3D Print Order Form

Guidelines for submitting a file to be printed:
Please submit your file in the following format: yourname_projectname.stl

   Please submit all files to be printed in the .stl format. Any file downloaded from the internet that is ready to be 3d printed should already be in .stl format and most all 3d design programs will allow you to save your project as .stl.

   Please make sure your object is sized correctly, and is sized using millimeters. A lot of programs give you the choice of inches or millimeters, but all of our printers are set to read in metric.

   When creating a 3d design to be printed, keep in mind that unless you design it otherwise, the interior of the piece will be semi-solid. Consider hollowing out the interior space, it requires less print time and will significantly reduce the total cost of the print. Most programs have a tool that will allow you to hollow out the inside fairly easily. If you desire a solid print, for reasons of strength or durability, be sure to indicate that on the order form. The software we use to print automatically "honeycombs" the interior of the print to help reduce material usage unless we tell it to make a solid print.

   Be aware that we will not print anything that could be considered unlawful, such as: gun parts, knives, drug paraphernalia, etc. We also reserve the right to refuse any print request without reason.

   Be aware of any copyright issues. You are responsible for any copyright issues relating to your file/object.

   While we will make every effort to ensure your print job succeeds and prints well, be advised that if the job fails due to a faulty file or design flaw, you are still responsible for paying for materials. We will however, attempt to verify the file is printable before sending it to the printer.

   We will determine total cost before printing and will require authorization before completing the job.

Name: _____

Phone: _____ Email: _____

File Name: _____Material: pla / abs (circle one)

Solid Interior Fill: Yes / No (circle one)

PLA Color Choice: x / Pink / x / x / x (circle one)
Abs Color Choice: x / Black / x
PLA = $0.35 per gram with a $5.00 minimum charge
Abs = $0.50 per gram with a $5.00 minimum charge

Total Cost of Print = $_____ (to be filled out by 3d Tech employee)
I have read and understand the print guidelines and pricing.

Signature: _____ Date:_____

3D Printing:
Frequently Asked Questions

What is 3d Printing?

3d printing is a computer-based process for making a three dimensional object from a 3d model. The most common type of 3d printing, and the type used at 3d Tech is called "fused deposition modeling" which refers to the extrusion of molten plastic through the print head and deposited, layer on layer, to create the object.

What are 3d Printed Objects Made of?

3d printing is an ever expanding field, and new technologies are being developed that will eventually allow objects to be printed in everything from ceramic to metal and even one day organic material. The printers here at 3d Tech print in either PLA plastic or ABS plastic. PLA plastic is a corn-based plastic that is very rigid and hard, and is recommended for creating decorative items that will not be used under a lot of stress. PLA plastic is also less expensive so it is often used to test to see if a design will print correctly. ABS plastic is a more flexible plastic, and is recommended for more functional parts, or when durability is needed. It is quite a bit more expensive than PLA, but will last much longer. In most cases, PLA plastic is more than adequate, but ABS will stand the test of time much better.

What Kind of 3D Printers do you Have?

3d Tech has multiple printers. We currently have a Prusa mk2.5, monoprice select mini 2 and a tevo tornado. PLA plastic can be printed up to sizes of 300 x 300 x 400mm. Abs plastic can be printed up to 9.84 x 8.3 x 8in. The 3d printers use a 0.4mm nozzle; which determines the resolution of the print.

Which Material Should I Choose?

That depends on what you want the final product to do. PLA is a much less expensive option, and will be a good choice for most average applications. Items such as phone docks, vases, and figurines are well suited for PLA plastic. Abs filament is more expensive, and would be recommended when strength and durability is needed. Replacement knobs and hinges, phone cases, and handles are all things that would benefit from being made from ABS. Keep in mind that neither type of plastic is food-safe, unless it is sealed a food grade sealer/epoxy before use. Both plastics are also porous, so would also need to be sealed before holding any type of liquid.

What Can I Make?

While there are limitations, basically the sky is the limit when designing an object to be printed. Depending on which printer is used, there are size limitations as well as other restrictions that should be considered when creating a design. Because the plastic is extruded in a molten form, overhanging ledges can cause a print to sag and fail. Larger objects can also create issues, because the plastic cools too much before the next layer is added so the layers do not bond together adequately. The printers uses the same plastic to create supports that help prevent sagging or failing and those supports must be manually removed from the final model.

Where Can I Learn More?

There are many good resources available online that delve deeper into 3D modeling, designing and printing.

thinginverse.com - An online database of user created 3D designs that can be downloaded and printed. Thingiverse is a good place to go to find things to print or to get ideas for your own projects.

tinkercad.com - Web-based design software that is perfect for 3D design beginners. Intuitive and easy to use, it's a great place to start. Best of all, it's free to use!

youtube.com - Youtube has multiple video tutorials on 3D printing. Check them out gif you want to learn more.