

EE-170L Computer Programming Lab

Laboratory Session 01

Installation of C++ on Microsoft Windows

February 18, 2025

1 Objective

The objective of this lab session is to install and setup C++ in Visual Studio Code (VS Code).

2 Download Visual Studio Code

- Download Visual Studio Code from [urlhttps://code.visualstudio.com/Download](https://code.visualstudio.com/Download)
- Click the “Download for Windows” button.
- Once the download is complete, run the Visual Studio Code installer and follow the on-screen instructions.

3 Downlaod MinGW Compiler

- Go to MinGW-64 website [urlhttps://sourceforge.net/projects/mingw/](https://sourceforge.net/projects/mingw/)
- Download the Mingw-w64 installer that corresponds to your system architecture (32-bit or 64-bit).
- Run the installer and follow the on-screen instructions.
- Once setup of mingw is completed open the downloaded application and install following packages inside it, apply the changes from the top down menu.
mingw32-gcc-g++
- click on "install" and then in drop down menu click on "Apply changes"

4 Open Visual Studio Code

5 Add the g++ path to the system environment variables

- Find and copy the path of G++ application file.
For example find the path like C:/MinGW/bin
- Open the Start menu and search for “Environment Variables” .
- Click on the “Environment Variables” button.
- In the “System Variables” section, scroll down and find the “Path” variable.
- Click on “Edit” .
- Click on “New” and add the path to the Mingw-w64 bin folder.
- Click “OK” on all the windows to close them.

6 Install the Code Runner extension for Visual Studio Code

- Open VS code
- In Visual Studio Code, click on the Extensions icon on the left-hand side of the screen (the one that looks like four squares).
- In the search bar, type “C++” and hit Enter.
- The first result should be the “C/C++” extension by Microsoft. Click on the “Install” button to install the extension.
- Wait for the installation to complete and then restart Visual Studio Code.

7 Install the Code Runner extension for Visual Studio Code

- In Visual Studio Code, click on the Extensions icon on the left-hand side of the screen (the one that looks like four squares).
- In the search bar, type “Code Runner” and hit Enter.
- The first result should be the “Code Runner” extension by Jun Han. Click on the “Install” button to install the extension.

- Wait for the installation to complete and then restart Visual Studio Code.

Note: For details see the following link
<https://gotechies.net/step-by-step-guide-how-to-set-up-c-and-visual-studio-code-on-windows/>

8 Youtube Links

You can also watch the following youtube links to get more help.

1. <https://www.youtube.com/watch?v=eb7JXsKJmmE>
2. <https://www.youtube.com/watch?v=Q0BRcxha9ig>
3. <https://www.youtube.com/watch?v=KYxLEDF6kjs>
4. https://www.youtube.com/watch?v=RJh__3ikZbs
5. <https://www.youtube.com/watch?v=jWN1Q9ZIytM>

9 Lab01: Lab Tasks

1. Make a group of three students.
2. Understand the instructions given in this sheet (You may also take help from tutorial in any of the given url links).
3. Complete the download, installation and other setup required to install C++ in VS code.
4. Finally, run a simple program to display your the students name in your group.