# **Laser Cut Group Project Sign**



#### **Abstract**

In this assignment, you will use a laser cutter to create an add-on or sign for your group project. This can either be integrated with the project you build throughout the semester, or it can be a standalone sign displaying your group project information at the demo desk during your project demonstration. The assignment will be graded on a group basis. Your design should be created using any vector tool, such as Adobe Illustrator or Inkscape. We will provide several sheets of plywood in various sizes and thicknesses. You can drop by IRB0102 and ask TA for the material. If the material provided is insufficient for your ambitious ideas, please inform us and coordinate with the Sandbox managers to acquire materials suitable for your design.

## **Description**

Below is the minimal requirement for this assignment.

- 1. All group members must complete the Sandbox laser cutter training for the VLS laser and submit a screenshot confirming completion of the module.
- 2. The design must feature both vector cutting and rastering.
- 3. Use red (255,0,0) for stroke only (vector cut) to cut through. The line width should be 0.01mm or any suitable design parameter for your choice of vector design software.
- 4. Use black (0,0,0) for area only (raster) to engrave.
- 5. The design must utilize at least 1 technique (for groups of 3 or fewer), 2 techniques (for groups of 4), or 3 techniques (for groups of 5 or more) from the following: stacking, living hinge, finger joints, and laser bending, to create 3D features.
- 6. Save your file as an SVG and upload it to ELMS.
- 7. Use the VLS laser to cut your design.

### **Delivery**

- a. Bring your group sign to the demo.
- b. Upload a zip file including 1) **training screenshots** 2) the **SVG file** of your design and 3) one or two **photos of your actual cut**, to Elms. Name format: "Your groupNumber.zip"

### **Due Date**

**Wed Dec 11th, 11:59 PM EST** 

Last Modified Date: Nov 19th, 2023