

IDEaS Program:: PROOF Lab

Machines in the lab:

2x Makerbot Replicator-2; U Print; Dimension 1200 Es;

3 x Mojos; 1 x Objet Connex 350

Materials: ABS, PLA (\$2 / in³ for Makerbot; \$6 for Mojos/U Print/Dimension)

For Connex-350: (~\$15 per in³)

<http://www.stratasys.com/3d-printers/production-series/connex3-systems>

Instructions for Job Submission

- Design the part in 3D CAD and Generate a STL File. You may combine several small parts into one STL File using Mesh Mixer (www.meshmixer.com)
- Get an access code to this site via email (Fill in name, email and leave code blank to get an email with the access code)
- Use the emailed code to submit jobs and request status. @stevens.edu will be appended and do not include it in any of the form fields.
- After you submit a job, we will email your advisor with a link to authorize printing.
- It is a good practice to view the submitted part and check the volume, size (bounding box), and costs. You have the option to select the material and the lab will pick the best machine for the part based on resolution needed and low cost.
- Email to advisor will contain your name, project name, your email address, and a link to authorize only. Parts not authorized for print within 5 days may be deleted from the system. Contact your advisor to expedite the process.
- If there are issues with the part, you may get an email from the lab requesting revisions. If there are no issues, the parts will be printed and you will receive an email with pick up date/time.
- It is a good idea to login into one of the commercial sites such as shapeways, upload your part to test its optimality for printing. (e.g. <http://www.shapeways.com/create>)
- These sites can also give you part volumes, weights support materials, and approximate cost for printing as you change your designs.
- The more you do this optimization by yourself, the faster and cheaper we can print the parts for you.
- PROOF Lab will reject badly designed parts that waste materials and machine times.
- Consult with your teammates/colleagues who have taken additive manufacturing courses at Stevens for good design practices. If you need help with design, you can consult with one of the lab engineers before job submission.