3D Printer(s) Videos & How-To

VIDEOS

Elegoo Resin Printer basics of resin printer

Prusa Filament Printer
using Prusa Slicer
Prusa3D.com

Vyper Filament Printer

<u>Vyper- How to</u>

General sites to find prints

tinkercad.com

ULTI digital library

Thingiverse.com

www.printables.com

FDM vs. SLA

(filament vs. resin)

Terms

3D printing common terms

- CAD Computer Aided Design, software that produces a 3D model
- GCODE the file type the 3D printer uses to print a design.
- STL Stands for stereolithography, the file format computer aided design (CAD) programs generate. It's a file of a 3D model.
- PLA Polylactic acid is frequently called PLA. Polylactic Acid is a biodegradable thermoplastic polymer derived from the starch in plants normally corn) that is used for 3D printing. It comes in a variety of colors, is 1.75mm in diameter, and feeds into the printer on a spool.
- Slicing An STL file must be "sliced" before a 3D printer can understand how to print the file. Slicing the STL file converts it to GCODE. We use PrusaSlicer to convert STL files to GCODE for printing at HCL.
- Support Additional removable structures that are printed to support overhangs or other parts of a model that do not make contact with the build plate during printing.
- Thingiverse.com A popular site for sharing file designs.
- Tinkercad.com A free computer aided design (CAD) software site that is very good for learning the basics of designing for 3D printing.