



# **E11: Autonomous Vehicles**

## **Fall 2014**

### **Lab 0: Shop Orientation**

In this lab, you will receive a briefing on the machine shop and complete the safety training. In Lab 3, you will use the mill and sheet metal tools in the machine shop to build some sensor mounts.

Bring your laptop to this lab session.

#### **Shop Orientation**

This hour-long orientation presented by the shop proctors will include

- Safety highlights
- Hands-on instruction with the machines
- Tour of the 3 machine shops (wood, main, sheet metal)
- Brief discussion of what the students will be doing in their lab, and Q&A

#### **Safety Manual and Test**

Read the shop safety manual at the link below. Although E11 will focus on a few machines, you will need to be familiar with all of the equipment for the safety test.

<http://hmc-machine-shop.wikidot.com/general-safety>

Once you have read the manual, take the shop safety test online at the same link. A score of at least 60/64 is required to pass the test. You may review the safety manual or ask questions of the teaching team, then retake the test if you do not pass the first time. Be sure to pass the test before leaving the lab section.

#### **Install Arduino Software**

Download the Arduino software on your computer (PC or Mac recommended; the software indicates that Linux also works, but we have not tested it in E11).

<http://arduino.cc/en/main/software>

Connect to the instructor's Mudduino board and verify that you can download and run a program.