Student Shop Training and Access Policy

March 2024

Access

Access to the student machine shop will be provided to anyone that has:

a) Completed the student shop training course while demonstrating safe use of machine tools, detailed in the next section

or

b) completed a "proof" project, available to those that come to the shop with significant prior machining experience

This access is granted through the Broida building door code system, and grants approved users access to the student machine shop during weekday hours determined by the shop. There must be a minimum of two people present when any machine tool is running. This second person is not required to be trained in the student shop, but must know the location of the emergency power shutoff buttons. Using machine tools without this second person is grounds for immediate suspension of machine shop access.

If in their judgment, the student shop supervisor feels that any user's conduct is unsafe or likely to cause equipment damage, the user will be asked to correct the problem. In the event of continuing, frequent, or severe problematic conduct, the user's access will be suspended.

The fee for access to the machine shop is $326 per user per year of access. This fee may change from year to year. This fee is assessed annually on October 1, and will be prorated for anyone who completes their training in a later month. If someone leaves the department part way through the year, no discount will be offered.

This fee will be placed into an account allocated only for use on the student shop, and will be used to keep the shop stocked with sharp tooling, fresh abrasives, cutting fluids, cleaning supplies, etc. Qualified experimental faculty will be granted access free of charge after completing a proof project or having some additional training if needed, and will be subject to the same restrictions vis-a-vis buddy system and access hours.

Training

New machine shop users with no prior shop experience must attend a training in the machine shop, overseen by the student machine shop manager. These trainings will be offered on a rolling basis, with the cost covered by the aforementioned access fee. This course will not be listed on GOLD, and is an informal course on safe and effective use of standard machine tooling. Upon completion of the course, students will have the skills to tackle many machine shop projects that might come up in their research, know enough about manufacturing processes to make informed design decisions, and importantly, will know when they need to seek help. If a student shows particular interest and aptitude, training on the Haas 3-axis CNC mill is also offered. These trainings would be open to anyone from any department, with priority given to physics department affiliates (every physics grad student wanting shop training would be accommodated before any grad student from another department).