Program Wide Resources

- ITLP Workshops and Resources Scheduling
- Recommended Distributors and Products

ITLP Workshops and Resources Scheduling

Faculty Resources Directory

Suggested Week for GEEN 1400	Level	Workshop Name & Description	Equipment Needed	Individual Workshop Scheduling Links (for students)	Class Workshop Scheduling Links (for instructors)
Required Workshops					
If you are an instructor for GEEN1400, your required workshops will be scheduled for you.					
45 min Week 1-2		**ITLL Tour Laboratory & Staff Tour**	BuffOne Card	In-Person Sign-Up (After-Hours Only)	Non-GEEN1400 Class Sign-Up
1hr 50min Week 2-3		**CAD - Level 1 Sketches & Parts**	Laptop w/Wifi Optical Mouse	In-Person Sign-Up (After-Hours Only)	Non-GEEN1400 Class Sign-Up
1hr 50min Weeks 2-4		**Manufacturing Center - Level 1** **Safety Orientation & Saws & Drills**	Closed-Toe Shoes	In-Person Sign-Up	←Individual Workshops Only
1hr 50min Week 2-5		**Electronics - Level 1 Simple Circuits & Measurements**	---	In-Person Sign-Up (After-Hours Only)	Non-GEEN1400 Class Sign-Up
1hr 50min Week 4-6		**Arduino - Level 1 Wiring & Coding Inputs & Outputs**	---	In-Person Sign-Up (After-Hours Only)	Non-GEEN1400 Class Sign-Up

Recommended Workshops

1hr 50min Weeks 3+		**Prototyping - Level 1 Operating the Laser Machines**	---	In-Person Sign-Up (After-Hours Only)	←Individual Workshops Only
60 min Weeks 3+		**Prototyping - Level 1 Operating the 3D Printers**	---	In-Person Sign-Up (After-Hours Only)	←Individual Workshops Only
1hr 50 min Week 3+		**Electronics - Level 1 Using Soldering Irons**	---	In-Person Sign-Up (After-Hours Only)	Class Sign-Up
1hr 50min Week 5+		**Arduino - Level 2 Controlling Speed & Position w/Motors**	---	In-Person Sign-Up (After-Hours Only)	Class Sign-Up
1hr 50min Week 5+		**CAD - Level 2 Assemblies & DFM**	Laptop w/Wifi Optical Mouse	In-Person Sign-Up (After-Hours Only)	Class Sign-Up
1hr 50min Week 6+		**ECAD – Level 1** **PCB Design Basics using Altium D esigner**	Laptop w/Wifi, Altium Designer Student Account, Optical Mouse	In-Person Sign-Up (After-Hours Only)	Class Sign-Up

1hr 50 min Week 6+	**Arduino – Level 3 Communication Between Arduinos, Phones, & More** **Arduino – Level 3 Migrating Projects to Smaller Microcontrollers (Miniaturization)**	Arduino 1 & 2 are required to take these workshops	Communications In-Person Sign-Up (After-Hours Only) Miniaturization In-Person Sign-Up (After-Hours Only)	Class Sign-Up

Brief “One-On-One” consultations can be scheduled with each of us using our personal links or scheduled by content area. We are always happy to help on a drop-in basis as well!

Recommended Distributors and Products

Looking to purchase project supplies? Here are a few of our favorite stores and some pro-tips.

Electronics

Want to get some supplies that aren't available in the ITL Program?

- Preferred Electronics Stores/Distributors
  - Sparkfun - online, but local! started by a CU alum, sko buffs.
  - Adafruit - online
  - Digikey - online, 2 day shipping standard
  - Wanna go to a brick and mortar store? Have a car or enjoy public transit? Check out Denver Micro Center
- Buying electronics on Amazon? Try to find the exact same product from another distributor, then take advantage of shipping by getting it from Amazon if you can.

Generally looking for a microcontroller?

- Need an ESP32 dev board? We recommend Arduino-brand, espressif systems brand, Sparkfun and Adafruit.
  - What if I wanted to get it off Amazon? Elegoo
- Need an Arduino?
  - With LOTS of pins? Arduino Mega 2560
  - Like the Uno but Small? Arduino Nano
  - Off Brand to save funding?
    - Elegoo Uno
    - Elegoo Nano
    - Elegoo Mega

Prototyping

- Need Acrylic to laser machine? No larger than 24" x 36", no thicker than 1/4"
  - Home Depot (Boulder)
  - McGuckin Hardware (Boulder)
  - Colorado Plastic Products (Louisville)
- Need Wood to laser machine? No larger than 24" x 36", no thicker than 1/8"
  - Home Depot (Boulder)
  - McGuckin Hardware (Boulder)

Manufacturing

- Need Wood to cut in the manufacturing center? No larger than x by x, no thicker than x"
  - Home Depot (Boulder)
  - McGuckin Hardware (Boulder)