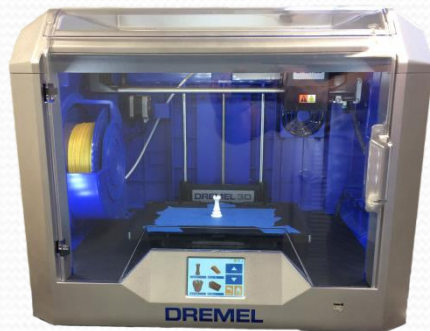
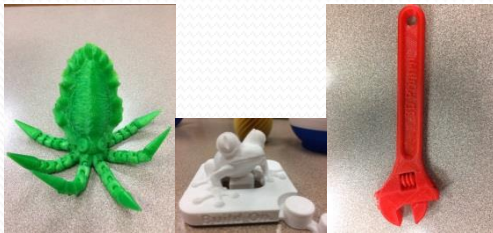


Make something.

Part of our ongoing mission at Glencoe Public Library is to foster learning, discovery, and creativity within the community. In this spirit, we are pleased to offer our 3D printing service, which can help you turn your ideas into something you can hold in your hand.

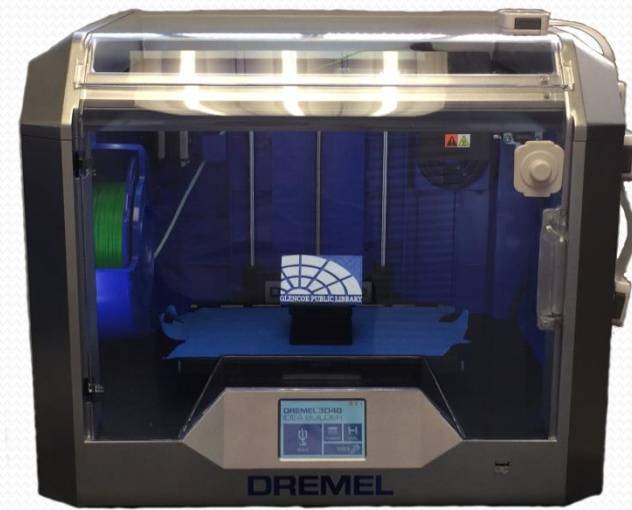
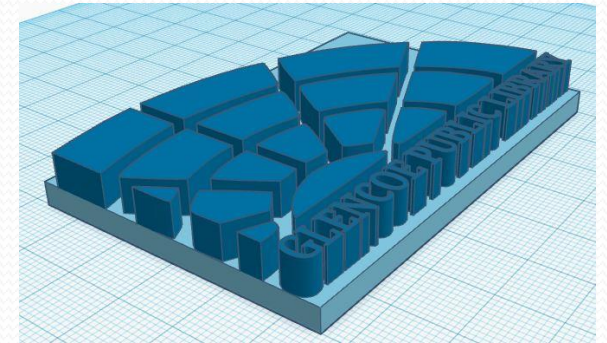


For more information, visit
<https://www.glencoeibrary.org/3d-printing/>
or call/email us.
Phone - (847) 835-5056
Email - 3dprinting@glencoeibrary.org




GLENCOE PUBLIC LIBRARY
320 Park Ave
Glencoe, IL 60022

3D Printing @ Glencoe Public Library

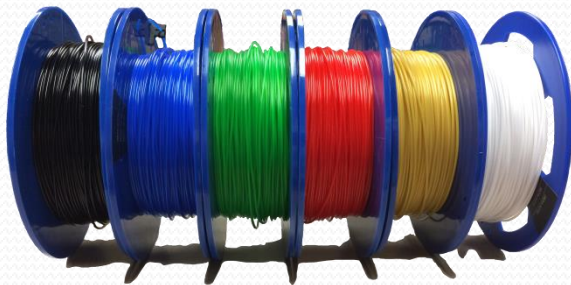


What is 3D Printing?

A traditional computer printer converts a text or image file into a physical page via a set of mechanical instructions. 3D printing is similar except that the end result is a three-dimensional object.

The basis of a printed 3D object is a digital model describing the object's width, height, depth, and overall shape. To prepare it for printing, another program "slices" the model into thin layers. The printer then uses heated plastic filament to draw each slice onto a gradually descending surface, building them layer upon layer into the finished product.

Our printers use Polylactic Acid (PLA) plastic filament. Derived from plant starch, this polymer is popular for 3D printing due to its safety and ease of use. PLA filaments are available in a variety of different colors and textures.



Using Our Service

All Glencoe residents in good standing may submit designs to be printed for personal, non-commercial purposes using the form on our website's 3D printing section (look under the "Digital Content" header). You will receive an automated email after successfully submitting a design. One of our librarians will contact you if there are any issues with your submission and/or when your items are ready to pick up.

Completed items will be held at the circulation desk for up to two weeks after you are contacted about its completion.

Getting Started with 3D

3D design may sound daunting if it's new to you, but learning it doesn't need to be. Here are a couple of resources to get you on the path to designing and building your own models.

(Starred resources require the user to create a free account to use them)

*TinkerCAD (<http://www.tinkercad.com>)

This free and easy-to-use app runs in any web browser and features an intuitive drag-and-drop interface and hands-on tutorials to get you up and running. A great entry point to 3D modeling.

SculptFab and SculptGL (<https://www.labs.sketchfab.com/sculptfab>) (<https://stephaneginier.com/sculptGL>)

These free web apps are like working with a ball of virtual clay, using your mouse to shape and sculpt it.

*SketchUp Free

(<https://bit.ly/3gXezCS>)

A popular solution for architects and structural designers. Model items or assemble your project from a library of ready-made ones. Free for personal & educational use.

*OnShape Free

(<https://www.onshape.com/en/products/free>)

Use lines and shapes to design 3D objects. This web-based software has several tutorials and exercises for the novice to practice with. Free for personal use. Requires Installation.

BlocksCAD

(<https://www.blockscad3d.com/editor/>)

All 3D models are, in their purest form, lines of code, and BlocksCAD is designed to teach you about designing things that way. Combine elements like building blocks to generate complex geometric shapes.

3DSLash

(<https://www.3dslash.net/slash.php?alias=new>)

If you've ever played Minecraft, this app will be second nature to you. Start with a solid block and chip away at it to get the desired shape.

Looking for creative inspiration? These sites offer free 3D item files for download, many of which can be modified and remixed.
(note: some require free registration to use)

www.thingiverse.com

www.pinshape.com

www.grabcad.com

www.myminifactory.com

www.yeggi.com