

**ME 363**  
**[Lab #11] Freeform Fabrication**  
**2 week assignment**

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This week's laboratory assignment involves freeform fabrication. You will be using the Laser Stereolithography machine in ME120 to fabricate this part. Your creativity is needed! The objective is to select a part that will be difficult to make by other manufacturing processes and design it using either PRO-E or IronCAD. The three dimensional drawing file you generate must be converted to STL format for processing. Your part may not exceed 2" by 2" by 2" in size. In the report the following items must be included.

1. Design drawings of the part and part components.
2. Rationale for selecting this part for the freeform fabrication process, including any potential applications.
3. Any comparison with alternative processes in terms of manufacturing cost would be desirable.

Once you create the part drawing and convert it to STL format, store it in a 1.4" floppy diskette and bring it to room ME120. The file will be loaded to the machine controller by Mike Sherwood.