Course overview
Systems theory
Real life examples
Control theory
Open-loop vs. closed-loop systems
Automatic control

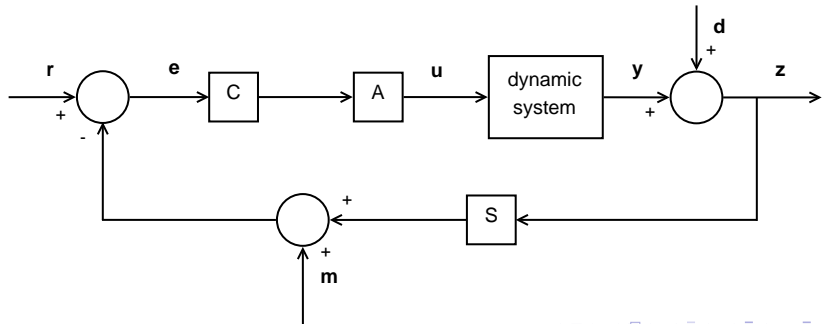# Outline

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2. Systems theory

3. Real life examples

4. Control theory

5. Open-loop vs. closed-loop systems

6. Automatic control

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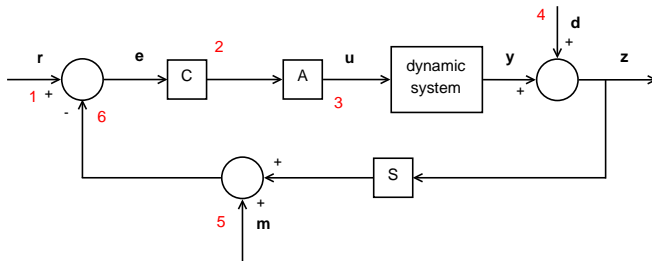Automatic control

Control theory

Control theory deals with the behavior of dynamical systems and how their behavior is modified by feedback.

The output is compared to the reference signal and this *'error'* is used by the controller to adjust the system.
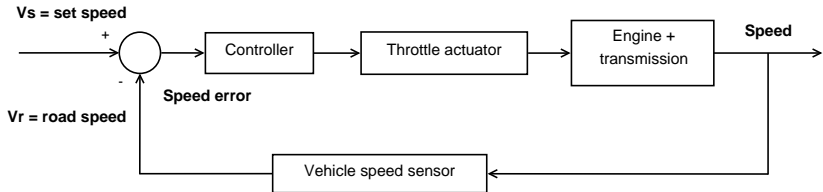
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Control theory

1. reference signals: the desired output signals
2. Controller
3. Actuators
4. Noise
5. Measurement noise
6. Negative feedback

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Example

Speed control system

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Example

Temperature control system