

In this assignment, you will be assembling predefined circuits with varying levels of complexity. With options such as: (Flashlight, Measuring Tape, 5V Stepper Control, and 17 Stepper Control). The code required will be provided so all you will need to do is plug and screw all the components together.

Final Deliverables

Complete ONE Sensor Circuit & One Motor Circuit

## A2- Circuit Prep

What you'll need

Arduino IDE

<https://www.arduino.cc/en/software>

This is the software that allows you to edit and compile the code needed to run your circuit. Within this software are libraries that can be downloaded and imported to increase the capabilities of the software.

Examples of libraries are Grove Sensors. On their website ([https://wiki.seeedstudio.com/Grove\\_System/](https://wiki.seeedstudio.com/Grove_System/)) they have an example code available to test all of the sensors we have in the lab. Typically they will also provide a downloadable .zip file that can be imported into the IDE to open examples rather than copying them.

Lastly when using the Variable Power supply be very careful not to touch the bare metal clips as these will be outputting the voltage set by you. Please ensure that the rubber sleeves are on the clips before powering on the supply. When you have the voltage set and are ready to power your circuit, simply hit the Output button to start your circuit.

(Proceed to M5A2 a or b)

