

FAMU-FSU Engineering

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Objective

Design and manufacture a human powered vehicle to traverse exoplanetary terrain.

Background

During the Apollo 14 lunar mission astronauts struggled to traverse through lunar terrain on foot. The rover competition provides students with the opportunity to design a human powered rover for future lunar missions.

Design Requirements

- Completely human powered
- Fit within 5 x 5 x 5-foot landing bay
- Full assembly in under 2 minutes
- Ground clearance > 12-inch
- Traverse uneven terrain with 5-foothigh hills and 30-degree inclines

Validation

The rover will be driven through 3 obstacles with varying terrain. Each obstacle simulates a type of lunar terrain.

The speed, stability, and handling of the rover will be evaluated.





NASA Human Powered Rover

