

Guide To 3D Printing at Frisco Public Library

Get Started:

Visit the 1st floor Ask Us desk to get started.

- Bring in your .STL or .OBJ file on a flash drive or saved to your cloud storage.
- Cost is 15 cents per gram of plastic.
- Object must complete printing before close.
- Recommended to design in millimeters.

Tech Notes:

- Maximum size: 8 in. x 6 in. x 6 in.
- Material: PLA plastic
- Printer: Ultimaker 2+
- Objects print in a single color
- File formats: .STL | .OBJ

3D Rules:

- Available on a first come, first serve basis
- Users must be at least 18 years of old and sign the liability waiver.
- Users must supervise projects while printing.
- Objects must be completed before library closing.
- The printers may only be used for lawful purposes and for objects appropriate for a public library environment.
- Objects must not infringe upon any third party's intellectual property rights.
- Object must not be illegal nor can they be construed as having the intent to harm.
- Staff is not available to supervise prints or make modifications to objects.

Some Common Questions:

What colors are available?

The selection of colors is subject to availability. The library frequently has the following colors on hand: white, red, and black.

How long does it take?

You can estimate print time using the Makerbot Desktop software: ultimaker.com

How will I know how much my object will weigh in order to estimate the cost?

You can estimate the weight of your object using the Cura software: ultimaker.com

How quickly can I learn how to use the Cura software?

Watch this [video](#) to learn the basics. Go in depth with this [guide](#).

Can the library fix and edit my objects for me?

Library staff will help connect you with the right software so that you can make modifications.

I have never used a 3D printer. How can I quickly learn how to operate the printer?

We can teach you as you go. Here is the [printer anatomy](#). You may want to read about [common operations](#).

3D Design Online Tools and Help:

There are a lot of freely available software and lessons available online. Here are a few:

[Thingiverse](#) - Find and download models other users have created and shared. Some models have the option to customise them so they suit your needs.

[Tinkercad](#) - The interactive lessons are perfect for the first time user! This free cloud based 3D modeling software will have you creating your own designs in just a few lessons.

[FreeCAD](#) - Advanced users will appreciate the power and depth of this software that can you download for free to your computer. [Video tutorials](#)

[OnShape](#) - Use either the cloud based software or as an app for iOS or Android devices. More sophisticated design tools than Tinkercad. [Video tutorials](#)

[MeshMixer](#) - Download this free software to sculpt, edit, and mix objects. [Video tutorials](#)

[NASA](#) - Take a look at NASA's selection of .stl files you can download and use for printing.

[Simplify 3D](#) - A great visual troubleshooting guide that covers all of the most common problems.

[NetFabb](#) - Fix models that have mesh errors and other flaws that prevent them from printing.