ECE Design Resources

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Hudson 05C

ECE Stockroom - Hudson 02D

ecelab.pratt.duke.edu/inventory

- Carries common circuit components, microprocessors, motors, and sensors.
- Materials in the stockroom are available to students for projects in Duke's teaching laboratories and independent studies.
- Stockroom inventory is made available to students on ECE labs website.
- The stockroom also has basic equipment (Oscilloscopes, power supplies, and function generators) available for loan.
- There is a Stockroom TA available on Weekends
 - Sat: 10 am 12 pm
 - Sun: 4 pm 6 pm



Advanced Prototyping Lab - Hudson 05B

- Advanced Fabrication tools for student projects
 - PCB milling machine
 - PCB Printer
 - Solder Reflow Oven
 - Manual Pick and Place
 - Laser Cutter
- Manuals and specifications for equipment available on website.
- Contact Chris Bingham if you want to use Adv. Prototyping Lab equipment.



Design Lab - Hudson 06

- Space for electronics testing and soldering for projects
- 6 Workstations
- Shelves for storage
- Equipment
 - 7 Solder stations
 - Test Equipment: Scopes, DC power supplies, multimeter and waveform generator



Finishing Lab - Hudson 01A

- Lab space to help with final assembly
- Basic Hand Tools (Screwdrivers, hex keys, wrenches, etc...)
- Equipment
 - 5 3D printers
 - Test Equipment: Scopes, DC power supplies, multimeter and waveform generator



Design Work Space- Hudson 202A

- Open bench space for project work
- Shelves for storage
- Basic Hand Tools (Screwdrivers, hex keys, wrenches, etc...)
- Equipment
 - Test Equipment: Scopes, DC power supplies, multimeter and waveform generator

Soldering

- There is a YouTube playlist with a variety of video tutorials linked on the project spaces section of the ECE Labs web site
 - <u>https://ecelab.pratt.duke.edu/project_spaces</u>
- Videos range from quick introductions to longer discussions on technique
- If you have questions or issues please feel free to contact Chris Bingham

Ordering Parts for your Project

- There is a budget of \$50 per group for the projects
- The stockroom has a large selection of items from past projects. Most of the inventory can be searched online. Items from stockroom are not counted against the budget
- If the stockroom does not have what you need let Chris Bingham know (inperson or through email is fine) and he can order the parts you need.
- It is preferred that parts are ordered by Chris, however we will reimburse purchases made for projects. You will need to submit a receipt from the purchase to be reimbursed.
- Items paid for by the department need to be returned at the end of the semester.

Getting Help/Advice/Parts

- You are welcome to stop by my office anytime
 - I am available Mon. Fri. 8 am to 4pm (if you catch me before I leave, I will stay as late needed)
- You are not bothering me. I am just as happy to see you the fifth time you stop by as the first.

Accessing Design Labs

- Door codes for design labs can be obtained by filling out a quick safety acknowledgement form.
- https://duke.is/ECESafety



