

List of Group Members:

1. Erick Stanzah (ES)
2. Nandana Lathesh (NL)
3. Simon Martin (SM)
4. Yixuan Huo (YH)

Date	In Attendance	Summary of discussions	Plan for next meeting
9/10/25	ES, NL, SM, YH	First meeting with group members, introduced ourselves to each other, and discussed which area we're strong in	Check lecture notes, papers, or other sources as starting point
13/10/25 (Morning)	ES, NL, SM, YH	Created the free body diagram, derived the Equations of Motion from it, and checked our answers with each other	Continue with Laplace Transformation and State Space Matrix
13/10/25 (Noon)	ES, NL, SM, YH	Performed Laplace Transformation on the Equations of Motion and made a State Space representation	Create a MATLAB code and Simulink model for simulation
16/10/25	ES, NL, SM, YH	Created a Simulink model from the Equations of Motion and put the variables needed in the MATLAB code	Think up of a way to validate the simulation results
20/10/25	ES, NL, SM, YH	Created a Simulink model with Transfer Functions from Laplace Transformation and another model using the State Space block	Create different ground inputs for the simulation
23/10/25 (Morning)	ES, NL, SM, YH	Coded 3 types of ground inputs in MATLAB (upwards slope, a bump on the road, and wavy road)	Do the simulation with different parameters and inputs
23/10/25 (Noon)	ES, NL, SM, YH	Did the simulations with different parameters and ground inputs	Tune the parameters to get desired results
27/10/25	ES, NL, SM, YH	Tuned the model by testing various parameter values on different ground inputs	Start writing the report and presentation
30/10/25	ES, NL, SM, YH	Wrote a draft of the report and planned for the presentation	Make the presentation slides
3/11/25	ES, NL, SM, YH	Finished the slides for presentation and did a rehearsal	Continue writing the report and MATLAB + Simulink
6/11/25	ES, NL, SM, YH	Finished and double checked the report as well tidied up the MATLAB code and Simulink model	-

During the first meeting, we created a WhatsApp group chat as our method of communication and also did tasks allocation. However, we decided that everyone should do the derivation of the Equations of Motion as it's the first question and also to keep everyone on the same page. Afterwards, everyone did their parts equally and we kept track of each other's progress during the lab or via the group chat. For long discussions, we had several group meetings outside of the lab hours. The only thing we would want to add for next time is to use a shared folder as we mostly used emails or sent the files on the group chat.