

3D Printing - Architecture, Spring 2025

Please follow these instructions to complete your 3D printing:

1. Create your file using Rhino. Make sure that it is a closed singular polysurface. For references on what a good file looks like, you may watch these videos:
 - a. Beginner: [How to prepare a Rhino file to 3D print](#)
 - b. Beginner: [Rhino basics part 2: preparing model for 3D printing](#)
 - c. Intermediate: [How to make a Rhino model solid for 3D print](#) (Please watch from 0:00-4:16. The end of this video shows a different slicer software that we do not use – please disregard. The employee that sets up your print will slice your file on our Bambu Labs software.)
 - d. Intermediate: [3D printing file using Rhino](#) – May help reduce the amount of filament needed for larger prints.
 - e. Exporting the print: [Preparing Rhino 3D model for 3D printing export](#)
2. Save your file as a .3dm with the following naming convention: netID_DateSubmitted (e.g. jsmith00_03252025). If there are multiple files, please name them the same way, but follow them with letters according to file (e.g. jsmith00_03252025a, jsmith00_03252025b)
3. Upload your file to the BOX folder, linked here: [BOX Folder](#).
4. After your file has been uploaded, **a physical 3D printing form must be filled out in the DigiFab Lab, located in the Architecture Annex. The slip must be given to the fabrication shop employee on shift.** They will check the file to confirm it is feasible. If it is not, the employee will assist you in correcting the issue prior to your departure from the Fabrication Shops.
5. Once your slip has been submitted and your file has been approved by the fabrication shop employee, you will be added to the queue. *
6. A fabrication shop employee will complete your print, attach the slip to the print, bill your student account accordingly, and email you when it is ready for pick up.

*Prints will be completed in 1-3 days unless otherwise informed.

Reminders & Tips

Bambu Lab Printers - \$0.05/gram + \$1/hour = total cost

- Make sure the unit of the Rhino file is millimeters, otherwise the scaling might be off!
- Each build plate may not exceed 237 mm (width) x 254 mm (length) x 249 mm (height)
- Make sure all pieces are closed singular polysurfaces
- For issues with printing, please email arch-3dprinting@illinois.edu (please allow 24 hours for a response). For more thorough help, please stop by the DigiFab Lab/Woodshop, located on the southeast corner of the Architecture Annex.
- White PLA and black PLA are always available. Other filaments are available upon request and there is a lead time of up to 2 weeks for ordering different materials. Contact arch-3dprinting@illinois.edu.