

Computer Science: Python

ECTS : 3

Volume horaire : 36

Description du contenu de l'enseignement :

Basic concepts of algorithms in Python: variable, affectation, use of the print() and output() functions - Conditional instructions and Boolean expressions - Repetitive instructions (loops) - Modular programming: functions and libraries in Python - Sequential data structures in Python: strings and lists - Reading and writing to text files.

Compétence à acquérir :

This class is an introduction to algorithms and programming in Python.

The students develop sound skills in Python programming language, which is now a reference language in many technical domains.

This class lets students design and code Python programs to extract and handle data.

Mode de contrôle des connaissances :

- Mid-term exam (40%)
- Online quizzes (10%)
- Final exam (50%)

Bibliographie, lectures recommandées :

- [David L. Ranum, Bradley N Miller, "Problem Solving with Algorithms and Data Structures Using Python"](https://runestone.academy/ns/books/published/pythonds/index.html) (<https://runestone.academy/ns/books/published/pythonds/index.html>)
- <https://www.w3schools.com/python/>

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