

# Learning Python

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## **Fall Semester [12 x (2-hour lectures + 1 hour tutorial)]**

**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)

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**Time: 16:00 – 19:00 (Fridays, start: March 3, 2023)**

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

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

**Language:** English

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