

**Virginia Polytechnic Institute and State University  
Department of Electrical and Computer Engineering**

**LABORATORY SAFETY AND EQUIPMENT USE PROCEDURES**

**Violations of these procedures will result in access being denied except during regularly scheduled lab sessions.**

1. For safety reasons, undergraduate students are never permitted to work unsupervised in any laboratory when utilizing above 25 V.
2. Students may work in the ECE teaching labs (Electronics, Radio, Measurement, etc.) at times other than the regularly scheduled lab period (s) under the following conditions:
  - a. Please observe the lab schedule posted on the door as not interfere with other schedule labs. See Technical Support (room 234) personal for access.
  - b. The students must have permission from their lab instructor in advance, to use the lab. The power lab requires that the instructor be present.
  - c. They may use the lab between the hours of 8:00 AM and 4:00 PM unless their instructor is with them. The student must come in early enough to complete the project by the 4pm close.
  - d. Never leave a lab unattended with the door blocked open. Technical Support personnel will be happy to let you back into the lab as many times as necessary
3. Do not remove equipment from one bench to another. If you have an instrument that is or seems to be defective, notify your instructor at once; please red-tag defective equipment and briefly describe the problem. The lab instructor should notify personnel in the Technical Support (room 234) and they will immediately replace any defective instrument.
4. Never switch plug-in modules. These are internally back-wired and inputs/outputs can easily be shorted. Several of the plug-ins are key and slot configured to prevent them from being plugged into the wrong bay. Attempting to force them into position can severely damage connectors or P.C. boards. Please contact someone in the Technical Support if you have an equipment problem. We will try to resolve it immediately.
5. Do not write on equipment or lab benches. If needed, blank removable stick-on labels will be provided for you to label circuit components. Please ask.

6. If you blow a fuse or find one already blown, it must be replaced with the correct value and physical size. Each fuse holder is labeled with the correct fuse size in amperage. All fuses are available at the Technical Support. Please bring the blown-out fuse with you.
7. If you have a defective component (transistor, diode, IC, etc.), you can exchange it for a good one at the Technical Support.
8. If your shoes are muddy, wipe them off on the mats provided at all outside doors, not on the lab stools. Do not place textbooks or other articles on electronic equipment.
9. Do not remove any equipment or software from a laboratory without securing prior approval of the Technical Support and the professor in charge of that lab.
10. Labs will be checked at 4:00 PM each day. The only students allowed in labs after 4:00 PM are those in regularly scheduled labs or those accompanied by an instructor, who must remain with the student(s).
11. At the end of each lab session:
  - a. return equipment, components, connectors, and software with manuals to their proper location.
  - b. turn off all equipment and bench power.
  - c. turn off all battery-operated equipment.
  - d. leave the lab with a clean, orderly, professional appearance.
12. Become familiar with the operation of the lab equipment to be used by reading the appropriate sections of the equipment manuals provided at each bench.
13. Never use soldering irons or guns without protecting work bench tops. A piece of masonite will be provided by the Technical Support for you to use on workbench tops.
14. Technical Support personnel will attempt to help you in any way they can. Please help them by keeping the labs neat and orderly.
15. Never loan a laboratory key to anyone or divulge the keypad code.
16. Do not eat or drink in the labs.
17. Use the lab telephone for emergency calls only.
18. If you need printer paper please go to Technical Support.