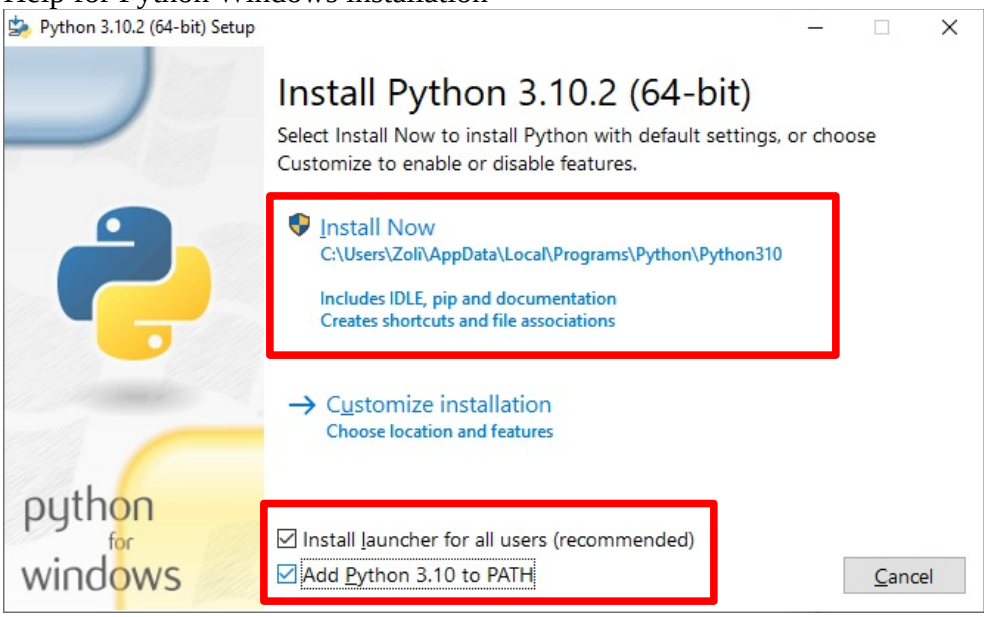
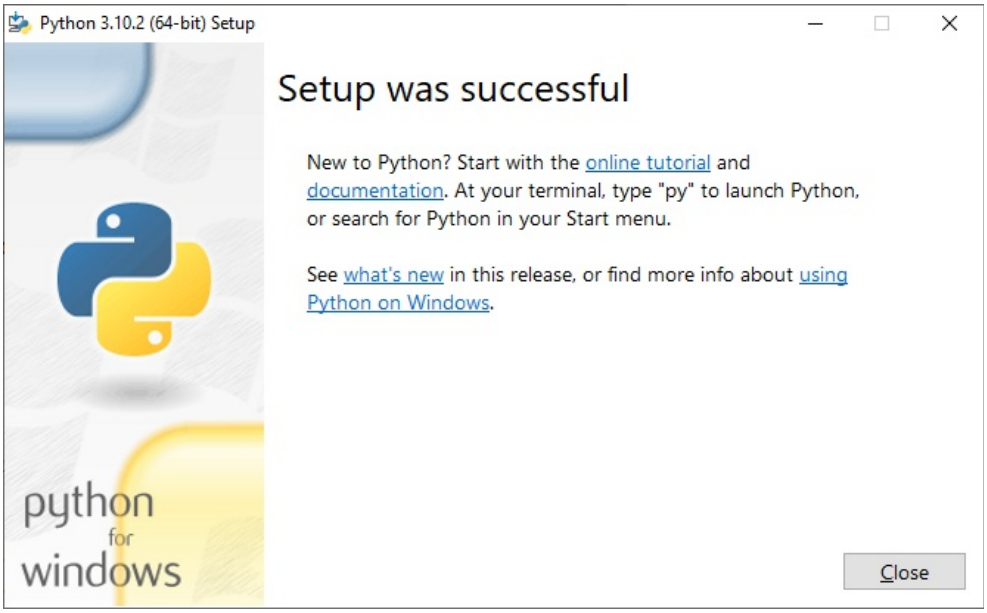
Software used during the semester

- Python 3 (http://www.python.org/downloads/windows) 3.9 version or later
- RTKLIB Demo 5/rtkexplorer (https://github.com/rtklibexplorer/RTKLIB/releases) latest version
- CloudCompare (http://www.danielgm.net/cc/release/) 2.11+, stable version

Each software is free and open source and available for Windows, Linux and macOS. Please download and install them on your machine. You can use your laptop during the classes or the limited number of computers in our lab.

Help for Python Windows installation





Disable MAX_PATH limit in the second window if you are asked.

Open a command window (CMD.EXE) and type “py”, the Python interpreter should start.
To install Python packages use “pip” command at the command prompt (e.g. pip install numpy).

External Python packages used during the semester (you have to install them using pip):

- numpy
- pandas
- matplotlib
- ezdxf
- opencv-python
- opencv-contrib-python
- wget
- scipy

To install the packages on Windows

1. Search for cmd.exe (beside the magnifying glass in the status line)
2. In the opening command windows type in the folleong line
   ```
   pip install numpy pandas matplotlib ezdxf opencv-python opencv-contrib-python wget scipy
   ```
   It will take some minutes, depending on the internet bandwidth.
3. To test the installation start Python
   ```
   python
   ```
4. At the Python prompt (>>>) import one of the installed packages
   ```
   >>>import numpy
   >>> import cv2 # it imports opencv package
   ```