

## Hull Design

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### Project Summary

Ever since 2012, the Solar Racing Team used composites to make its hull. Composites proved to be a lighter material to use when manufacturing the hull. The carbon fiber hull has been a great success and defined the team in many different manners. However, this hull currently gathered a lot of wear that creates unnecessary constraints on the other projects on the boat. The main goal of this project to design and manufacture a new hull and keep reaching for the win during competition

### Requirements

- Made with composites
- Hull must be able to flow on water with 500 pounds on it
- Optimize hull shape to earn the Solar Racing Team the most points during competition
- Hull must be able to store safety equipment
- Hull must be able large enough to mount essential projects (Steering, Drivetrain, Batteries, Solar Panels...).

### Learning Capabilities

- CAD modeling with SolidWorks
- Geometric fluid mechanics
- Computational Fluid Dynamics
- Wave studies
- Composites, Carbon Fiber, Structural Engineering

### Hull Design Team Information

The hull design team meets every Friday 10AM to 11AM at Heavy Engineering room 002.

