City of Melville Libraries

USING THE 3D PRINTER

Our Bambu Lab P2S 3D printer is free to use on Maker Mondays!

We're trialling a public access 3D printer at AH Bracks Library + Creative Space in the tech lab. During this time:

- The printer is available on **Mondays only**
- To check availability or book a timeslot, contact staff at AH Bracks Library + Creative Space on **08 9364 0115**.

Library staff are available to help print your file, but we're not experts in 3D modelling.

WHO CAN USE IT?

Library members aged 12 years and over. 3D printer users aged 12-15 must be accompanied by a supervising adult.

WHAT KIND OF FILAMENT?

We supply free PLA filament. You cannot use your own filament. PLA is a low-fume option suitable for a library environment.

WHAT CAN BE PRINTED?

Small objects for personal, educational, or creative use. Printing time is limited to 4 hours. Printing unsafe, illegal, offensive or inappropriate items is not allowed.

FILE TYPE REQUIREMENTS

The 3D printer can print pre-sliced G-code (.gcode) files. You can bring your prepared file on a USB drive or use Bambu Studio on our public PCs.

RECOMMENDED FLASH DRIVES

To print your file, you'll need to save it to a USB flash drive. The drive must be formatted as FAT32 or exFAT. Encrypted drives aren't supported.

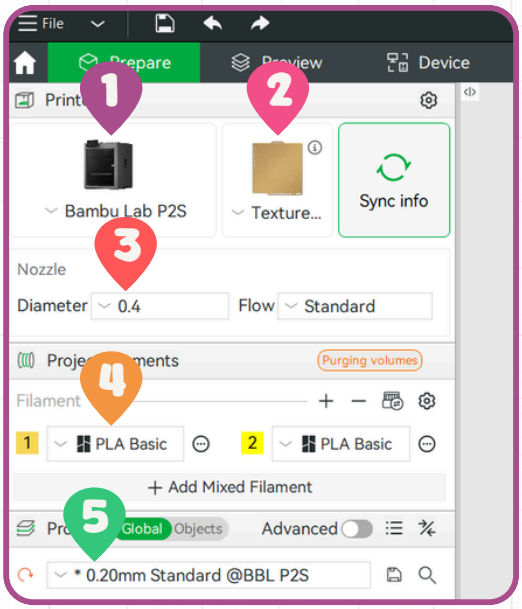
HOW TO:

PREPARE A 3D MODEL TO PRINT

First open **Bambu Studio**.
This open-source slicing software is available on the public PCs at AH Bracks Library + Creative Space. Next:

- Click **File > Import** to import your own 3D model **- OR -**
- Select **Online Models** from the lefthand menu to find a MakerWorld model:
  - Click the model you'd like to print, and then set Print Profile to **P2S**
  - Select from the available print profiles, then click **Download and Open.**

AFTER IMPORTING YOUR MODEL...

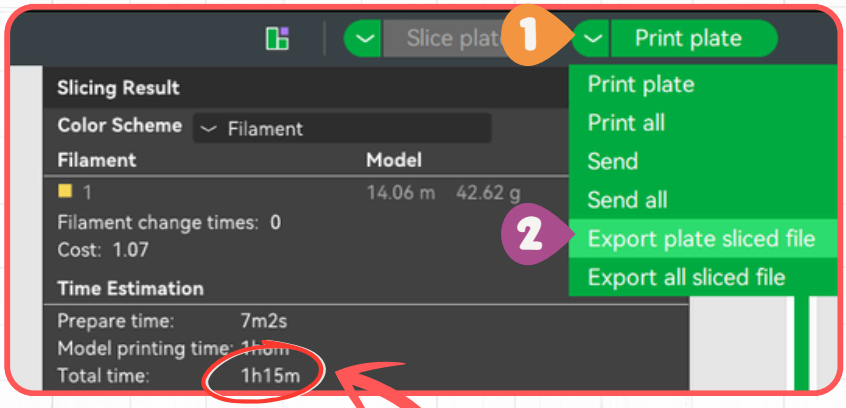


1. Select the **Bambu Lab P2S** 3D printer
2. Select the **Textured PEI Plate**
3. Set **nozzle diameter** to **0.4**
4. Select the **filament type PLA Basic**
5. Select a **layer height** (**0.20mm** is recommended for balanced speed/quality)

Note: *A smaller layer height will provide more detail but will also increase print time; a larger height will produce a faster print of lower quality with more obvious layer lines.*

After applying the settings, click **Slice plate** (top right):

NEXT, EXPORT YOUR FILE TO A FLASH DRIVE...



Insert a compatible USB flash drive into the computer, then:

1. Select the **small arrow next to 'Print Plate'**
2. Select the **Export plate sliced file** option
3. Click **Export plate slice file** again to confirm.

You'll be prompted to choose a location to save your G-code file. Save it to **the root** of your USB flash drive (don't put it in a folder).

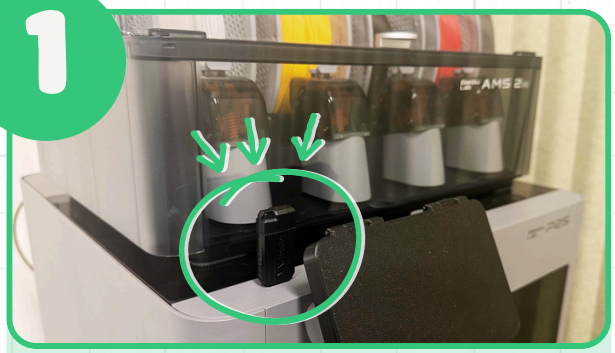
***Tip:** Make a note of your **total time** estimation, our maximum printing time is **limited to four hours**.*

HOW TO:

PRINT YOUR OBJECT

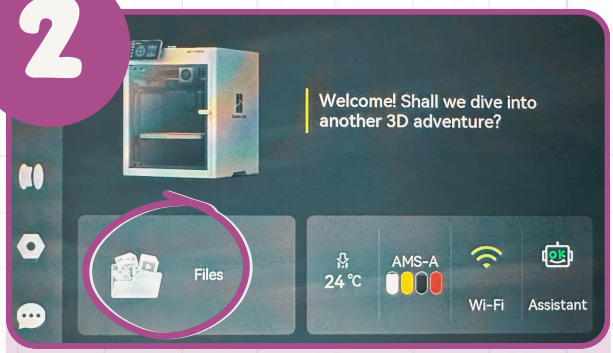
Once you have your **G-code file on a USB flash drive** you're ready to print! Speak to library staff or scan the QR code to book the printer.

1



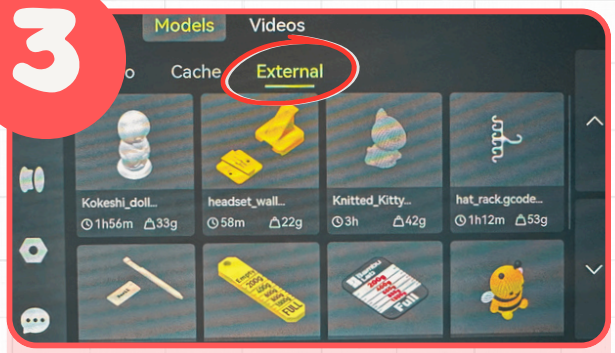
Insert your flash drive into the USB port at the front of the 3D printer.

2



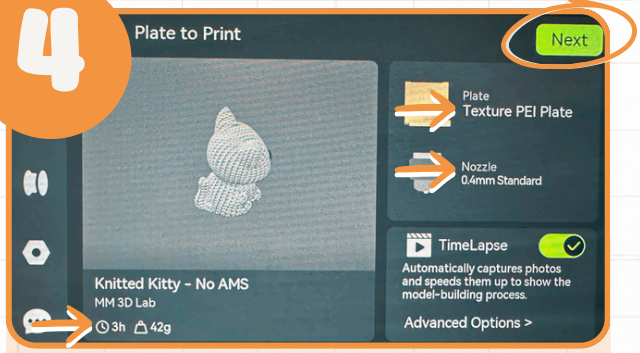
On the printer's home screen, tap **Files**.

3



Select the **External** option, then tap the model you wish to print.

4



Before starting the print, confirm:

- Plate: **Texture PEI Plate**
- Nozzle: **0.4mm Standard**
- The print will finish **by 6pm at the latest** (estimated print duration is displayed next to the clock icon)

Optionally, you may enable TimeLapse recording.

Tap **Next,** match filaments if needed, then tap **Print** to start.

AFTER PRINTING...

When your print finishes, **allow 15 minutes** for the printer and build plate to **cool completely** and then see staff to unlock the printer door.

The build plate gets **very hot during operation** and may cause burns if touched immediately after printing.

Allowing the plate to cool also helps the printed object to release more easily.

Use the supplied scraper tool to carefully remove the print from the build plate. **Don't touch the build plate surface with your hands**.

The printer door should be re-locked after the object has been removed.

The printer nozzle becomes **extremely hot** during use.

To prevent injury, the printer door will remain locked at all times.

See staff to retrieve your print.