About the Prusa 3D printers

We operate a number of Fused Filament Fabrication (FFF) 3D printers.

- 3x [Prusa i3 MK3S+](#)
- 3x [Prusa MINI+](#) - The profile for the Prusa Mini for Cura is [here](#).

These printers can be used with [Prusa Sli3r](#) or [Ultimaker Cura](#), the printers are configured with [Octoprint](#) which allows network control, meaning using Ultimaker Cura integrates nicely.

All three printers use 1.75mm filament, we only allow the use of plain PLA filament in our machines, filament with flakes of metal, glitter, or other materials can damage the machine and we don't allow these to be used. We only allow PLA due to fumes caused by other types of filament.

Within reason there is no cost to using the 3D printer, we provide black and white filament as standard and some other colours may be available from other projects.

If you are going to 3D print, ensure you read this [Io3DP-Cheat-Sheet.pdf](#) and also check out the guide to perfect 3D printing problem solving here: [The Ultimate 3D Print Quality Troubleshooting Guide 2019](#)

You can monitor the printers from the link at the top of [#technical](#) on Slack, when on the UAL-Wifi network.

Here is the basic workflow to 3D print:

1.

Design a 3D object

TinkerCAD

Blender

Other CAD software

2.

Create STL file

Check printer set up

Plate clean

What filament do you want to use?

Edit file in slicer software

Cura or Prusa slicer?

Correct filament & heat settings?

'Slice' the file in software to create a gcode file

Get gcode to the printer

SD Card or Octoprint?

Monitor the print

In person & via webcams

Troubleshoot

Plate adhesion

Cleaning hot end

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