Assignment 5

TTK4210 - Advanced Control of Industrial Processes

Sondre Myrberg

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Selecting controlled outputs

Given the cost function
$$J(u, d) = (u - 2d)^2$$

and the possible measurements of the process
$$y_1 = 0.2(u - d)$$
$$y_2 = u$$
$$y_3 = 8u - 5d$$

with the magnitude of the expected disturbances and implementations errors W_d and W_e given as
$$W_d = 1$$
$$W_e = \begin{bmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{bmatrix}$$

1.