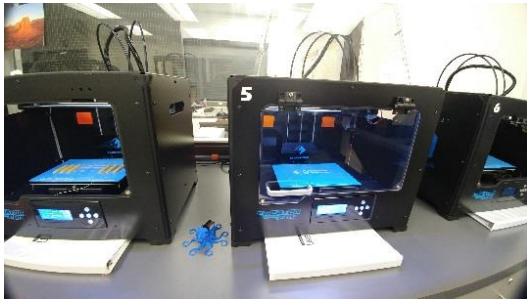


FREE PROGRAMS YOU CAN USE AT HOME!

3D Printing



The JJC MakerLab currently maintains fifteen 3D printers including filament, resin, large format and commercial prototyping printers. Members can bring in their own materials or purchase what they need from the MakerLab stock.

A variety of graphics and slicing programs needed to use these printers are installed on our six PC workstations.

Laser Engraving & Cutting

Our 65 watt Boss laser engraver & cutter can be used on wood, paper, leather, fabric and some plastics. It engraves designs as well as cut out shapes using a laser beam to precisely burn the cut or image into the material. There is also a rotary attachment for engraving round objects.



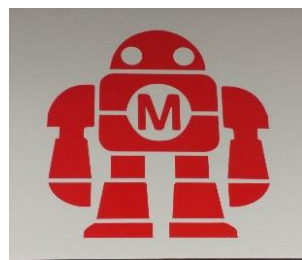
CNC Wood Carver

Just like the laser engraver, this machine engraves and cuts wood and other softer materials. In this case a computer guided cutting bit is used to shape the material.



Vinyl Cutter

Our vinyl cutter precisely cuts designs and lettering out of adhesive-backed vinyl which can then be used for custom signs, plaques, etc.



Here are some of the programs you can use to create a project. (There are more online.) Once it's created, MakerLab members can bring in their project to be produced on the MakerLab machines.

These same programs and more are available for member use in the MakerLab where an assistant is available to help.

3D Modeling Programs

Tinkercad	www.tinkercad.com
Blender	www.blender.org
Meshmixer	www.meshmixer.com
FreeCAD	www.freecadweb.org
Sketchup	www.sketchup.com
Sculptris	pixologic.com/sculptris
OnShape	www.onshape.com
Fusion 360	www.autodesk.com

Free File Downloads

Thingiverse	www.thingiverse.com
GrabCAD	grabcad.com
Sourceforge	sourceforge.net
Sketchup	www.sketchup.com
OpensCAD	opencad.org
Tinkercad	www.tinkercad.com
Shapsmith	shapsmith.net

Free Design Programs (Laser Engraver/Cutter)

Gimp	www.gimp.org
Inkscape	inkscape.org/en
Vectr	vectr.com

Free (Creative Commons) Images

Internet Archive	archive.org
Clickr Clip Art	www.clker.com
Open Clip Art	openclipart.org

Want to learn more? YouTube it!

Here are a few of my favorite YouTube Channels, but there are many more!

Maker's Muse (3D printing)
 3D Printing Nerd
 3D Revolution
 Boss Laser



MakerLab
 Innovation at the next level.