

Computer Engineering Senior Design Laboratory

Policies and Guidelines

Lab Manager

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Lab Overview

The Computer Engineering Senior Design Laboratory (henceforth known as the *CpE Lab*), located in NSB 215, is a shared space for the design, assembly, and testing of cyber physical projects by students at the University of Florida. For the safety and enjoyment of all students, this document outlines the lab's capabilities and operating policies. In order to gain access to the lab, students must read this document and pass a quiz to demonstrate their understanding of the safe and respectful use of the space and equipment.

General Lab Policies

Treat the lab area with respect so that students can enjoy the space for years to come.

- No food or drink is allowed in the lab, with the exception of well-sealed water bottles. If you need to eat, please leave the lab to do so.
- Keep your space clean and ready for other students after you leave. For exceptions (such as leaving a test setup in place for multiple days), talk to the Lab Manager.
- Treat others with kindness and respect. Speak quietly. Do not play music out loud.

The CpE Lab contains equipment for electronics testing and assembly and software development. Students are expected to supply their own consumables (solder, flux, parts and components, etc). Additional materials for student use are available for loan; contact the lab manager for more information.

There are 12 workstations in the lab's main area, each with the following equipment:

- Rigol DSO2302A Oscilloscope
- Rigol DP832a Power Supply
- Rigol DM3068 Benchtop Multimeter
- Rigol DG1032 Function Generator
- Asus 27" 4k monitor with DisplayPort and HDMI connectors
- USB Type A Keyboard & Mouse

Test Equipment Usage Policies

Please treat all the equipment with respect. This includes:

- Gently handle all probes, knobs, and connectors. Never force anything to fit.
- Clean up after yourself. Return all cables and parts back to their original locations.
- If you have any questions about how to safely or properly use a piece of equipment, ask the TA or Lab Manager on duty.

In addition to the test equipment listed above, the lab contains equipment for soldering and inspection of small scale electronics. This includes:

- Multiple hand-help soldering irons
- A reflow oven for SMT soldering
- A hot-air rework station
- A microscope for inspection of printed circuit boards

Soldering Equipment Usage Policies

- Be careful! All soldering equipment gets very hot and can easily burn you if handled improperly (i.e. touched).
- Only use soldering equipment in a designated area. Soldering fumes are toxic, and should only be used in the soldering room or at a station with a fume hood.
- Be gentle. The microscope is a sensitive instrument. Please do not touch any of the glass components with your skin, and be careful when adjusting the instrument.
- Ask for help. If you are not familiar with how to use an instrument, talk to the Lab Manager, who will be happy to assist you.
- When using a hand-held iron, always keep the tip clean. This includes having a damp sponge available to wipe the tip between uses.
- Turn off the equipment when you are done using it. An iron left on for an extended time will quickly destroy the tip.

The CpE Lab houses a *Microcomputer Museum*, showcasing some of the revolutionary and influential computing platforms of the last few decades. Please enjoy the museum without touching or moving any of the platforms.