In this course, you will work on a team with some of your classmates to utilize a microchip board (TI Kits) to solve several problems throughout the course with the option of utilizing this technology to solve your team’s design project at the end of the course.

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| **Step 1** | **Identify the TI Version**   1. There are two TI Kit or Launchpad versions being utilized in this course, the MSP-430 and the MSP-432. It is important to identify which you have as they have different driver/software requirements. Please look at your TI Kit board to identify which version your team has as shown in the picture below. |
| **Step 2** | **Download and Install the Launchpad Drivers**   1. Download any necessary drivers.    1. If you are using a MSP-430, please download the appropriate drivers       1. If you are using a Linux Computer:          1. Please download the [TI udev rules](https://s3.amazonaws.com/energiaUS/files/71-ti-permissions.rules) here. This is required to run the Energia IDE not as root.          2. Execute the following command: sudo mv /71-ti-permissions.rules /etc/udev/rules.d/          3. No drivers required for installation.       2. If you are using a Mac Computer:          1. Please download the drivers [here.](http://s3.amazonaws.com/energiaUS/files/MSP430LPCDC-1.0.3b-Signed.zip)       3. If you are using a Windows computer:          1. Please download the drivers [here](http://s3.amazonaws.com/energiaUS/files/energia_drivers.zip).             1. These drivers are not signed and may require you to disable the signed driver feature in windows. Please click [here](https://learn.sparkfun.com/tutorials/disabling-driver-signature-on-windows-8) for a guide on how to do so.    2. If you are using a MSP-432, please download the appropriate drivers       1. If you are using a Linux Computer:          1. Please download the [TI udev rules](https://s3.amazonaws.com/energiaUS/files/71-ti-permissions.rules) here. This is required to run the Energia IDE not as root.          2. Execute the following command: sudo mv /71-ti-permissions.rules /etc/udev/rules.d/          3. No drivers required for installation.       2. If you are using a Mac Computer:          1. No drivers required for installation.       3. If you are using a Windows computer:          1. Please download the drivers [here](http://s3.amazonaws.com/energiaUS/files/energia_drivers.zip).             1. These drivers are not signed and may require you to disable the signed driver feature in windows. Please click [here](https://learn.sparkfun.com/tutorials/disabling-driver-signature-on-windows-8) for a guide on how to do so. 2. Run the installer    1. On a Windows computer.       1. Select Next      * + 1. Select Finish |
| **Step 3** | **Download and Install Energia IDE**   1. On a Linux computer    1. Download the Energia IDE software [here.](https://energia.nu/downloads/downloadv4.php?file=energia-1.8.10E23-linux64.tar.xz) 2. On a Mac computer    1. Download the Energia IDE software [here.](https://energia.nu/downloads/downloadv4.php?file=energia-1.8.10E23-macosx-signed.zip)    2. Select the download in your downloads folder, where you will be prompted if you wish to open it.        1. On a Windows computer.    1. Download the Energia IDE software [here](https://energia.nu/downloads/downloadv4.php?file=energia-1.8.10E23-windows.zip).    2. Extract the files from the zip folder.      * 1. Once the files are extracted, navigate to that folder and open it. |
| **Step 4** | **Setting Up Energia**   1. Board Manager Set Up    1. After having identified which TI Kit your team is using, you now need to set Energia to communicate with this type of board. Go to Tools/Boards and select the appropriate board from the Board Manager.   Graphical user interface, application, Word  Description automatically generated   1. COM Port Set Up    1. The COM Port set up is just below the Boards Manager under the tools tab: Tools/Port as shown below:   Graphical user interface, application, PowerPoint  Description automatically generated   * 1. Typically, the correct COM port to use with a TI Board is the Port with the largest number. This is not always the case and if communication between Energia IDE and your TI Kit fails, the first thing to try is a different COM port. |
| **Troubleshooting** | **Common Issues and Fixes**   1. Communication error between Energia IDE and your TI Kit.    1. Make sure that your TI Kit is plugged in correctly using the provided Micro USB to USB A cable. There should be a green power LED lit up when this occurs.    2. The COM port selected in Energia is not the correct port. While it is generally the highest port number available. This is not always the case. All COM Ports should be tried if there are communication issues.    3. Ensure all drivers have been installed. For instructions on how to install, please see Step 2.    4. Restart Energia IDE    5. Restart your computer (Should not be required, but can help depending on your computer’s settings) 2. For more troubleshooting, please see the Energia Troubleshooting documentation located in the help section of the Energia IDE application as shown below: |
| **References** | [Energia IDE Documentation](https://energia.nu/guide/) |