Digital Fabrication Work Flow

3D Printing

TINKERCAD

or

Vinyl Cutting

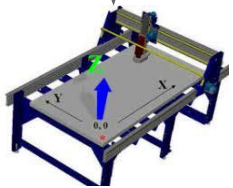
CutStudio

Laser Cutting / Engraving

CorelDRAW

Shopbot CNC Routing

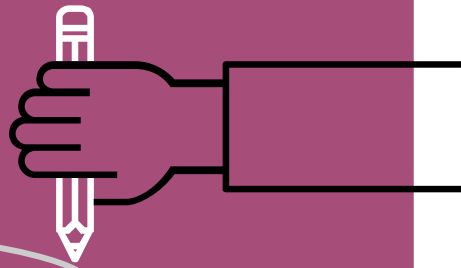
Aspire



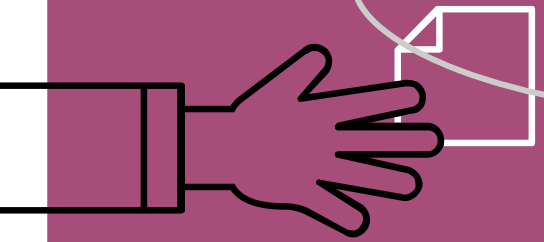
CutStudio
for Vinyl Cutter

Open New Design - insert vinyl into machine. Choose Cutting Set-up ->Change-> Get from Machine. This sets your size.

File -> Cutting
(NOT print and cut)
See additional instructions for weeding and heat press options.



For TEXT:
Use tool "A" to choose text (do not use a text box). CutStudio automatically draws all lines for cutting.



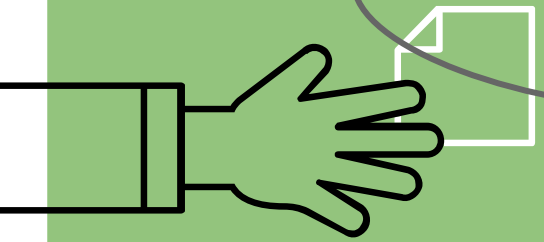
For IMAGES:
Import Image -> rt click-> Image Outline. Extract contour lines (remove thin lines) -> OK.
Delete bitmap image.

For SHAPES:
Use geometry tools on left side toolbar. See tutorial for additional options.

CorelDRAW
for Laser Cutter

Open New Design - insert correct measurement for the stock (wood, vinyl, acrylic, etc.) you have chosen.

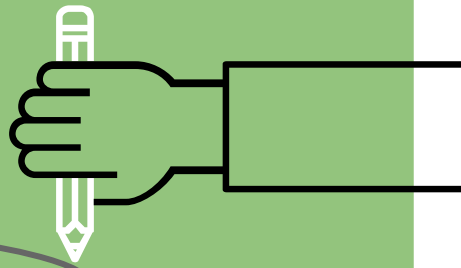
For TEXT:
Use tool "A" to choose text (do not use a text box). For engraving any pt size will do. For cutting -> Convert to Curves -> change pt size to "Hairline"



For IMAGES:
Import Image -> Bitmap -> Outline Trace
For engraving any pt size will do. For cutting change pt size to "hairline"

For SHAPES:
Use geometry tools on left side toolbar. See tutorial for additional options.

Save files to your Google DRIVE. Download & Open on computer connected to the machine and follow written tutorials.

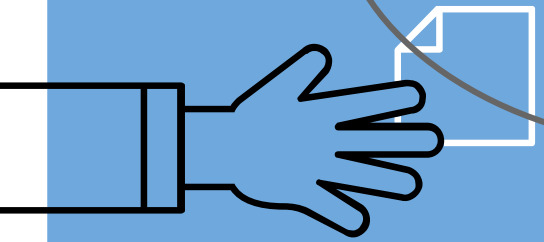


Vectric Aspire

for CNC routing

Open New Design - insert correct measurement for the stock (wood, acrylic, etc.) you have chosen.

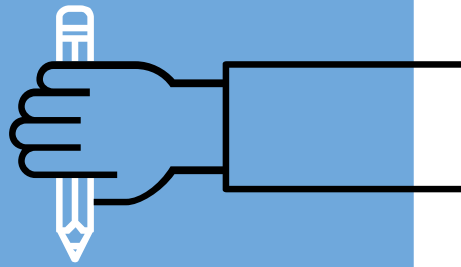
For TEXT:
Use tool “T” to choose text and type into open window.



For IMAGES:
Import Image -> Bitmap Trace (bird icon). Choose colors to trace -> Preview -> Apply -> Close. Delete original image after bitmap gives you a line drawing.

For SHAPES:
Use geometry tools on left side toolbar. See tutorial for additional options.

Save files to your Google DRIVE. Save to flash drive & Open on computer connected to the machine and follow written tutorials for making toolpaths.



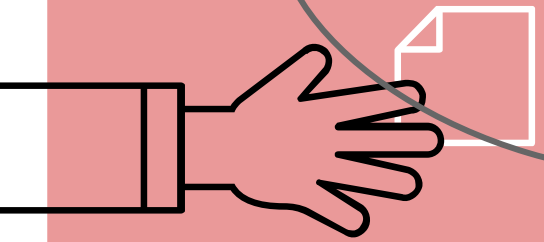
Aspire

VCarve PRO

Tinkercad.com
for 3D Printing

Go to tinkercad.com and login or sign up for a new account. Be sure to write down or remember password!

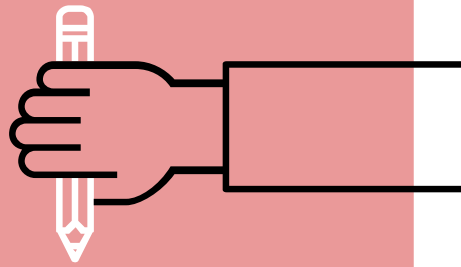
Choose tinkercad icon -> click on Create new design.



Drag and drop geometric shapes onto workplane. Change size and position, rotation, etc.

Shapes can be solid or a hole. Arrange and group objects as you wish. Use the tutorial for more options.

Tinkercad will automatically save your designs. When ready to 3D print EXPORT as an STL file. Then follow the directions for the 3D Printer Slicer.



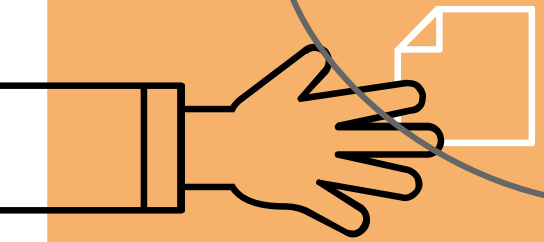
TINKERCAD

Fusion 360

for 3D Printing

Login or sign up for an account (only free for education). This should be the same as your tinkercad account as it is the same company. Be sure to write down or remember password!

Choose FILE -> Create new design.



Drag and drop geometric shapes onto workplane. Change size, position, or rotation. Modify shapes with push/pull, add fillets, etc.

Or save as vector files for laser and CNC.

Fusion 360 is pretty complicated, therefore I recommend watching videos and reading tutorials.

Fusion will automatically save your designs. When ready to 3D print right click your components and save as an STL file. Then follow the directions for the 3D Printer Slicer.