TAP LAB SAFETY LEVEL:
HIGH RISK

Read the safety card | Receive induction from a trainer
Supervision required until approved to operate independently

3D Printer

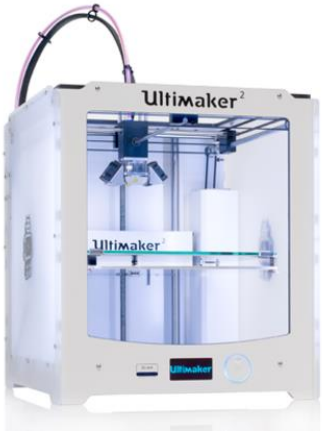
KEY RISKS:


Burns


Fumes


Breakage

PURPOSE:



3D printers are additive manufacturing tools that melt plastic filament which is then applied in layers to build up a complete 3D object.

SAFETY:

- The printhead of a 3D printer reaches temperatures in excess of 200℃ and is capable of causing severe burns. The print head should never be touched when the machine is in operation, and should only be touched when the correct cooling down process has been completed.
- Some types of filament can produce gases which can be harmful when inhaled. The 3D printers at TAP lab don't have ventilation.
  Filament use at TAP lab:
  - PLA: Yes
  - ABS: No
  - Anything else: ask on the **#equip_3d-printer** channel on slack
- Used incorrectly the printer can jam, block the nozzle and become inoperable or damage the printer itself.
- For safe removal of prints the bed needs to be prepared with a thin application of glue stick or none at all. Allow the print bed to cool and the print should snap off cleanly - if not use a sharp blade to ease the print off the bed. Be careful to point blades away from your body while doing this. DO NOT use the butane torch on the back of the glass as part of the removal process.
- Failure to keep the machine clean can also lead to its incorrect operation, and can even be a fire risk. Approved members should also know how to complete an atomic clean of the extruder and clean and wash the print bed when required.