# Setting Up Visual Studio Code for Computer Vision Practicals

# Instructer : Jaweria Panhwar

## ✅ 1. Install Python

Go to the official Python website: <https://www.python.org/downloads/>

Download the latest version for Windows.

**IMPORTANT:** During installation, check the box that says **“Add Python to PATH”**, then click **Install Now**.

## ✅ 2. Install Visual Studio Code

Download VS Code from: <https://code.visualstudio.com/>

Run the installer.

During installation, check:

“Add to PATH”

“Register Code as an editor for supported file types”

## ✅ 3. Install VS Code Extensions

1.Open VS Code.

2.Go to the Extensions tab (or press Ctrl+Shift+X).

3.Search for and install:**Python** (by Microsoft) **Jupyter** (by Microsoft)

## ✅ 4. Verify Python Installation in VS Code

1.Open a terminal in VS Code:  
Terminal > New Terminal

2.Type the following and press Enter:

python --version

pip --version

You should see the installed versions printed.

## ✅ 5. Install Required Libraries

In the same VS Code terminal, run the following commands one by one:

pip install opencv-python

pip install numpy

pip install matplotlib

pip install notebook

## ✅ 6. Open and Run .ipynb Files

Open or create a .ipynb file in VS Code.

The Jupyter interface will appear at the top.

Use the **Run** button next to each cell, or press Shift + Enter to execute.

## ✅ 7. Sample OpenCV Test

Paste the following code into a cell and run it:

import cv2

print("OpenCV version:", cv2.\_\_version\_\_)

✅ If OpenCV is installed correctly, it will print the version number.

## 🚨 8. Troubleshooting Tips

If Python is not detected, restart VS Code.

Make sure the correct Python interpreter is selected:  
Ctrl+Shift+P > Python: Select Interpreter

Use pip install --upgrade pip if pip has issues.

If Jupyter cells don't run, try reinstalling the Jupyter extension or restarting VS Code.