

Thilo Leitzbach, M.Sc. | Chair of Derivatives and Financial Engineering

Introduction to Python



Faculty of Economics and Business Administration

Winter Semester 25/26

Contact: thilo.leitzbach@gmail.com

Agenda | 2h Session



- 1. Prior Experience & Expectations
- 2. Your Coding Environment
- 3. Basic Python Concepts
- 5. Hands-On Session
- 6. Coding Quiz

If time permits:

- 5. Code Versioning, Open Source, and Scientific Programming
- 6. Outlook Code Generation and Al

Your Experience and Expectations



Join at slido.com #2986 160 Passcode:

CAPM



What are my objectives for this Session?



1. Reduce or eliminate any potential anxiety you might have regarding Programming.

2. Introduce you to many basic Python building blocks in a short time.

3. Make you write your (first) own lines.

4. Show you why that is useful and exciting.

Why Python?



1st / most popular programming language for beginners learning to code*

- The "go-to" programming language for Data
 Science and Al development
- Easy to learn
- Cross-Platform (linux, windows, mac) and Open Source
- Large community and library ecosystem
- Some of your favorite applications' backends are built with it









21. Oktober 2025

Your Coding Environment



Basic requirements for using or learning any language:

Writing code

+

running code

IDE + Language Distribution + Hardware







IDE Comparison | Python for Data Science







Start basic, but do start!

1. Copy the notebook "python_for_finance_intro.ipynb" from https://github.com/TLeitzbach/py_intro
2. and upload to https://colab.research.google.com/



Open Source, Code Versioning, and Scientific Programming





Quantitative Finance Exchange







- Enhancements: Pull-Request #18977 for SciPy
- Bugs: Pull-Request #19025 for SciPy
- Co-authoring SciPy Release 1.12

Example of a small open source, scientific programming contribution in Python using git and Github.

21. Oktober 2025



Questions?



Sources



Images

1. Python logo, courtesy of https://www.python.org/community/logos/