

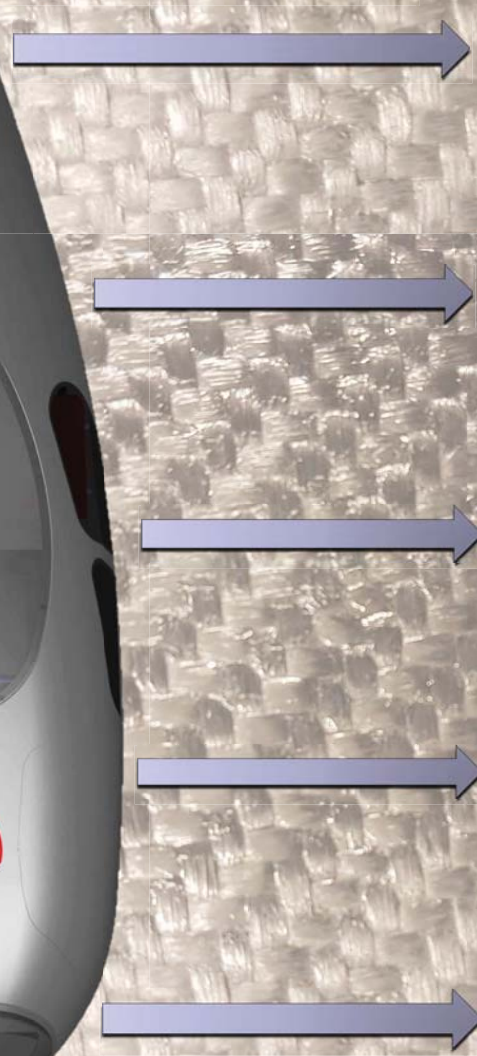
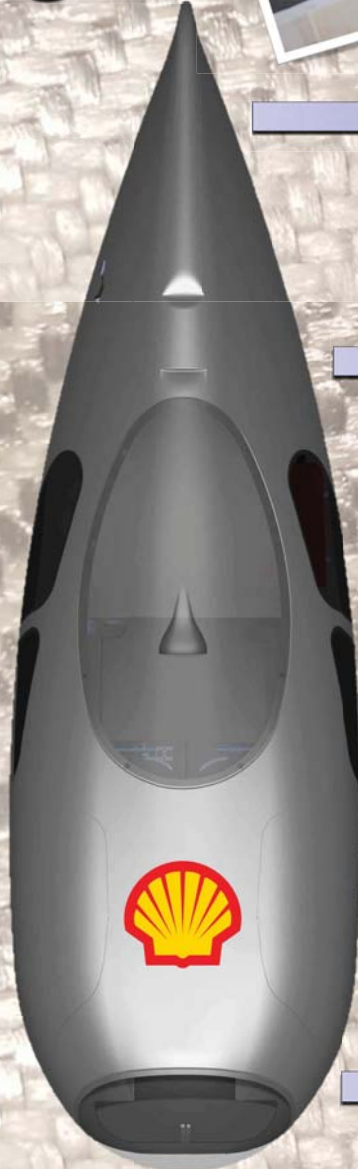
UCLR Shell Eco-Marathon

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Supervised by Dr. Tim Baker and Dr. Nelia Jurado Pontes



Compete against other institutions for ultimate fuel efficiency



Specifications



40 kg

Race-Ready Weight

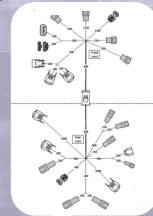
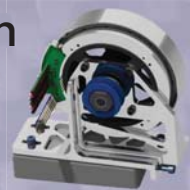


650 km/m³ H₂

Fuel Efficiency

Streamlined Powertrain

- Lightweight, efficient motor that handles variable input voltage
- Removes need for heavy and inefficient DC-DC converters

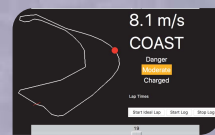


Electrical Network

- Two centralised assemblies to separate the powertrain system from the auxiliary system
- Robust structure and improved accessibility

NACA Duct

- Incorporated into an existing passive ventilation as an outlet
- Displaces 20 litres of air per second
- Induced chimney effect reduces temperature and fogging



Telemetry System

- On-board telemetry system
- Displays pertinent race data to the driver
- Stores important data for post-processing

Simulation

- Improved simulation models to predict performance along track
- Based off of empirical values

