# **Project Diary**

## September

- Week 1 Title Selected on the topic of Lower Control Arm.
- Week 2 Research done on the selected topic.
- Week 3 Searching and studying various research papers on the topic.
- Week 4 Market Research to find the required Lower Control Arm.
- Week 5 Market Survey and Purchasing of the Lower Control Arm.

#### October -

- Week 6 Inspecting and finding out the required dimensions of the Lower Control Arm.
- Week 7 Taking out the measurements with the required tools and equipment.
- Week 8 Prepared Draft for the Lower Control Arm.
- Week 9 Started to prepare 3D Model of Lower Control Arm on Catia
- Week 10 Completed preparing model on Catia and Solidworks.

## November - Ansys 1

- Week 11 Started to prepare Ansys on the Lower Control Arm.
- Week 12 Learnt how to prepare a Ansys analysis.
- Week 13 Solved the problems regarding model in Ansys.
- Week 14 Started applying conditions on the model.
- Week 15 Prepared Ansys for the existing component.

### December - UTM 1

- Week 16 Searched for a Universal Testing Machine and its equipment in nearby location.
- Week 17 Found a Universal Testing Machine and inspected how to mount the Lower Control Arm.
- Week 18 Started preparing a mount on the Lower Control Arm.
- Week 19 Prepared the mounting for the Lower Control Arm.
- Week 20 Testing done on the Universal Testing Machine.

- Week 21 Evaluated the results on the existing component.
- Week 22 Started applying condition on existing component in Ansys.
- Week 23 Applied the conditions on the existing component.
- Week 24 Evaluated the results for the weight reduction.
- Week 25 Prepared the dimensions and the CAD for optimized component.
- February Fabrication
- Week 26 Market Research to find the required fabricator.
- Week 27 Taking out the dimensions on the model.
- Week 28 Preparing slot on the model.
- Week 29 Drilling the required hole on the prepared dimension on the model.
- Week 30 Finishing on the work done on the model.
- March UTM 2
- Week 31 Started preparing a mount on the Lower Control Arm.
- Week 32 Prepared the mounting for the Lower Control Arm.
- Week 33 Testing done on the Universal Testing Machine.
- Week 34 Started preparing the report with the results.
- Week 35 Prepared the report on the results.
- April Report
- Week 36 Started preparing the report on entire project.
- Week 37 Collecting the required data for the report.
- Week 38 Prepared the report on the data collected.
- Week 39 Corrections done on the report.
- Week 40 Prepared the final report.