

# Solar Car - Apollon

Student: Solar Car Team Apollon

Programme: CE, ECE and MBE

Supervisor: Prof. Henry Chung, Dr. Ricky Lau

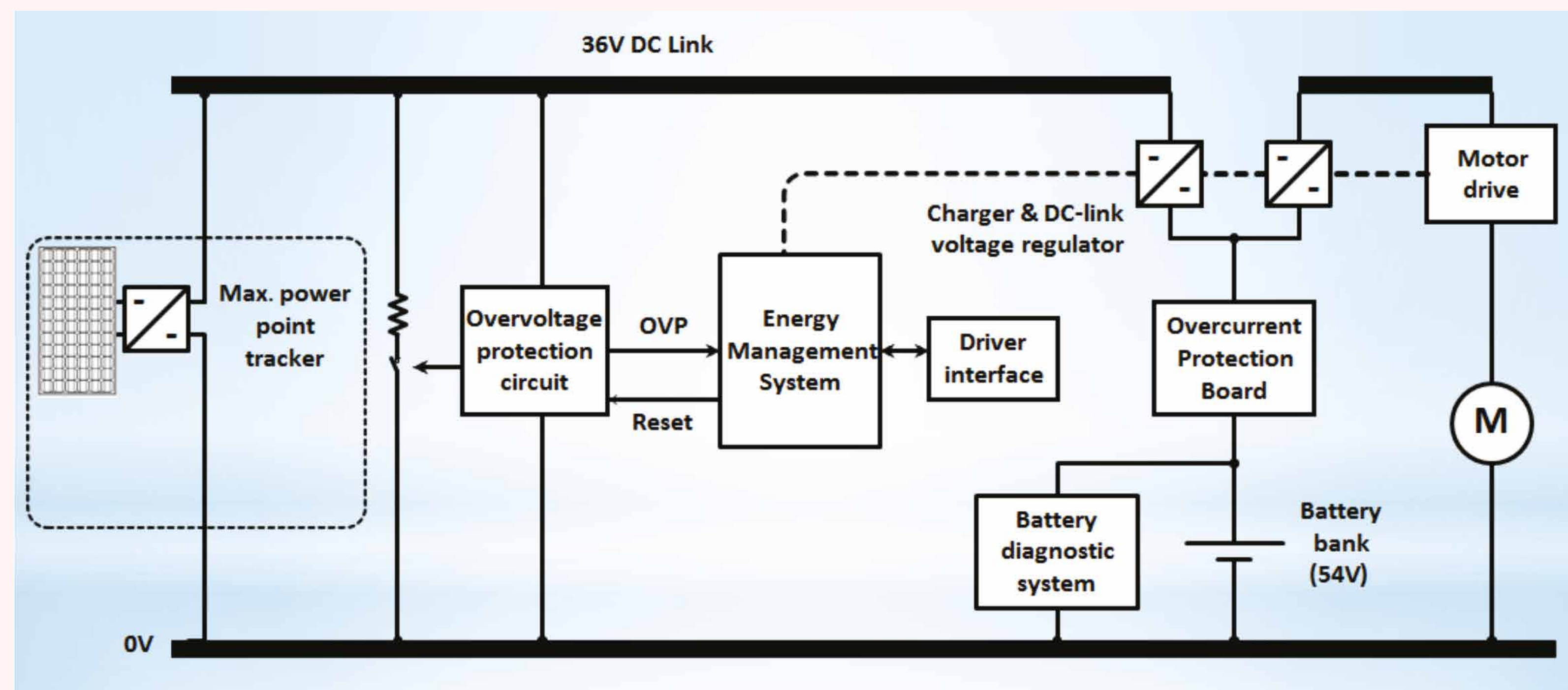
## Background

- A vehicle uses solar energy with zero cost and without air pollutants.
- With aerodynamic considerations and carbon fibre to reduce its weight to minimise energy consumption.
- Intelligent circuit to maximise the energy efficiency of the entire vehicle.

***Apollon is a true solar powered vehicle  
that can run on sunlight  
without battery***



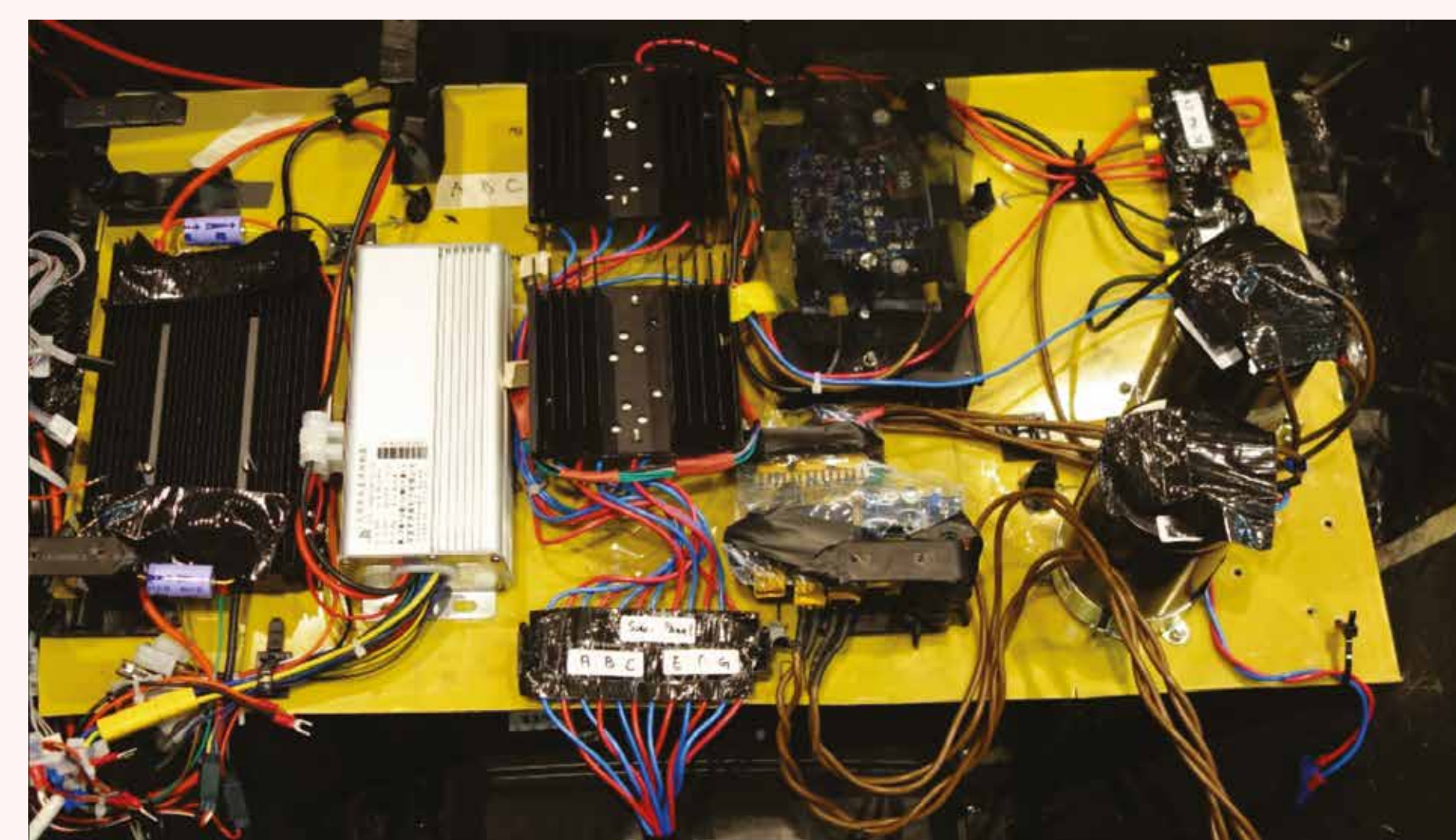
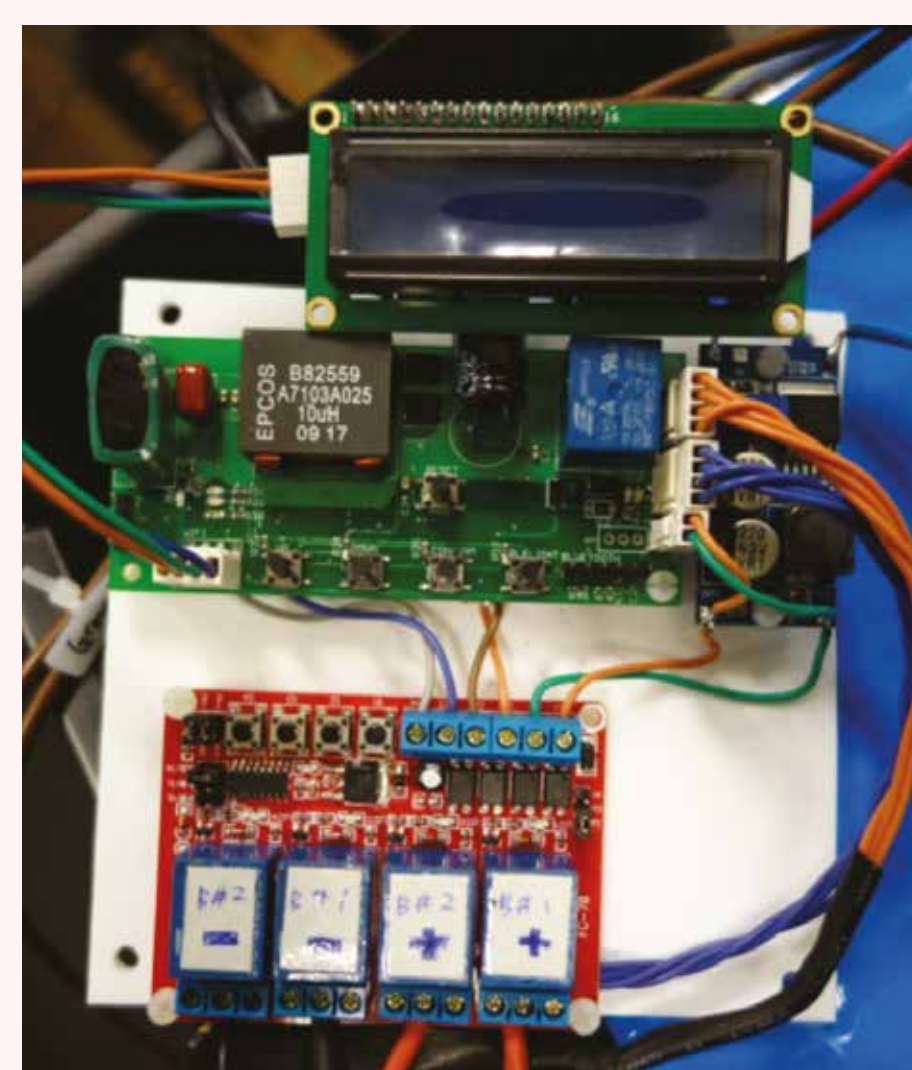
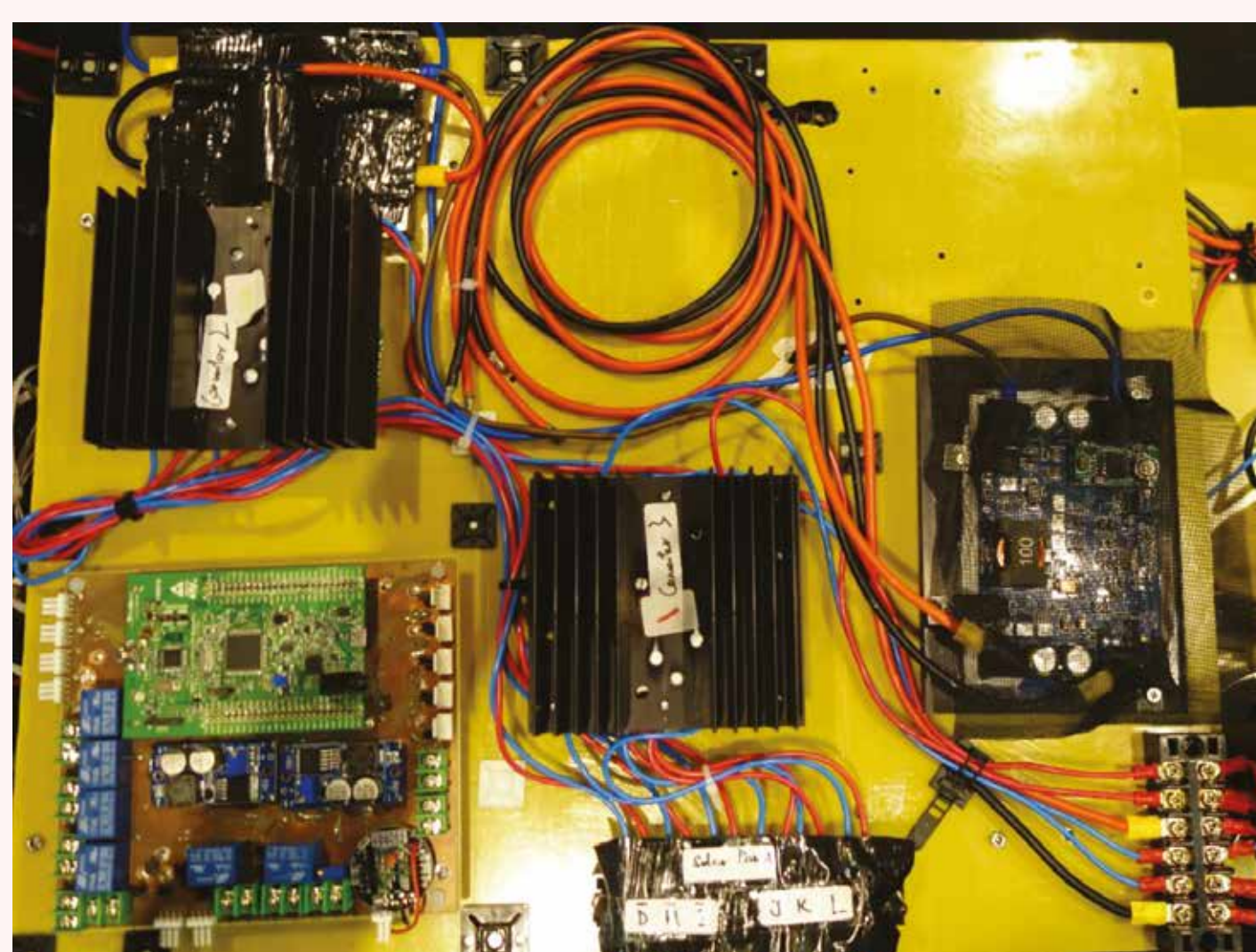
## Electrical System



## Innovative Features

- Energy management of the solar panels, charge controllers, motor drive
- Maximum power extraction from the solar panels under partial shading condition
- Battery health diagnostic system

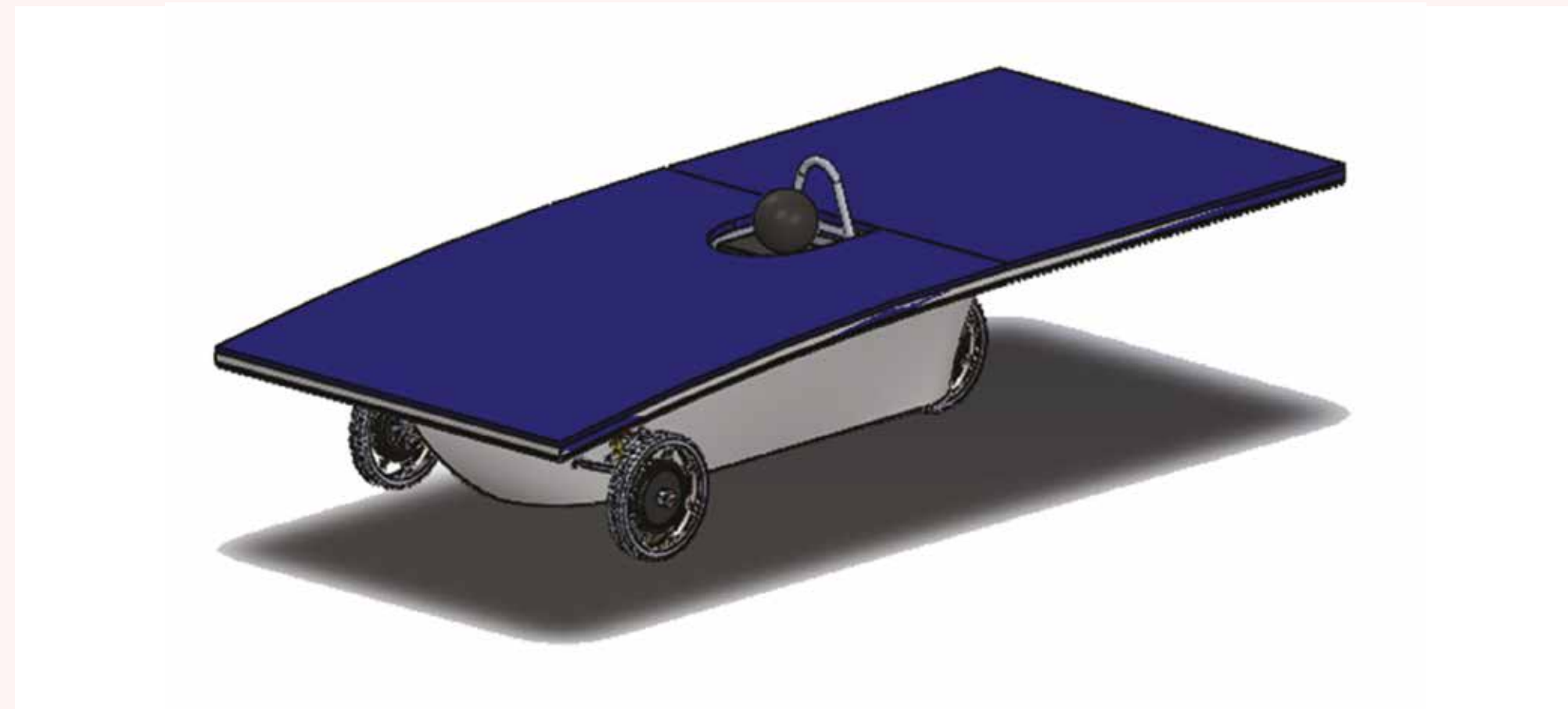
## Electrical System



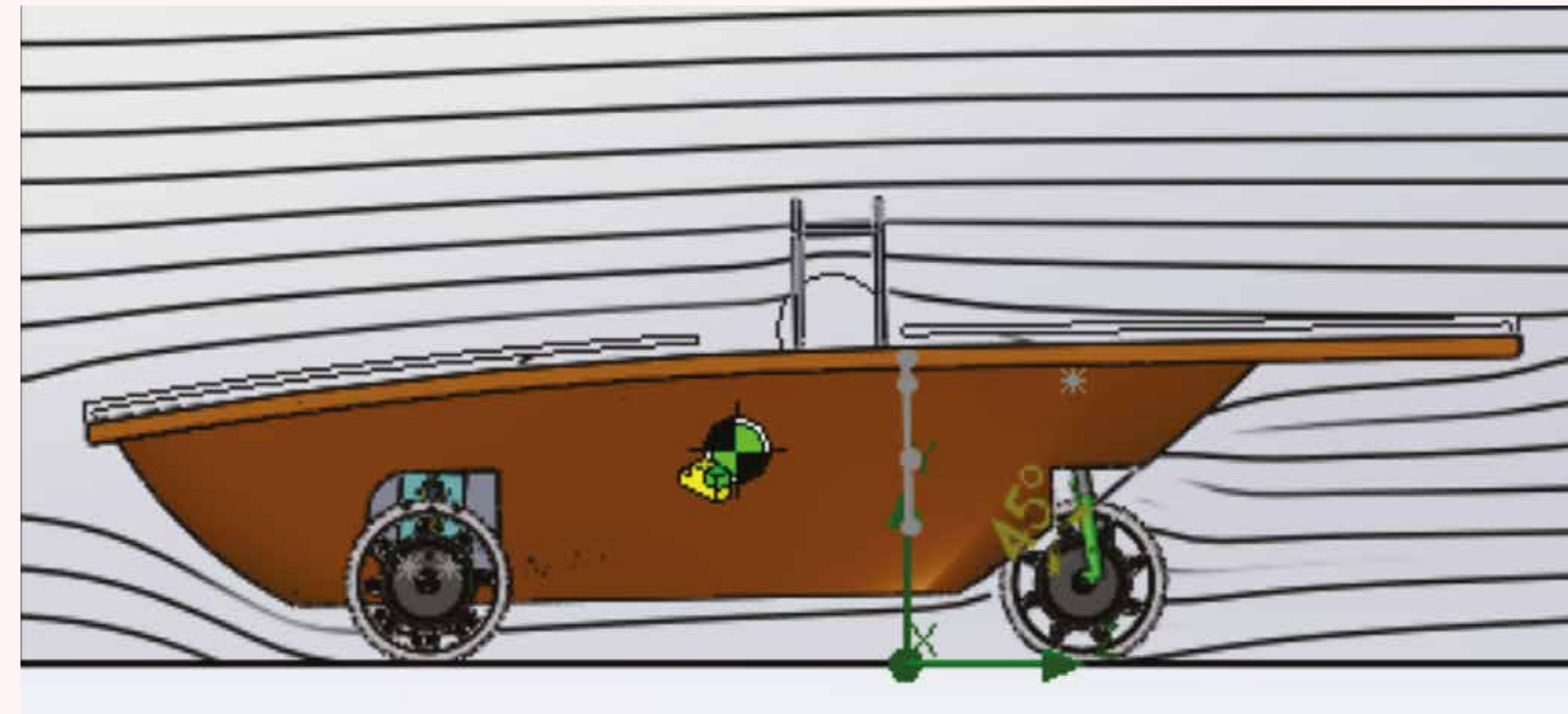
## Energy Capture



Department of Mechanical and Biomedical Engineering



1. Computer Aided Design



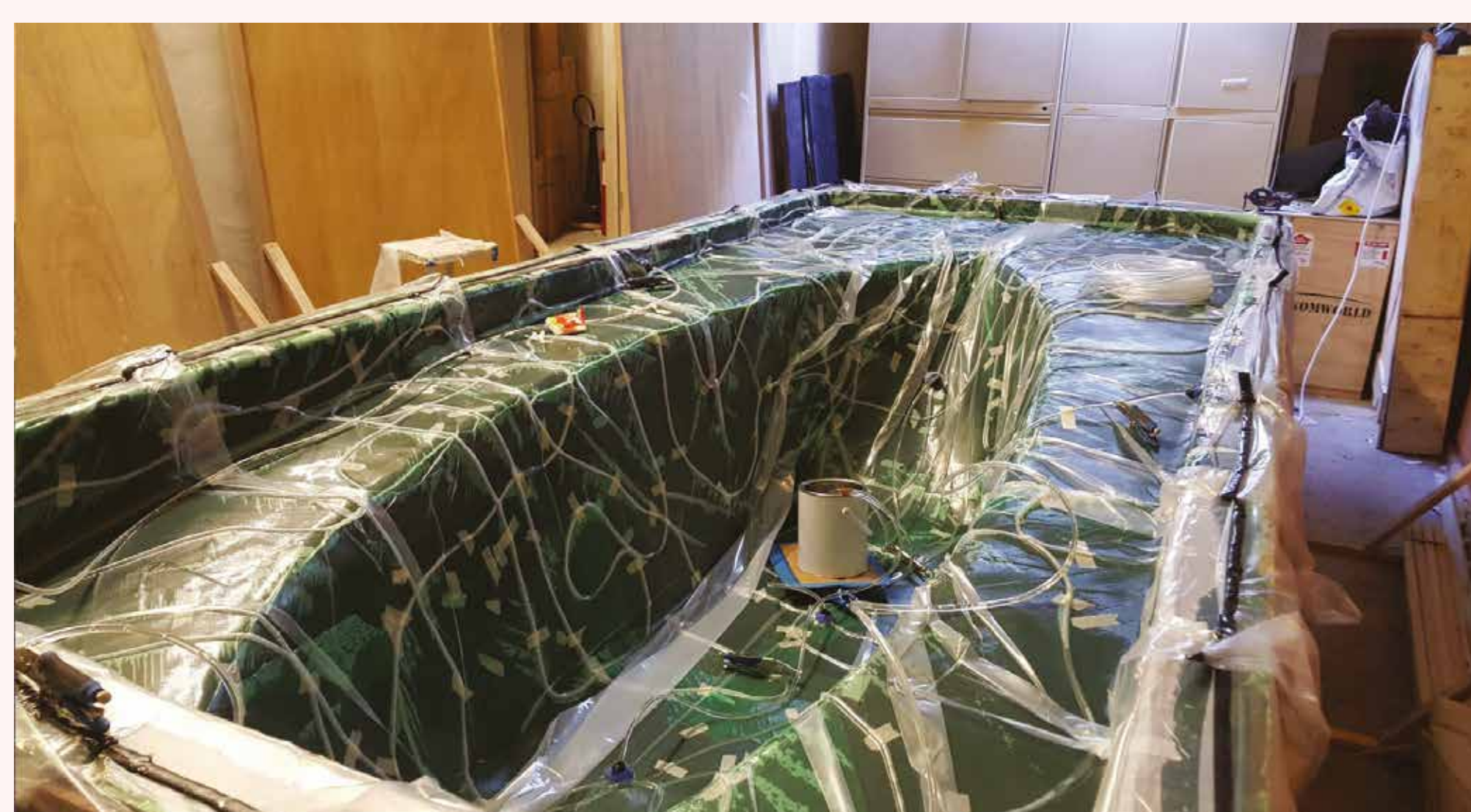
2. Flow Simulation



3. Fiber Glass Mold



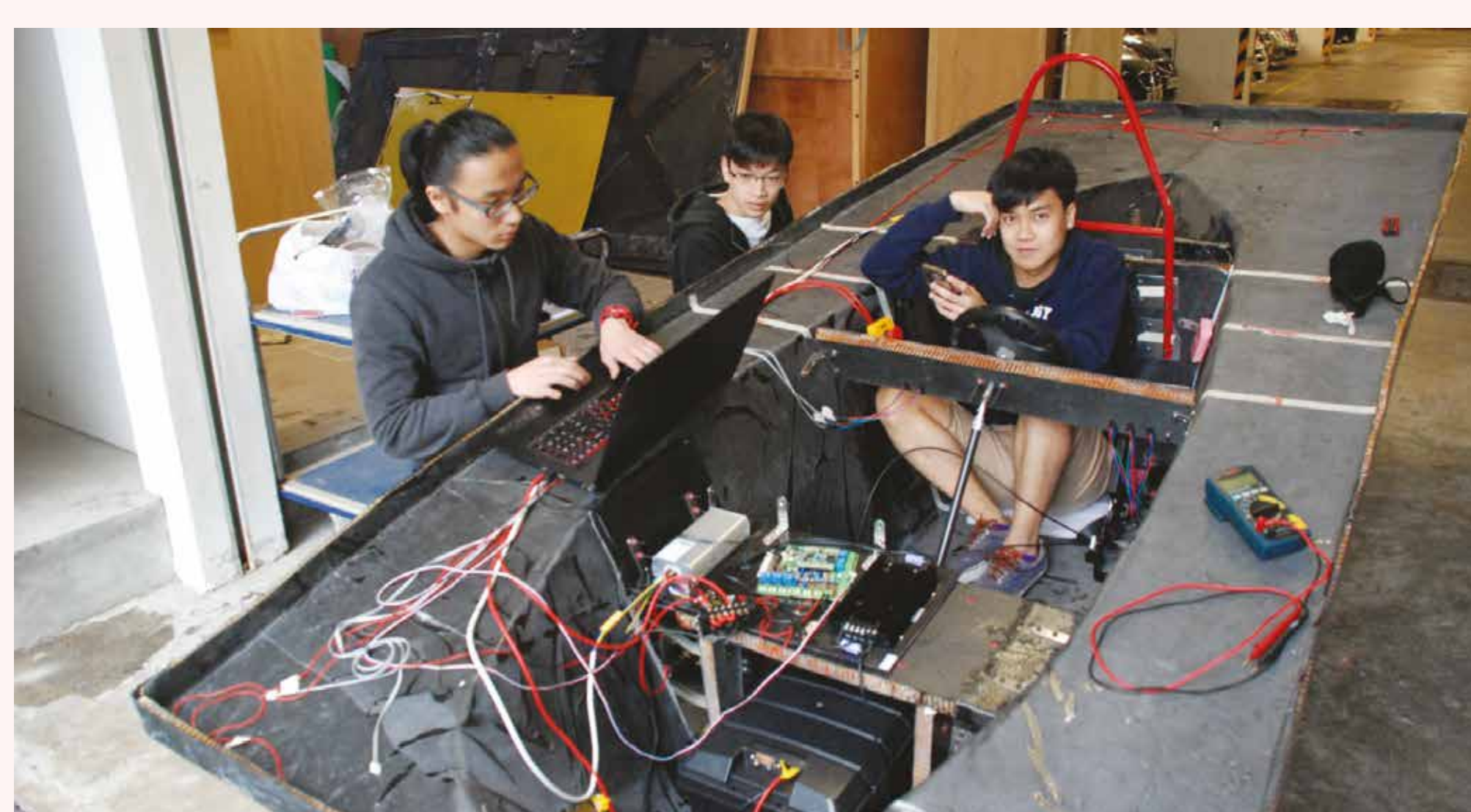
4. Carbon Fiber Chassis



5. Vacuum infusion



6. Solar Panel



7. Interior



8. Solar Car - Apollon