

Assignment No 7

(Hand-in by 28/1/25)

Repeat Assignment #6, but this time use the optimal linear time-varying gains method (Chapter 8.4) to determine the controller.

All the design requirements of Assignment #6 apply here.

Provide the following plots:

- i. 3-dimensional relative trajectory (x - y - z).
- ii. x , y and z vs. time.
- iii. Thrust acceleration vs. time.
- iv. Accumulated ΔV vs. time.

On each plot, add also the results of the previous assignments (cross product controller, linear feedback controller based on pole placement and LQR).