3D Printing – Architecture, Fall 2021

Please follow these instructions to complete your 3D printing:

1. Download and fill out the 3D printing form located on the school website here.

2. Once your 3D print form is filed out, please email it to arch-printing@illinois.edu

3. Download the 3D printer software from box: QIDI Slicer Software

4. Upload your 3D Rhino model (.stl or .obj) to the printer software.

5. Format your 3D print using the 3D printer software (instructions below)

6. Upload your formatted 3D print to the 3D printing box folder: Box upload

*Once our staff has received both your completed 3D print form and your 3D printing file, you will be entered into the printing queue. Name your file in the following format: netID_DateSubmitted (e.g. JohnDoe_10232020)

7. A Print Lab staff member will complete your print, label your print, and email you instructions and when and how to pick up your 3D print. Please follow the directions provided to you to keep you and our staff safe.

3D Printing Tools / Instructions:

Below are some links to tutorials and directions on how to set up 3D prints to our different printers.
The types of printers available and their prices are listed below.

Qidi X Plus & X-Max (filament) – ($3 set up charge, $0.10/gram, $1/hr after 4 hrs printing)

- **Make sure file is saved in mm not inches** and in .STL or .OBJ format. This can be done in rhino by using > export selected
- Once the file is downloaded on the computer open the program *QidiPrint*
- QIDI X-Plus filament printer (build volume 10.6"x7.9"x7.9" or 270mm x 200mm x 200mm)
- QIDI X-Max filament printer (build volume 9.8"x11.8"x11.8" or 250mm x 300mm x 300mm)
- Now click File > Open, then select the file you're preparing to print or drag the file onto the build platform on the screen.
- If your 3D model is too big for the platform, your model will be grey with lines. If it fits on the platform, it will show up in red.
- To format the model, you must click on it first. You can use the toolbar on the left-hand side of the screen to scale, rotate, or mirror your model fit your needs.
- Once your model is formatted, you must add supports. This step is EXTREMELY important because the file will fail without the supports and possibly damage the printer.
- If you have your model formatted properly and your supports added, make sure the material in the upper right-hand corner is the material you wish to have the model printed in. Available materials are:
  - White PLA
  - Black PLA
  - White ABS
  - Black ABS
  - Other filaments available upon request and there is a lead time of up to 2 weeks for ordering different materials. Contact arch-printing@illinois.edu with any questions.
- Click "prepare" at the bottom left corner of the screen.
- SAVE THE FILE and upload this formatted print to the box folder.

For issues with printing, please email arch-printing@illinois.edu (please allow 24 hours for a response).