

# Innovation Space General SOP

Welcome to the BME Innovation Space. Located in the Denny Research Centers (DRB), we house a collection of equipment for the fabrication and testing of biomedical devices and instrumentation. These facilities are made freely available to students in the BME department or the MEDesign club.

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## A. Hours of Operation

The Innovation Space is open Monday-Friday 8 AM to 5 PM.

Use of the machine shop beyond these hours is strictly prohibited, but use of other spaces may be granted with prior authorization and the presence of trained personnel.

User access doors should be open during regular hours. If they are not, please contact the shop manager (find contact info at the end of the document). All rooms will be locked after 5 PM.

Users who are granted after-hours access may sign the key out from the shop manager in DRB B8.

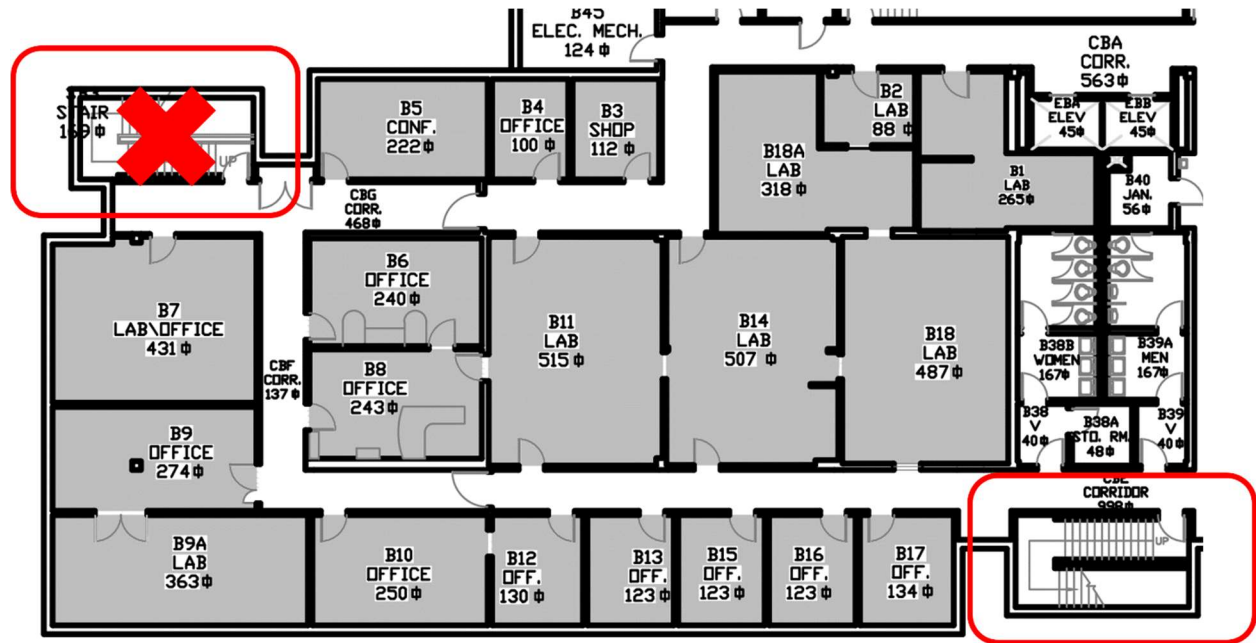
## B. Safety

To use this space, students must have the following:

- General Shop Safety Training
  - The course is available in TrojanLearn at the link:
    - <https://trojanlearn.csod.com/ui/lms-learning-details/app/course/3577cb60-8dde-4cde-a610-0bd1be30acfc>
    - The title is “General Shop Safety Training”
  - Certificate or transcript from TrojanLearn should be submitted to the shop manager
- Innovation Space orientation
  - Orientation will be held on the 2<sup>nd</sup> and 6<sup>th</sup> weeks of each semester. Sign up using the online form: <https://forms.gle/rnVucFgQ7AUHdnU19>
- Proper attire:
  - No loose-fitting clothing, hair, or accessories that can be caught in machinery
  - Long pants
  - Closed-toe shoes
  - Eye protection
    - Safety glasses are available in the Innovation Space
    - Prescription safety glasses may be purchased at Roski Eye Institute

Rules and emergency numbers are posted in each room. Note their location.

In case of an evacuation, use the stairs on the west side of the building. Currently, the northeast door is blocked by construction. Meeting place will be outside DRB



## C. Training

Each section of the Innovation Space has its own dedicated training: Machine Shop, 3D Printers, Laser Engraver, and Electronics. Training records are maintained by the shop manager ([Innovation Space Training Records](#)).

### 1. Machine Shop (room B7)

Hand tools may be used without extra training, but do not leave the room with them.

Additional training is required for these:

- Drill presses, band saws, lathe, miter saws, sanders, grinders
- Lathe
- Numerically controlled (NC) milling machine

### 2. 3D Printers & Laser Engraver (room B14)

Model-specific training is required to use any of these machines. Time on equipment here must be scheduled in the reservation system in advance (see below).

### 3. Electronics Workshop (room B18)

Electronics training covers soldering basics and use of the inventory system. Components may be used at no cost so long as the inventory is updated. Speak to a shop supervisor if additional materials are required.

For each specialized equipment, training will be assessed with a functional test. Users who pass will be designated as “qualified” and will then be allowed to make reservations on trained equipment only.

Additionally, qualified users who log extensive experience may be designated as “super users” for that equipment. They will be allowed after-hours access and may supervise other users on said equipment.

#### D. Reservations

Use the form located on the Innovation Space website to reserve time on a machine:

<https://forms.gle/6b1C8tE3w7HvY9JW9>

Time on any single machine is limited to 8 hours; longer times must be approved by a shop manager or supervisor.

Reservations must be cancelled 12 hours in advance. Failure to show up to a reservation or failure to cancel with sufficient notice will result in suspension or loss of privileges.

#### E. Using Consumables

Stock materials in the storage room (B4) or components in the electronics inventory are free for student use. Users should inform the shop manager or supervisor what material they are removing to update the inventory. To re-order materials, users can simply notify the relevant shop supervisor or the shop manager. For ordering materials new to the shop, users may email the shop manager with the material name, spec sheet, purpose, supplier, and cost.

## F. Contact Information

Shop Supervisor (mechanical): Ray Peck, rpeck@usc.edu

Shop Supervisor (electrical): Sam Kohan, samkohan@usc.edu

Shop Manager: James Yoo, PhD, james.yoo@usc.edu

Department of Public Safety (DPS): 213-740-4321

Professor of Design Courses: John Mai, PhD, johnmai@usc.edu

Director of Innovation Space: Jerry Loeb, PhD, gloeb@usc.edu

## G. Organization Chart

