

# Laser Cutting Policies

Laser cutter-related policy violations have consequences. Some of these will incur fines, some will involve access suspension, and others will have both. The last date for Laser Cutter training for the Spring 2024 semester is 12 Apr 2024 .

## Access & Certification

To use the laser cutters, you must:

- be a member of the School of Architecture community *AND*
- purchase a [Digital Fabrication Subscription](#) for the semester *AND*
- be certified for laser cutter use\*

\*To become certified, you must:

1. [Email the Tech Desk](#) to request to be added to the Laser Cutter Certification course
  - a. Please check that you aren't already in the course before reaching out
2. Review all of the material in each module and **complete the quizzes with 100%**
  - You only have three attempts to receive a 100%
    - Email the Tech Desk to request an additional attempt if you require more than three
  - Take your time and read each question carefully
  - Incorrect answers will point you toward the page you still need to review
3. **Score a 100% on the "Laser Cutter Certification Exam"**
  - You only have three attempts to receive a 100%
    - Email the Tech Desk to request an additional attempt if you require more than three
  - Take your time and read each question carefully
4. **Only after scoring a 100% on all Quizzes and the Exam**, schedule a time for in-person training with a member of the Tech Desk staff through [Forms](#)
  - We will contact you within 2 business days to schedule training
  - Once certified, you will be added to the registry of certified users for the laser cutters

## Approved Materials

## Prohibited Materials

## Health and Safety

- Although this system uses a CO<sub>2</sub> laser that could damage your eyes or skin with direct contact, it uses both a system of safety interlocks and an IR-absorbing window on the top door, making the laser cutter safe to use without goggles or other safety gear
  - Please note that the intense light that appears during the engraving or cutting process is the product of material combustion or vaporization
  - Do not stare at the bright light or risk damage to your eyes
  - Certain materials require close supervision, but you should still avoid looking directly at the combustion/vaporization
  - Additionally, the Red Dot Pointer that appears on the material is just a positioning help, not the laser beam itself; however, do not stare at the Red Dot Pointer or risk damage to your eyes.
  - Lastly, the machine doors are safety-interlocked and will disable the CO<sub>2</sub> laser beam from firing when the doors are opened. The Red Dot Pointer is NOT safety interlocked and can be activated with the door(s) either open or closed.
- Operating the laser cutter in any unsafe way can result in damage caused to your health and/or the laser cutter.
  - Unsafe practices include, but are not limited to:
    - Leaving the laser cutter unattended while it is running
    - Cutting materials that are on the Prohibited Materials list
      - Many of the Prohibited Materials emit toxic gas
    - Tampering with the laser cutter's safety mechanisms
    - Turning off the Air Assist feature
    - 'Sandwiching' more flammable material between less-flammable materials. (i.e. a sheet of cardboard between two layers of chipboard, etc.) The result could easily be a FIRE!
- **IN CASE OF FIRE, IMMEDIATELY PRESS THE EMERGENCY STOP BUTTON (located on top of the laser) AND USE THE FIRE EXTINGUISHER (located near the door).**

## General

- If the laser cutter computers aren't logged in, notify staff at the Technology Desk
  - Only the Technology Desk staff are permitted to give you access to the system
  - **Do not log in using your own EID credentials, as the software is only configured under our account**
- **Operating the laser cutter without (a) being trained AND (b) paying the subscription fee will result in privileges being revoked**
- If you notice that the laser cutter requires cleaning or maintenance, please notify the Technology Desk staff immediately in person or by calling 512-471-1189

# Policy Violations

If you cancel your reservation...

- **More than 2 hours** before your reservation...
  - There is no charge
- **Less than 2 hours** before your reservation...
  - You will be fined **\$2.50 per 30 minutes** of the reserved time
- **Less than 1 hour** before your reservation...
  - You will be fined **\$5.00 per 30 minutes** of the reserved time

If you have not arrived within **5 minutes** (on time for certifications) of your reservation start time...

- We will **cancel** your reservation
- You will be fined **\$10 per 30 minutes** of the reserved time
- You will be added to the Greylist\*

If you leave the laser cutter room to go purchase materials, etc...

- Your reservation will be canceled

If you cut without a Subscription (after the 12th class day)...

- You will be Subscribed
  - The **\$50** fee will be added to your WIO
- You will be fined **\$100**

If you damage a part of the laser cutter...

- You will be fined **the cost of replacement**
- You will be added to the Greylist\*

If you cut plastic or wood on Laser Cutters 3, 4, or 5...

- You will be added to the Blacklist\*\* for two weeks
- You will remain on the Greylist\* after the two-week suspension for the current semester
- Your certification will be revoked, and you must go through the certification process again after your suspension

If you cut prohibited material...

- You will be added to the Blacklist\*\* for the remainder of the semester
- You will remain on the Greylist\* for the next semester
- Your certification will be revoked, and you must go through the certification process again the following semester

## Greylist & Blacklist

Violations include:

- Cutting without being certified
- Cutting without a subscription
- Cutting banned materials
- Cutting acrylic or wood on laser cutters 3, 4, or 5
- Damaging equipment
- Sharing a subscription
- Being in the Laser Cutter room or Robotics Lab without being certified and subscribed
- No-show/late to a reservation
- Cutting a file with an estimated run time that's longer than your remaining reservation time

The consequences are listed below.

- 1st Offense - Warning - Greylist
- 2nd Offense - Two-Week Suspension - Blacklist
  - You may not use any services related to Patron Portal for two weeks
- 3rd Offense - Semester-Long Suspension - Blacklist
  - You may not use any services related to Patron Portal until the first class day of the next semester

For any questions about the content of these messages, please contact us:

- [soatechdesk@utexas.edu](mailto:soatechdesk@utexas.edu)
- <https://soa.utexas.edu/techwiki>
- 512-471-1189
- SUT 1.100