Computer Exercise 4  
EL2520 Control Theory and Practice

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# Minimum phase case

## Dynamic decoupling

The dynamic decoupling in exercise 3.2.1 is

Figure 1: Bode diagram of G(s) derived in exercise 3.2.1

Figure : Simulink plots from exercise 3.2.4

Is the controller good?

Are the output signals coupled?

## Glover-MacFarlane robust loop-shaping

Figure 3: Simulink plots from exercise 3.3.4

What are the similarities and differences compared to the nominal design?

# Non-minimum phase case

## Dynamic decoupling

The dynamic decoupling in exercise 3.2.1 is

Figure 4: Bode diagram of G(s) derived in exercise 3.2.1

Figure 5: Simulink plots from exercise 3.2.4

Is the controller good?

Are the output signals coupled?

## Glover-MacFarlane robust loop-shaping

Figure 6: Simulink plots from exercise 3.3.4

What are the similarities and differences compared to the nominal design?