

Rapid Prototyper Lab and Professional Machine Shop Student Use

The AOE Rapid Prototyping Laboratory, featuring an Objet Alaris 30 3D printer and Next Engine Desktop 3D Scanner provides state of the art 3D modeling, visualization, and printing capabilities.

The AOE Department is offering materials and associated support to student groups interested in using this unique facility.

Additionally, students may request funding to support projects requiring professional machining components within or external to the AOE machine shop.



Student groups must have a faculty sponsor and should be comprised of at least 2 students. Students should submit an application (2 pages max.) to Dr. Leigh McCue (mccue@vt.edu). There is no preset deadline, but there is a limit to the total amount of funding available for the academic year, and no further grants will be made once this is used up.

Applications should include list of student names, departments and email addresses along with the names and contact info of sponsoring faculty. Applications should describe the goals of the proposed usage and what exactly will be built (including a 3D CAD model). Students should clearly indicate if they believe the work will require the use of the rapid prototyper or professional machining. Design and other class-related project groups are particularly encouraged to apply. Applications will be judged on the level of preparation and reasonableness of the proposed use.

Interested groups are strongly encouraged to meet with Dr. McCue, Mr. James Lambert, or Mr. Scott Patrick in the AOE shop to visit the facilities and discuss their needs before submitting their application. Mr. Lambert and Mr. Patrick have office hours for students between 2-3pm weekdays. For rapid prototyper jobs, please include the following information:

- Model Material Expected Usage: grams X .25=\$
- Support Material Expected Usage: grams X .13=\$
- Simulation number (presuming a simulation of the job was run with Mr. Patrick prior to proposal submission)

Recipients are required to submit a final poster showing the CAD model and final part developed.