

Ultimaker 2 Extended 3D Printer

ANU MakerSpace Safe Operating Procedure:

Low Risk Equipment - low incidence of minor burns, pinched fingers. PPE: Closed toe shoes, loose clothing and hair must be restrained.

Pre-operational Checks

- 1. Make sure you have been shown how to use the CURA software for slicing your 3D models. Issues begin with a poorly designed model or poor choice of printing parameters.
- 2. In Cura, ensure that "Ultimaker 2 Extended" is the selected machine from the machine menu.
- 3. Only use 2.85mm PLA filament in the Ultimaker 2 Extended. If you are interested in using other plastics, speak with staff/mentor.
- 4. Make sure you are familiar with how to change filament before doing so. Ensure there are no knots in the filament spool.

Operational Checks

- 5. Watch your print until the first layer is complete this is when most prints fail and need to be restarted.
- 6. Do not manually move the printhead or print bed using your hands.
- 7. Do not reach inside the printer while parts are moving. The motors are strong enough to cause injury if you trap a finger.
- 8. Do not touch the nozzle or plastics while printing. The nozzle is heated to temperatures of greater than 200°C.
- 9. Do not touch the bed when printing. The print bed can be heated to above 80°C
- 10. If there are issues with the nozzle/bed/filament check https://ultimaker.com/en/resources/ for troubleshooting

Post-operational Checks

- 11. Wait until the bed has cooled before attempting to remove your model. Waiting 5 mins after the build is complete ensures the part will easily seperate from the bed.
- 12. Beware of sharp edged tools (pliers, chisels and knives) when removing support material.
- 13. Discard any failed prints/support in the bins provided. Leave the print enclosure clean.



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