

Plan Of Approach

INTRODUCTION:

This document functions as the plan of approach for the design and development of a small solar vehicle (SSV) towards the EE4 Electromechanics project for GroupT. That will need to be approved by the coach and the Umicar Solar Team as the customer.

Goals:

- The key objective is to build a miniature functioning prototype of a solar car.
- The team obliges to come up with a design of a SSV which is the most efficient, stable and innovative model feasible within the given time.
- On Friday 14/02 the team presents the basic information regarding the activities for the coming weeks in a primary documentation. This documentation is handed in in the following weeks necessary changes will be made to the plan.
- In week 3 Team will optimize the basic design based on the study on gear ratios and test it in Simulink interface for its strengths and weaknesses.
- In Week 5 the team the prototype is subjected to testing and a final report will be handed in to the coach, Consecutively takes part in the Solar car Race
- Furthermore all team members agree to participate in the development of SSV with their best efforts.

Contractors:

Mr. Hu Yunhao will be the coach, a representative from the Umicar Solar Team and GroupT as our client. The team AM8, also called as "Light Angel".

Team Members:

- Mingqian Zhu (Team Leader)
- Kaiyu Yang
- Yu Chen
- Meghashyam Adurti
- Shaik Jasmine Sultana
- Manaswini Tamalapakula

Limitations:

- The major set backs of the construction of SSV are as follows
- Firstly the time factor, in a duration of 6 weeks it is a highly challenging task to design a complete fully functioning SSV. Along with the study plan of Group T, each team member must put in 300 hours on this project approximately, with predefined project deadlines. An in-depth technical know-how has to be acquired by every individual team member towards the successful completion of the task and achieve positive results.
- The final racing conditions also show a significant impact on the performance of the vehicle. This might comprise of weather, track and miscellaneous.
- Financial constraints also do come into consideration, as the team allowances towards the project are set to a maximum of € 300.

Suppositions:

The team is looking forward for completion of the SSV with complete coordination and collective effort towards the objectives ahead with the encouraging support and guidance's from our coach Hu Yunhao.