

ME Shop Rules and Procedures

MISSION OF THE ME SHOP:

To act as an instructional and practical laboratory to support, in priority order, the following:

- 1) Scheduled class and laboratory sessions in the ME Shop;
- 2) ME undergraduate student work on ME Department sanctioned projects and activities;
- 3) ME Department instructional laboratory equipment;
- 4) Research activities of the ME faculty and graduate students

ME SHOP LOCATION:

The ME Shop is located in room B09, Engineering Building, in the basement level of B Wing (between the in-fills).

ME SHOP HOURS:

Supervised Shop Hours: 8am to 7pm Monday through Friday.

During these times, any student or faculty member may use the shop under the supervision of the ME Shop Supervisor and/or the ME Shop Assistants.

Unsupervised Shop Hours: 7pm to 9pm Monday through Friday
8am to 9pm Saturday and Sunday.

During these times, students who are Certified Shop Users may use the shop.

ME Faculty Member Supervised Shop Hours:

Hours: anytime outside the supervised shop hours.

During these times any students may use the shop in the presence of a ME Faculty Member.

SHOP USERS:

Certified Shop Users: Certified shop users are ME students who are certified to use the shop during the Unsupervised Shop Hours. A list of Certified Shop users will be kept, updated and posted (on the shop door and via email) by the ME Shop Supervisor.

To become a Certified Shop User, students must demonstrate adequate knowledge of proper and safe use of the equipment in the shop. The student must also declare formally that the student has read, fully understands, and agrees to comply with all ME Shop rules and procedures. A certification form is used for such certification, a copy of which is part of this document.

Two Person Rule:

During unsupervised shop hours, the "**two person**" rule is in place. This means that a Certified Shop User must be accompanied in the shop by at least one other person, not necessarily certified, to provide help in case of an accident.

Shop Safety is the responsibility of all Faculty and Student personnel involved in using the ME Shop. All involved are charged by the ME Department Faculty and Administration to enforce safe practice in the shop at all times. The Shop Safety Rules and Procedures are provided as part of this document. Every user of the Shop is expected to know, follow and enforce the complete published set of safety rules and procedures.

Keys and Security: The ME Shop has an ALL-OPEN Philosophy. This means that all cabinets and necessary power panels are open and unlocked at all times so that shop users can have easy access to the tools and facilities of the shop when they are using the shop. All ME Shop users present are responsible to see that the shop is properly cleaned up and that the entry doors are locked when no one is present.

Keys for Unsupervised Shop Hours and Professor Supervised Shop Hours:

Kathy Stencil at the Front desk of the ME Dept Office will operate a key sign-out system. Keys will be signed out only to Certified Student Users or ME Professors. Professors may request and receive permanently assigned ME Shop Keys.

Shop Users should plan ahead for their shop use. The shop is heavily used at times, but there is plenty of free time in the shop during supervised shop hours. The schedule of pre-planned shop use by class sessions and laboratory sessions is posted as an aid to planning and you are strongly encouraged to check with the Shop Supervisor as you plan ahead for your shop use.

ME Shop use by Non-ME students: The ME Shop may be used by non-ME students if a request is made to the ME Department Head and approval is received.

SHOP RULES

The most important rules in the shop are the safety rules. They are strictly enforced by the ME Shop Supervisor and the ME Shop Assistants, by the ME Faculty and Administration and by all users of the shop. They exist and are enforced for the safety of all involved.

Knowing, following and enforcing these rules is the responsibility of each person using the shop.

Safety Rules:

1. Eye protection must always be worn past the orange safety tape. The shop supplies goggles, sells safety glasses at cost. You may supply your own eye protection as long as the lenses are **clear** and **impact resistant**. Sun glasses will not be allowed as a substitute as safety glasses.
2. There will no opened toe or opened heel shoes worn past the safety tape at any time. This includes sandals, clogs, thongs, etc. If you do wear these type of shoes to school you will be asked to change them before being allowed in the work area of the shop.
3. Any long hair must be tied back to keep it from getting wrapped up in the machines.
4. No loose clothing should be worn in the shop work area. This includes baggy sweaters, loose shirt tails, and long sleeves. Sleeves will be required to rolled up above the elbow.
5. Absolutely no horse play in the shop. This includes running, yelling, throwing things etc. If you are running a machine and need to talk to someone shut the machine off and then talk. You need to keep your mind on the machine at all times.
6. Alcohol and illegal drug use before and during use of the shop will not be tolerated
7. During unsupervised shop hours, Certified Users are not responsible to supervise the work of uncertified students and are not allowed to supervise such students.
8. During unsupervised shop hours, the **"two person"** rule is in place. This means that a Certified Shop User **must be accompanied** in the shop by at least one other person, certified or uncertified, to provide help in case of an accident. The second person must not engage in shop work unless the second person is also certified.
9. Make every effort to avoid tool or machine breakage. However, tool or machine breakage is expected to occur from time to time. Any tool or machine breakage must be reported immediately by making an entry on the tool breakage list hanging on the wall in the ME Shop.

These rules are standard in most shop atmospheres. They must be observed at all times. At no time should safety be sacrificed in order to complete a project.

Machine Operation Safety Rules:

1. Machines are to be run by one person only. If you have more than one person changing things it is too easy for someone to get hurt. If there is more than one person at the machine everyone but the operator must remain a spectator.
2. Do not try to carry on a conversation while running the machines. It takes only an instant to lose your concentration and crash the machine or ruin your work piece.
3. Do not force anything on the machine. If it does not move freely, something is locked or broken. By forcing it you will make the problem worse. Stop and get the instructor or one of the work studies and they will help figure out what is wrong.
4. The machine must be set up like it was when you arrived. If you remove a vise from the mill it must be replaced and indicated before you leave. Likewise, if you change the chuck on the lathe the one you took off must be replaced, etc.
5. The machine must be free of chips and oil when you are done. You are responsible for cleaning up any mess you may make. If you are going to use more than one machine clean each machine as you are done using it. Example: cut material off on the saw, clean the saw. Then do some milling, clean the mill. This way everybody gets to use a clean machine.
6. Always leave at least 15 minutes for clean up. If you have class at 10:00 clean up no later than 9:45. You will always be required to clean up before leaving the shop.
7. Messes or set-ups cannot remain in the shop in the absence of the shop user, except in pre-approved circumstances. Such pre-approvals should not be considered routine and must be obtained from the Shop supervisor or a Shop Assistant.

The ME Shop and materials are here for ME Department sanctioned projects only. Personal projects will not be allowed in the shop.

The shop supervisor and the shop assistants are in the shop to assist you in learning how to use the equipment, help you design your project, enforce the rules, and to answer questions on the design and fabrication processes.

A few things to remember:

Try to know as much as possible about what you want to do before coming into the shop. This will help you to be able to convey your needs to the shop supervisor or assistants so you can obtain your desired results. Allow plenty of time to do your machining, it is a slow tedious process.

If you don't know, please ask!!

You can contact the ME Shop Supervisor by phone: 491-5140
by e-mail: walt @lamar.colostate.edu or by stopping by the shop during Supervised Hours.

ME SHOP STUDENT CERTIFICATION FORM

To become certified, a ME student must see that this form is executed and placed on file. The certification remains valid from the time it is first approved until the student graduates. The certification may be revoked without notice if the Certified User violates any of the shop safety rules and procedures or behaves in an irresponsible or unprofessional manner.

Once executed, this form along with the safety rules will be kept on file in the ME Department Office. Copies of this form will be provided by the ME Department Office to the student, and to the ME Shop Supervisor.

Student's Name: _____

Student's ID number: _____

Phone: _____

E Mail: _____

Emergency contact person

Name: _____

Address: _____

Phone: _____

Student Statement: By my signature below I certify that I have read all of the attached ME Shop Rules and Procedures, that I understand all of them and that I pledge to abide by all of them in a professional and responsible way. Further, I understand that my ME Shop certification may be revoked without notice if I violate the rules or procedures, or behave in an irresponsible or unprofessional way.

Signed: _____

Date: _____

Certification: The ME Shop Supervisor attests that the Student above named has sufficient expertise in the use of the shop machines and sufficient knowledge of and willingness to follow the shop safety rules to be certified to use the ME shop while unsupervised.

Signed: _____

Date: _____

ME Shop Supervisor

Certification: The sponsoring faculty member attests that the project(s) on which the student will work in the ME Shop is appropriate and that the ME faculty member has confidence in the student's integrity, professional attitude, and responsibility to work safely in the shop during unsupervised shop hours.

Signed: _____

Date: _____

Sponsoring ME Faculty Member

ME Shop Rules in bullet form. These are posted in and around the shop as a reminder of the safety rules. These are not to be construed as the complete set of all rules.

SHOP SAFETY RULES

1. WE ARE HERE TO HELP YOU, PLEASE ASK AND LEARN
2. EYE PROTECTION MUST BE WORN INSIDE THE ORANGE TAPE AREA
3. NO SANDALS, NO LOOSE CLOTHING, LONG HAIR MUST BE SECURED
4. CLEAN UP YOUR MESS, RETURN TOOLS, SUPPLIES AND MATERIALS
5. NO HORSEPLAY
6. PEOPLE UNDER THE INFLUENCE OF ALCOHOL OR ILLEGAL DRUGS WILL BE EJECTED
7. YOU MUST HAVE, KNOW AND FOLLOW THE COMPLETE RULES HANDOUT
8. HELP MAINTAIN A SAFE WORK PLACE FOR THE BENEFIT OF ALL