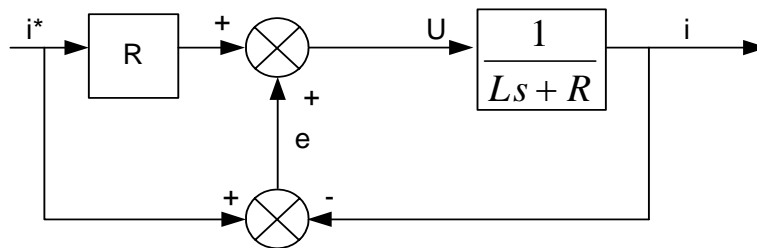# Automatic Control – EEE 2002 Tutorial Exercise V
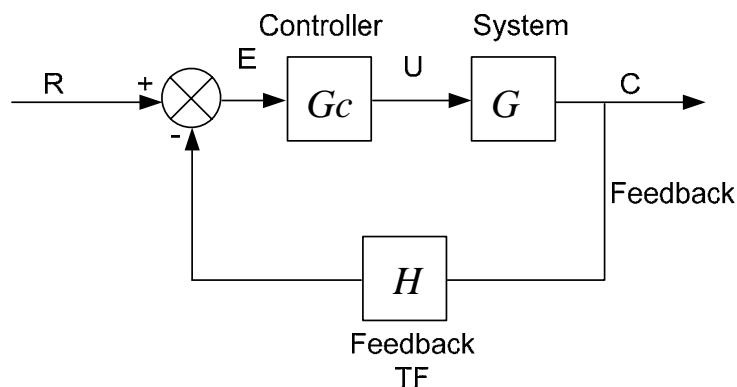
1. The RL circuit described during the lectures is to be controlled by

Simulate the system for a unit step and ramp response and crosscheck the results using the final value theorem. Monitor the value of the error and the control signal U.

See Simulink model

2. Change the control strategy to:

with $G(s) = \dfrac{1}{Ls + R}$, $H(s) = 1$, $G_c(s) = k$

For k=1, 10 and 100 simulate the system for a unit step and ramp response and crosscheck the results using the final value theorem. Monitor the value of the error and the control signal U.

See Simulink model

Detailed discussion during the lecture!