



## 3D Printing Training Sample Agenda

Attendees will be able to:

1. Identify the parts of a 3D printer.
2. Load and change filament.
3. Calibrate the 3D Printer
4. Connect the 3D Printer to the internal network (optional)
5. Download the Slicer software for your model
6. Design & print an .STL file.

Preparation for Training:

Before the training date, all attendees should complete the following for the best training experience:

- Read [A Novice Guide to 3D Printing](#)
- Obtain password for wireless network
- [Watch 3D Printer Video Series](#) from 1<sup>st</sup> Maker Space
- Create [Tinkercad](#) account and watch 1-2 tutorials on Tinkercad modeling

Training Outline:

1. 3D Printing Technology
2. Additive vs. Subtractive Manufacturing
3. Parts of a 3D Printer
  - a. Calibration
  - b. Settings
  - c. Filament Load and Change
4. PLA Filament (vs ABS & others)
5. 3D Modeling – .STL files
  - a. [Thingiverse](#)
  - b. [Tinkercad](#)
  - c. [Fusion 360](#) or [Inventor](#)
6. Create a 3D Model using Tinkercad
7. Printing from a PC
  - a. Creating .gcode file and send to printer (network or USB drive)
  - b. Print temp for Dremel Filament: 220° C (PLA)
  - c. Layer Height: 0.200 mm (200 microns)
  - d. Infill & Support structures
  - e. Raft & Brim
8. Safety
9. Curricular Applications Roundtable

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9059 Technology Lane, Fishers, IN 46038  
info@1stmakerspace.com - (317) 399-5001



## My 3D Printer Won't Work! Help!

1. Identify the Symptom
  - a. Simplify 3D: <https://www.simplify3d.com/support/print-quality-troubleshooting/>
2. Troubleshoot Symptom
  - a. Dremel Support: <https://digilab.dremel.com/service-3d45>
  - b. Flashforge Support: <https://flashforge-usa.com/pages/support>
3. Call 1<sup>st</sup> Maker Space: 317-399-5001 or [support@1stmakerspace.com](mailto:support@1stmakerspace.com)

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