

01 Prepare Your Development Environment

Each student in CSE 111 must install and use three pieces of free software which are:

- The Python Programming Language version 3.9
- Visual Studio Code (also known as VS Code)
- The Python extension in VS Code

If you recently completed CSE 110, it is possible that you already have all three pieces of software installed on your computer. Watch these three videos from Microsoft that explain a bit about Python, Visual Studio Code, and the Python extension in VS Code.

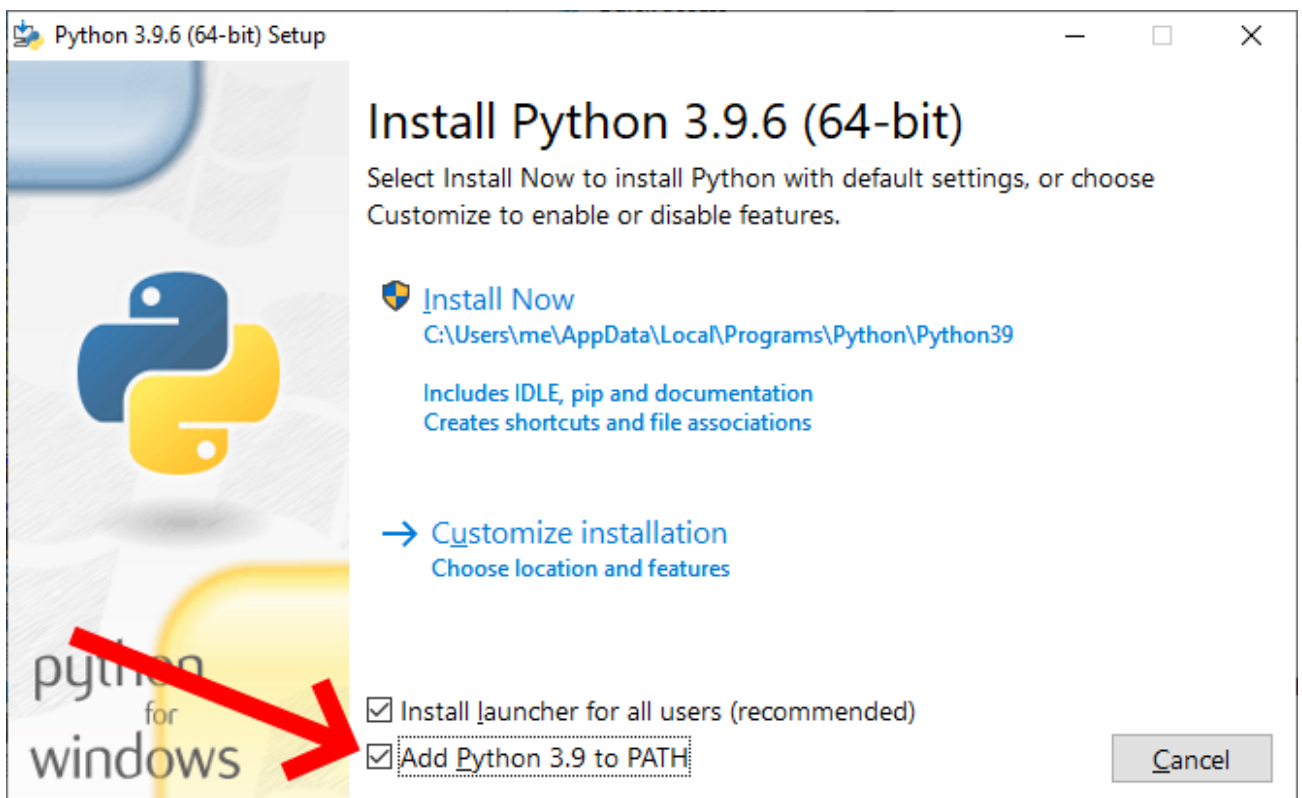
[Introducing Python](#) (3 minutes)

[Getting Started](#) (3 minutes)

[Configuring VS Code](#) (3 minutes)



If your computer doesn't have Python, VS Code, and the Python extension for VS Code already installed, follow these steps to install the software:

1. Download and install the latest stable version of Python 3.9. As of July 2021, the latest stable version of Python 3.9 is Python 3.9.6.
 - a. Open the Python [downloads page](#) in your browser.
 - b. Download and save the Python 3.9 installer for your operating system.
 - c. Start installing Python by double clicking the file that you downloaded.
 - d. On the first screen of the installer, be certain to check both boxes: "Install launcher..." and "Add Python 3.9 to PATH" as shown in this screen shot:



- e. Click the "Install Now" link and Python will be installed on your computer.

2. Download and install VS Code.

- a. Open the Visual Studio Code [download page](#) in your browser.
 - b. Download VS Code for your operating system.
 - c. Install VS Code.
 - d. Accept all the default settings.
3. Create a folder named cse111 on your computer where you will store all the programs that you write for CSE 111 and download and save this [sample Python file](#) into the folder that you created.
4. Install the Python extension in VS Code.
 - a. Run VS Code on your computer.
 - b. In VS Code, open the sample Python file that you downloaded.
 - c. In the lower right corner of VS Code, a small dialog will open that says, "The 'Python' extension is recommended for this file type."
 - d. Click the "Install" button in that dialog.
5. Execute the sample Python program.
 - a. Execute the sample Python file that you downloaded by clicking the run icon in the upper right corner of VS Code. The run icon is a green triangle ( or ).
 - b. The sample file should run without errors, and its output should be similar to this:

```
Hello! What is your name? Amelia
3
2
1
Welcome to CSE 111, Amelia!
```

Summary

To prepare your computer so that you can develop Python programs in CSE 111, you should have done the following:

1. Install the Python programming language version 3.9
2. Create a folder named cse111 where you will save your Python programs
3. Install an editor named Visual Studio Code
4. Install the Python extension inside VS Code
5. Download and run a sample Python program to ensure your computer is ready