

Steps to install python on your laptop



1. Check whether python is already installed
 - search for *Anaconda* in the installed programs
 - open the terminal app (Mac, Linux) or the Powershell (Windows)
 - type `$ python` in a command line window -> command not found message means it is likely not installed
2. Collect information about your operating system :
 - Windows, Mac OS, Linux ?
 - 32 bit vs. 64 bit operating system
3. Download the corresponding Installer for Python 3.9 from Anaconda (for Windows and Mac) :
 - <https://www.anaconda.com/distribution/>
 - chose the Graphical Installer
4. Launch the Installer on your laptop
 - **Important installation options** : (these options are only available in windows not for mac)
 - check installation for this user only : “Install for just me (recommended)”
 - check “add Anaconda to my PATH environment variable” (*important!*)
 - check “Register Anaconda as my default Python 3.x”

Complete installation with required packages

1. Launch *Anaconda Navigator*

- go to the environments tab : you can see all installed python packages in the 'base' environment there
- verify that all required packages are installed (ipython, numpy, scipy, jupyter-notebook, matplotlib, pandas, scikit-learn, xlrd)
- install **biopython** (and any other package above which is not already installed) as it is not part of the default installation; you can either do this in the Anaconda Navigator or in the command line
 - > Anaconda Navigator : go to 'base' environment and chose 'Not installed' packages, search for *biopython* and install
 - > Command line : launch the 'Anaconda prompt' and execute `$ conda install -c anaconda biopython` (don't worry about warnings and intermittent error messages, unless the code finishes with an error message)

2. Add Brian2 by typing the following command in the 'Anaconda prompt' :

```
$ conda install -c conda-forge brian2
```

Test python on your laptop



1. Execute `$ ipython` in the 'Anaconda prompt' or the 'Terminal' (on mac)

- try to import the packages required for the course

```
In[1] : import numpy, scipy, matplotlib, pandas, Bio, sklearn, brian2, xlrd
```

(the import should end without error message)

2. Execute `$ jupyter-notebook` in the 'Anaconda prompt' or the 'Terminal' (on mac)

- the jupyter server should start and a window should open in your browser
- you can select and launch the course tutorial or homework assignment (which have to be files with the `[name_of_file].ipynb` ending) here

3. Chose 'New' -> 'Python 3' to start a new notebook

- try again if all the above packages can be loaded with

```
In[1] : import numpy, scipy, matplotlib, pandas, Bio, sklearn, brian2, xlrd
```