Project I Description

Project Name: **Design of an Energy Efficient Human Powered Cycle**

Project Overview	
Human powered cycles have always been a cheap and clean mean of transportation. The aim of this project is to design a human powered cycle (bicycle or tricycle) equipped with an energy storage device that will store energy lost due to braking. This energy will be used to help the driver propel the cycle forward especially during the startup/acceleration phase or when driving up a slope.	
Project Areas	
• Mechanical Design (2 Student)	• Kinematics (2 Student)
Team Size and Majors needed	
MEE: 4 students	INE: 0 student
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 energy storage device. • Stress analysis using commercial finite element software. • Actual vehicle to be tested on the road.	