

Hardware in the Santori Makerspace

Macbook/PC Workstations

Computers available for designing your creations. All software needed to use our equipment is available on these machines.

3D Printers: Cube, Dremel, Form 2

Create 3D objects, toys, tools, gifts and prototypes.

25¢ per gram PLA material (Cube/Dremel)

50¢ per gram Resin material (Form 2)

Banner Printer

HP Design Jet Z5400 Printer

Create posters and banners up to 36" wide

Standard Paper \$5 per linear foot

Photo Paper \$10 per linear foot

Roland Vinyl Cutter

Make vinyl decals: **\$3 per foot**

Various colors available. Check in or call for availability.

Epilog Laser Cutter/Engraver

\$2 per minute + Cost of Material

Laser materials may be purchased in Makerspace. Prices vary by size.

Fellows Voyager 125 Laminator

Laminate up to 12" sheets

\$1 per sheet



Aurora
Public
Library



The Makerspace is located on the first floor of the Richard and Gina Santori Public Library of Aurora in the northwest corner of the building.

Santori Public Library
101 S. River St.
Aurora, IL 60506
630-264-4101
www.aurorapubliclibrary.org

Santori Makerspace Hours:

Monday through Thursday:

Noon to 7:30 p.m.

Friday and Saturday:

Noon to 4:30 p.m.

Sunday:

1 to 4:30 p.m. Labor Day to Memorial Day

Want to know more?

Call 630-264-4203 or visit the Makerspace!



Santori Makerspace



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How to Print a Poster

Posters can be printed at a max size of 36" and you pay by the linear foot. For example, the cost for a 36" x 24" print on standard paper would be \$10.

You can bring your image in a USB; higher resolution will print best. Image must be sized prior to printing, which can also be done in the Makerspace.

Accepted file types are: .PDF, Postscript, .HP-GL2, .TIFF, .JPEG

How to Laser Cut/Engrave

Our laser cutter can cut material up to 12" x 24" in size. Price is determined by the machine's runtime plus cost of materials. Keep in mind cutting is faster than engraving.

We sell various colors of acrylic and wood. Check in or call for additional information on materials available.

Many file types are supported. We use CorelDraw (.CDR) and have it available for any editing and creating. File types include: .PDF, .PSD, .AI, .JPG, .PNG, .EPS, & .SVG

How to Make Vinyl Decals

Decals can be printed in various sizes. Our sticker rolls are currently 8.5" or 24" wide.

Accepted file types include: .BMP, .JPG, .STX, .AI and .EPS

Image outlines and fonts work best. You can also create multiple color stickers. Ask us how!

How to 3D Print

In the Makerspace you will find 3 different 3D printers:

Cube prints objects at a maximum size of 6" x 6" x 6". Uses PLA material.

Dremel Builder prints objects at a maximum size of: 9" x 5.9" x 5.5". Uses PLA material.

Formlab Form 2 prints objects at a maximum size of: 5.7" x 5.7" x 6.9". Uses Resin material.

How do I 3D print something?

All you need to print is a **.STL** or **.OBJ** file. Bring it to us in a flash drive or use our computers to design and create an object.

How do I design 3D objects?

Creating 3D objects takes some practice, but there are various free programs you can use to learn how.

We recommend beginners start by visiting tinkercad.com and using an e-mail address to create a free account.

After signing up, follow the tutorial to learn the basics and begin creating.

To save your file on **Tinkercad**: click **Design** → **Download for 3D Printing** → select the **.STL** or **.OBJ** file type.

3D Printing Software

Tinkercad.com: Beginner level, only requires an e-mail; no download necessary.

Thingiverse.com: Search engine for 3D objects.

www.autodesk.com: This company has many programs available for designing in 2D and 3D. Not all features are free but some do have free trials. Users can create an **Autodesk** account to save their files online.

Autodesk 123D Design: Intermediate level, similar to Tinkercad but more advanced features. Many tutorials and videos available online.

Fusion360: Advanced 3D CAD software. Some aspects are free, but can be upgraded for a charge.

Blender: Some aspects are free, used for animation, but some patrons have brought in their files and printed successfully. <https://www.blender.org/>

Google SketchUp: Beginner/Intermediate. Free license can be obtained for casual users. The Pro version has more advanced features. <http://www.sketchup.com/>

Atomic Learning database does provide video tutorials. Also, the 3D design community is large online and many of these programs come with a "Help" menu that links to Tutorials. Using Google Search tends to be very useful.