

Type of Printer

The Library owns an Ultimaker 2+. You can learn more about the printer at the Ultimaker website, <https://ultimaker.com/en/products/ultimaker-2-plus/specifications>.

Design

- There are many websites where you can make your design vision a virtual reality. Tinkercad, <https://www.tinkercad.com>, is a great, free place to start.

Prepare Project for Print

- The design software you use will allow you to modify some printer settings, including the density of your project. It can be hollow, or have a range of infill densities. You might choose to make your project hollow in order to reduce PLA use and speed the print time. You might want it to be very strong, in which case, you might choose a dense build or even a solid build. This sort of build would require much more PLA and take longer, but might be appropriate if you were, for instance, printing a screw or a hinge that you intended to use on a door. You can enable supports and create a float for the project. You can research all these features online and learn by experimenting.
- Please note that we cannot run the printer outside library hours, so we may need to reject your print request if it will take too long.

Deliver the File to the Library for Printing

- There are two ways you can get your file to the Library.

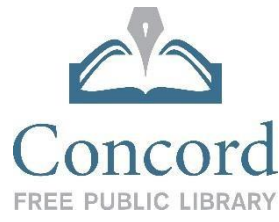
1. Save your project in .STL format to a removable drive and bring it to the Library

OR

2. Attach your .STL file in an email to: 3DPrint@concordlibrary.org and include:

- your name
- email
- best phone number to reach you
- preferred color of print job

- The 3D Print Team will load your .STL into the Cura slicing software and will then give you an estimate of the time and filament that your project will require. Sometimes the project will take too long and by modifying the settings or size of your project will reduce the print time and filament amount.



Some things you should know:

- The Ultimaker has a maximum print size of 8.8 x 8.8 x 8.1 inches, but in reality, you'll want to try a project much smaller than that so that your print won't take too long to print. Printing even a very small project can take an hour or two.
- Often, a project can look fantastic on-screen but fail during the printing process. You are responsible for the quality of your prints and will be charged for the filament used even if the project fails. Cost of filament is .25 cents per gram.
- Our Ultimaker 2+ is currently stocked with PLA filament.
- We have a number of filament colors, including black, white, red, blue, green, yellow, silver and transparent. You can view the colors at the Ultimaker website.
- If you would like, you can choose a preferred color, but we cannot guarantee that it will be available at the time of your print. You will be charged for the PLA use even if we are unable to print in your preferred color.