

METU

FACULTY OF ARCHITECTURE

3D PRINTER MANUAL

Our faculty provides various 3D printers for the studies of the students and academic staff. Before preparing the files for 3D printer, all users should read the guide carefully and make a reservation at least two days in advance. During the peak times of the semester, the reservations should be made at least a week in advance.

Files setup

You can prepare your files for the 3D printing process by using any CAD software as long as the files are saved in **STL** format.

To prepare your drawings for the 3D printer, you will need to organize your drawings.

- The maximum size of a part should not exceed 18 cm to avoid possible deformations in the printing plate due to heat loss.
- All parts should be modeled as closed forms.
- The parts should be scaled to the actual size of the model (1 unit=1 mm).
- Extruded surfaces may not be processed properly by 3D printers if they are not closed/capped.
- If your model is a shell, the minimum wall/shell thickness should be determined as 1 mm. Forms without wall thickness cannot be processed by 3D printing software
- If you have thin cylindrical parts on your model, their minimum diameter should be determined as 2 mm.
- Each piece to be printed must be sent as a separate file.
- The files should be correctly labeled in the following way.

Course code_Name_job number

Arch402_AyseKorkmaz_5

- Please submit your files by email to **foamorl@metu.edu.tr**

If you have any questions, please contact the model-making workshop staff.