

**EE 380**

# **Linear Control Systems**

## **Lecture 27**

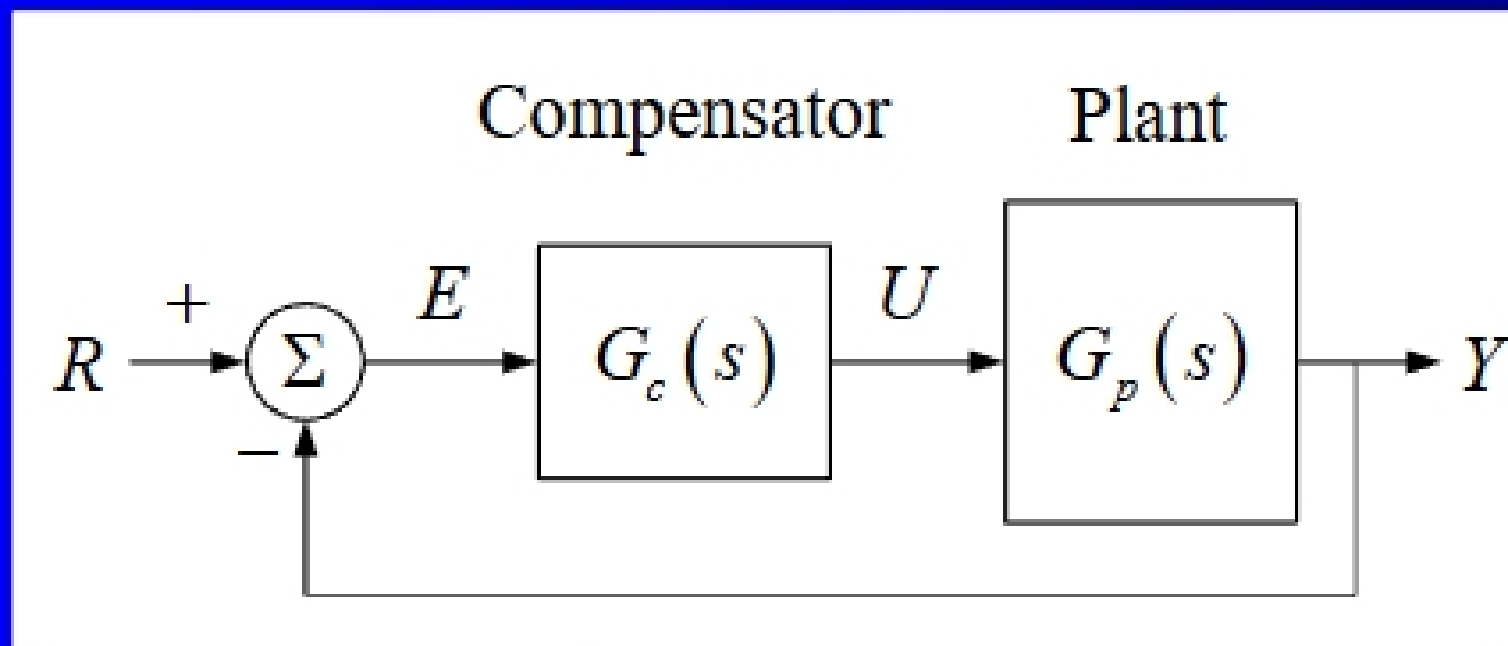
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# Lecture 27 Topics

- Determining Compensator Parameters using Root Locus
  - PD and Phase-Lead

# P, PI, PD, PID Compensators

- Three term compensator (Minorsky, 1922)



$$u(t) = K_P e(t) + K_I \int_0^t e(\tau) d\tau + K_D \frac{de}{dt}$$