

Getting Started with Python

author: Thomas Haslwanter

date: 2026-08-18

Download the Following Materials

- [WinPython](#) (Mac users: [Anaconda](#))
- Get [Notepad++](#)
- Get [git](#)
- From the FH-library (you must be logged in!), get the book [Hands-on Signal Analysis with Python “SaPy”](#)
- Personally, I also really like [Directory Opus](#). But it is commercial, and slightly more expensive. Give it a try - you may like it too.

On Your Computer

- Make sure you have a program to zip and unzip data installed (e.g. **7zip**).
- Clean up your *Windows Desktop*: You should not have more than seven icons on it. And don't just pull files onto the Desktop, always save them into folders!
- Turn on *Windows File Explorer* | *View* -> *Show* -> *File Name Extensions*.
- Make sure you have a clear file-structure on your computer:
 - Know your home-directory! (in the **powershell**, you can get there with `~`; in the **command window** you see it when you type `%USERPROFILE%`)
 - Either from there, or from the **Documents** directory, make a sub-directory **FH**, and there a separate folder for each lecture.
- Go to https://work.thaslwanter.at/py_intro , Chapter *Installation* , and install a Python Distribution(e.g. WinPython) on your computer.
- Try to work through that chapter as far as possible. Note that there is a video at the bottom to help you.

Personalize your computer

The following steps are for Windows users. For Mac, check out the instructions in *SaPy*, chapters 2.1.2. (Installation of Python) and 2.3.3. (Personalizing IPython/Jupyter)

- Set Environment path so that Python gets detected (The following assumes you have installed WinPython in the folder `C:\Programs!`)
 - in `Alt+Win` | `Edit environment variables for YOUR account` | `Path` | `Edit` | `New` | `C:\Programs\WPy64-31450\python\Scripts` | `OK` | `OK`
 - the same, with `C:\Programs\WPy64-31450\python`
- Add `~\ipy.nb.bat` to your home directory `jupyter lab %1`
- Add `~\ipy.bat` `cd [here you have to enter the directory you want to work in]`
`jupyter qtconsole`

The Terminal

- Try out *Windows Command Prompt* (`cmd`) or *Terminal* (`pwsh` or `terminal`). Know what `*` means (Wildcard: “any file/folder containing”).
- You may also want to check out [powershell-tips](#) or [cmd-tips](#).

Recommended Resources

- Get the Python package FreeSimpleGUI: `pip install FreeSimpleGUI` (in the terminal)
- Get [PyCharm](#) + [Jetbrains StudentPack](#)
- Get [GitHub Education](#)

Check your first Python Skills

- Is Python running on your computer?
- Where is the Python executable located?
- What is the difference between Python and IPython?
- How do you check if your program is running properly? (Answer: try to run it from the command line.)
- Do you know how to run an IPYNB-file?
- Do you know the most important keyboard shortcuts in JupyterLab?