

Project I Description

Project Name: Design of a Four Seater Carcycle

Project Overview

A four seater Carcycle is a human powered vehicle which can host up to four cyclists. The gearbox of this device is carefully designed such that the efforts of all four cyclists are separately added to propel the car forward. The carcycle should be equipped with a mechanical energy storage system which is used to store energy when it is moving down the hill. The stored energy will be used to help propel the vehicle forward when needed.

Project Areas

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| <ul style="list-style-type: none">Mechanical Design (2 Student) | <ul style="list-style-type: none">Kinematics (2 Student) |
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Team Size and Majors needed

MEE: 4 students

Project Deliverables

Project should consist of the following:

- A CAD drawing of the design.
- Simulation of the prototype.
- Design of the gearbox of the vehicle.
- Design of the mechanical energy storage system.
- Stress analysis using commercial finite element software.
- Actual vehicle to be tested on the road.

Advisors: Drs. Ramy Harik and Jimmy Issa

Students:

Mohammad assem
Ibrahim Berjawi
Mohammad Sherry
Reef Khairallah
Gebran Dabbak
Christian Adib
Charbel Hajj
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