

## Milestone One Communication and Debugging Software

The purpose of this lab is to get the communication and debugging software going on your computer and the microcontroller. The purpose of this software is to make measurements that will help you characterize your model, to get your results for plotting and to be able to debug your control system better. I am recommending you use [software recommended](#) by a friend, but you can use other software if you like. You and your teammate need to have decided which project you wish to do. I have four hover copters, and ten buck converters. There are 17 students. Hopefully this will be enough.

The kicad design files for the hover copter are available [here on github](#).

The kicad design files for the arduino buck converter control are [here on github](#).

Specifically for this milestone you need to:

- Read about the projects and pick one.
- Read about the recommended software.
- Make and document a short bring up plan for the software. You need to figure out how you are going to load it, and how you are going to test it to make sure it is working.
- Follow your bring up plan.
- Document things you will need to remember when you go to use this software if the docs already available are not already sufficient.
- Write a memo to turn in on D2L summarizing your progress.
- Turn in your bring up plan for the software, and your memo by April 16 at 6 p.m.

Below is a brief rubric to help you with this milestone:

	<b>Exceeds</b>	<b>Sufficient</b>	<b>Insufficient</b>
Bring up plan	Plan is sufficient, but has some features beyond that which will be useful.	The plan will work for all measurements that will be needed.	The plan will not work or does not include all measurements that will be needed.
Progress memo	Software is loaded and working with features added (for example with the hover copter, you will need software to read a shaft angle encoder).	Software is loaded and working.	Software not loaded or not working properly or untested.