

How to install all software necessary for getting and building code for FIRST Sparx Team 1126 Robot.

**1. Download the WPILib 2019.1.1 Kickoff Release here:**

<https://github.com/wpilibsuite/allwpilib/releases>

(pick WPILibInstaller\_Windows32-2019.1.1.zip or WPILibInstaller\_Windows64-2019.1.1.zip)

**2. Open the ZIP file, extract to a temp folder, then run installer**

**3. Let it download and install VS Code**

*Note: you need to let this install a new copy of VS Code and configure it for this purpose even if you previously had VS Code installed*

**4. Download the 2019 FRC Update Suite here:**

[http://download.ni.com/support/softlib/first/frc/FileAttachments/FRCUpdateSuite\\_2019.0.0.zip](http://download.ni.com/support/softlib/first/frc/FileAttachments/FRCUpdateSuite_2019.0.0.zip)

**5. Install it with default options**

**6. Download and Install the command line GIT client from here:**

<https://git-scm.com/download/win>

**7. Download and Install the CTRE Phoenix Framework v5.12.0.1 from here:**

[http://www.ctr-electronics.com/hro.html#product\\_tabs\\_technical\\_resources](http://www.ctr-electronics.com/hro.html#product_tabs_technical_resources)

**8. Download and Install the National Instruments Robo RIO driver from here:**

<http://www.ni.com/download/first-robotics-software-2017/7904/en>

**9. Reboot the computer**

**10. Run VS Code from its “FRC VS Code 2019” icon**

**11. Connect VS Code to the Sparx GIT archive and “git” the code**

- a. Ctrl-Shift-P
- b. Type “Clone”
- c. Paste in the URL of the Sparx 1126 GIT archive:  
<https://github.com/Sparx-Robotics-1126/2019-Season>
- d. Click the “Fork” icon (along left side panel)
- e. Click on “3-dot” menu button and select “Pull”
- f. Click the “W” Circle icon
- g. Select command: “Build Robot Code” (upper right corner)

**12. Make sure the build completes with no errors**

**Additional Tests:**

Open file Robot.java

add class variables:

```
WPI_TalonSRX foo;
```

```
AHRS bar;
```

Try to compile with these. If it compiles, it proves the NI and CTRE drivers got installed successfully.