

ME 254: Compliant Mechanisms

Assigned: Apr. 7, 2023

Homework 5

Due: Apr. 11, 2023

Submit paper copies of your solution and email the codes to the instructor and the TA.

Question 1 (20 points)

Download YinSyn from (<https://mecheng.iisc.ac.in/suresh/me260/Matlab/YinSyn.zip>) and obtain the solution for one compliant mechanism of your choice of input and output specifications. Interpret your compliant mechanism as a beam-based model that can be simulated using beam-FEA codes that you already have. Submit the YinSyn result and beam-FEA results. If you are comfortable with COMSOL, please also create a model in COMSOL to validate the mechanism behaviour. The last part is not mandatory.