinary differential equations,
- partial differential equations.

Bibliography

Lutz M. (2009), *Learning Python*, 4th edition, O'Reilly.

Teaching team

Frédéric Schwander

Total des heures

24h

CM	Master class	16h
TD	Directed work	8h

Useful info

Name responsible for EU

Lead Instructor

Frédéric Schwander

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