

Python

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Syllabus

- Part I.** — *Getting Started* (intro, IDEs, running programs)
- Part II.** — *Types and Operations* (objects, types, dynamic typing)
- Part III.** — *Statements and Syntax* (statements, assignments, expressions, comprehensions)
- Part IV.** — *Functions and Generators* (basics, scopes, arguments, advanced topics)
- Part V.** — *Modules and Packages* (basics and advanced topics)
- Part VI.** — *Classes and OOP* (basics, details, operator overloading, design, advanced topics)
- Part VII.** — *Exceptions and Tools* (basics, details, exception objects, design)
- Part VIII.** — *Advanced Topics* (Unicode and byte strings, managed attributes)
- Part IX.** — *Advanced Topics* (decorators)
- Part X.** — *Advanced Topics* (metaclasses)
- Part XI.** — *Design patterns*
- Part XII.** — *A topic proposed by the audience* (e.g. concurrent programming, GUI)

Time: 16:00-19:00 (**Fridays**, start: **7.03.2025**)

Place: Sala D, Institute of Physics of the Polish Academy of Sciences

Book: Big part of the lecture will be based on the book “Learning Python” 5ed by Mark Lutz

Software: Cpython, Jupyter Notebook

Language: English

Registration for the course: By email to panos@ifpan.edu.pl, please, provide name, surname, year of studies, and name of your institution upon registration)