POL42340 Programming for Social Scientists $installation\ instructions^*$

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1 Python

- 1. Go to the Python website: https://www.python.org/
- 2. Download the latest version of Python, or at least version 3.10.
- 3. Run the installer. Make sure to check the box that says "Add Python to PATH".
- 4. Verify the installation by opening a command prompt and typing python --version.

2 Visual Studio Code

- 1. Go to the Visual Studio Code website: https://code.visualstudio.com/
- 2. Download the latest version of Visual Studio Code.
- 3. Run the installer.
- 4. Open Visual Studio Code.

^{*}This document is based on the installation instructions for POL42560 AI and Large Language Models by Lorcan McLaren (17 January 2025) and written with heavy input from the Github Copilot.

5. Open a folder (File > Open Folder) where you will store all your Python files for this module.

2.1 Extensions

- 1. Press Ctrl+Shift+X / Cmd+Shift+X to open the Extensions view.
- 2. Search for the Python extension (by Microsoft).
- 3. Click on the install button.

2.2 Virtual environment

- 1. Open a terminal in Visual Studio Code.
- Type
 python -m venv venv
 to create a virtual environment.
- 3. Type
 .venv/Scripts/activate
 to activate the virtual environment.

2.3 Python interpreter

- 1. Open the command palette by pressing Ctrl + Shift + P / Cmd + Shift + P.
- 2. Type "Python: Select Interpreter".
- 3. Choose the Python interpreter that is located in the virtual environment (it should include .venv in the path).

2.4 Github Copilot

1. Go to the Github Copilot website: https://github.com/education and join GitHub Education.

- 2. You will be prompted to set up a GitHub account if you don't already have one, and you will be asked to provide proof of enrolment to access the Student Developer pack for free. Using your UCD student email address and uploading your "Certificate of Attendance" (you can download the document from UCD Connect) should grant you free access to GitHub Education (which includes access to GitHub Copilot).¹
- 3. In Visual Studio Code, install the Github Copilot extension.
 - Press Ctrl+Shift+X / Cmd+Shift+X to open the Extensions view.
 - Search for and install GitHub Copilot (by Github).
- 4. Once you open a new file in VS code and begin writing, you will be prompted to sign into your GitHub account.²

¹More information can be found at https://docs.github.com/en/education (Explore > About Github Education for Students).

²More detailed information can be found at https://code.visualstudio.com/docs/copilot/setup.