EFFI-CYCLE is an initiative of SAEINDIA Northern Section, with the objective of providing an opportunity for the students, to explore the “Environment Friendly and Economical” solutions for the day-to-day mobility needs of people. The event task is to conceive design and fabricate a prototype of a three-wheel configuration vehicle, capable of seating two passengers and powered by human and-electric hybrid power.  
  
I led the design of the university vehicle to compete in SAE North India Efficycle 2013, key responsibilities included:  
  
• Took responsibility for team formation and recruitment, Planned Design & Execution, Allocated resources and defined deliverables to sub-teams.  
• Chassis Design: Designed a tubular frame chassis complying with rules of the competition, and for stiffness and strength requirements for handling and safety.  
• Suspension Design: Designed a swingarm suspension-Rear. Performed kinematics, handling, and structural analysis.  
• FEA: Performed structural analysis and optimization for chassis, suspension, and mounting components of the car to perform under conditions encountered in the competition.

Additional Details: <https://seelio.com/w/3rjj/hybrid-tricycle-sae-north-india-efficycle-competition>