

3D Printing - How To Export Your AutoCAD File

Makerbot Replicator 5th Generation

At your station computer, you'll want to complete the following steps after you've completed designing your 3D object.

1. Ensure the 3D object in AutoCAD that you want to print out is **1 object**. You **cannot** export more than one object, so make sure that everything is Unioned together.
2. Click the **AutoCAD Menu button** in the top-left hand corner of the screen.
3. Select "Export" and "Other Formats".
4. Name the file and select a file location in your H-drive, but before doing so make sure that the file is a **Lithography** or **.stl** file.
5. After selecting save, you need to **highlight/select the object** that you want to export. After selecting the object, make sure that the text box at the bottom of the AutoCAD screen indicates that "**1 object [was] found**"; then hit **Enter**.

Now it's time to go to the dedicated 3D printing computer and login. After logging in, this is how you print out your model.

6. Open the application called **Makerbot Desktop**. You can search for it by selecting "**Start**" and typing in the name of the program.
7. After opening the application, make sure that you are looking at the **Prepare** view, which looks like a blank build plate.
8. Go to your student h-drive and open the **.stl** file that you saved earlier. The icon for the file should be a logo of the letter M.
9. After scaling the model to the size you want to print at, and after making sure that under **Settings**, the mode is set to **Standard**, and both **Raft** and **Supports** are **selected**, you may select the **Print** button. *This will begin the printing process.* Note that this process can take a long time, so please be patient.

After your model is done printing, these are the steps you'll want to follow to remove your model from the build plate and clean up.

1. **Wait for the extruder head to cool down** before removing a model from the build plate.
2. Use the scraper removal tool to nudge your model off the build plate, but be sure to be gentle with the tape, as it can and will rip.

Here are some other important things to note about 3D printer maintenance.

1. Under **no circumstances** do you put your hands inside the enclosure of the 3D printer or touch any part of the build plate or extruder.

2. The **only** time when it is safe to do so is **after the extruder head has cooled down** and your print is complete.