

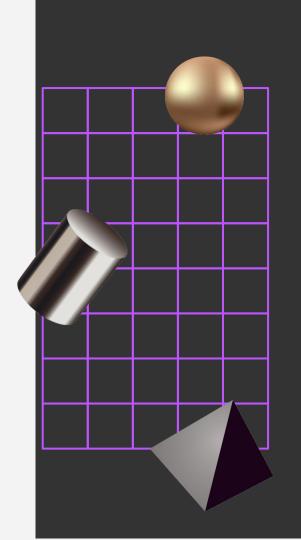


Final Presentation

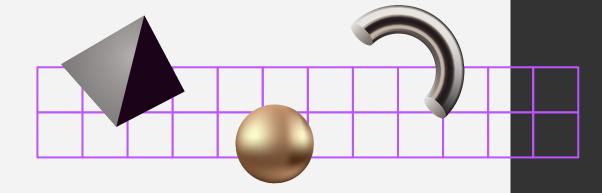
Alex M., Brady C., Christine R., Christine Y., Bryant N., Emely B., Darcy M.





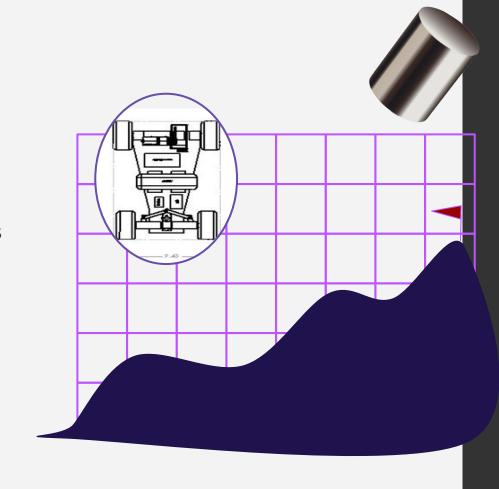


Objectives



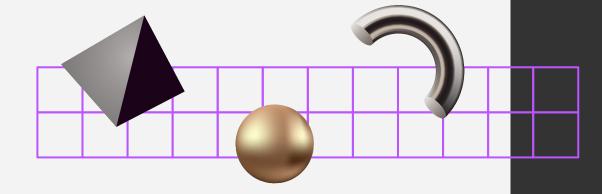


- ✓ Design and fabricate a rover
- ✓ Create rover under the parameters
 - -10 inches wide
 - 16 inches long
 - \$275
- ✓ Complete an obstacle course





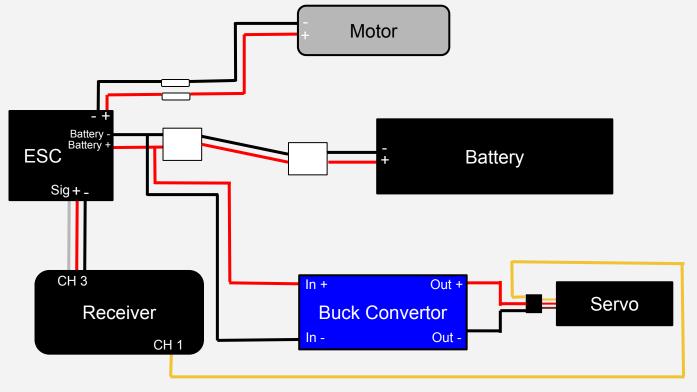
Ø2 Final Design



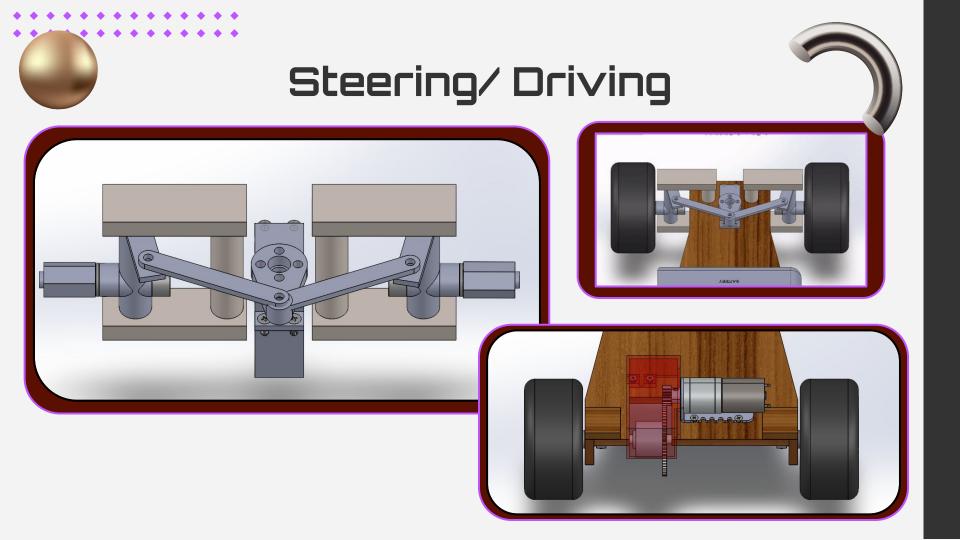


Wiring Diagram

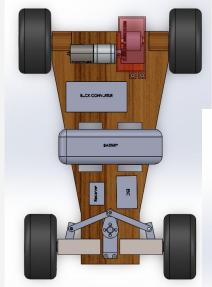


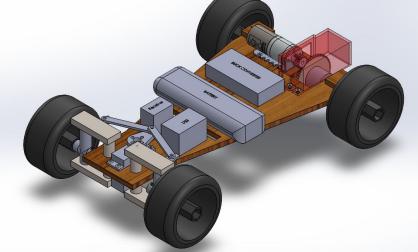


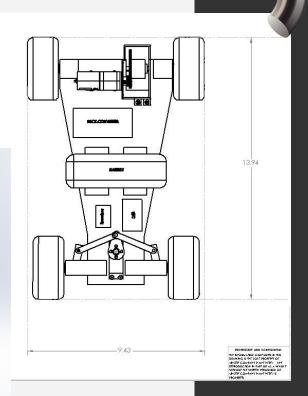




CAD DESIGN

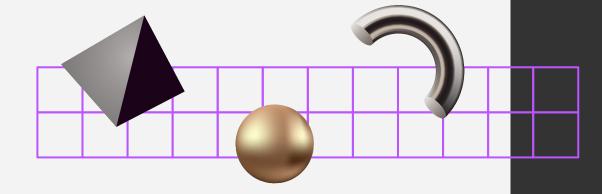




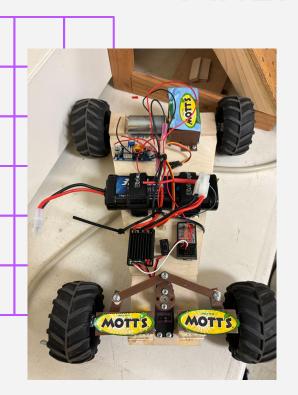




Final Results



Final Results



- Fulfills the project requirements
- Completed the preliminary course with a time of 26.75 seconds
 - Finished 8th out of 56 groups
 - Completed the final course with a time of 46
 - Finished 6th out of top 10 groups

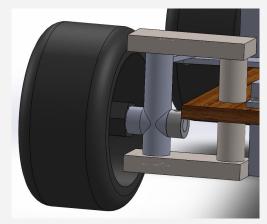


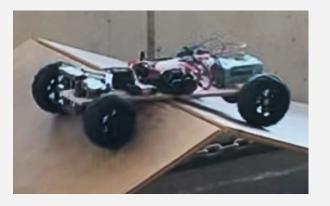


Final Results

Flaws in design

- Faulty glue connections
- Slight wobble in wheels
- Friction in steering system
- Chassis to long
- Large gear ratio

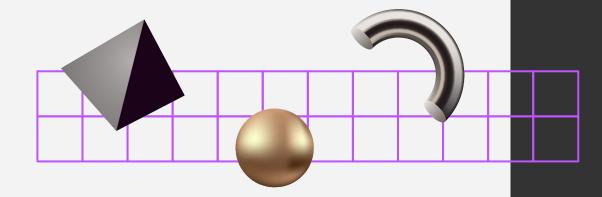








Parts List and Budget

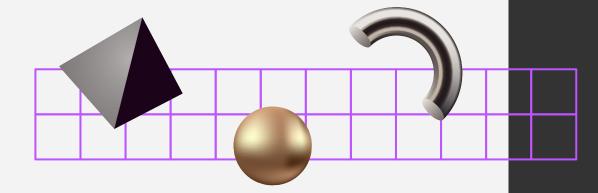


Parts/ Budget

Budget: \$275

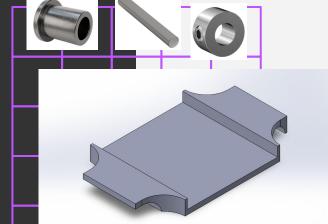
| All required parts including our choices of wheels and gear (\$204.14) | \$204.14 |
|--|----------|
| 16" x 12" x 1/4" Plywood for Chassis and rear wheel mounts (\$2.78) | \$2.27 |
| 7 Hours of 3D printing for steering system and gearguard (\$28) | \$28 |
| Total (after tax): | \$253.13 |

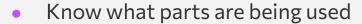
Lessons Learned











- Before designing system, find out what each part is for
- Put every part in CAD
- Keep things simple
 - Easy fabrication
 - Plan material
 - Least possible complexity



Thank You:)



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