

SISTEM KENDALI DIGITAL

Digital Control Systems

3(tiga) SKS

- 1 SKS tatap muka RHZ (pekan 1-8)
- 1 SKS tatap muka AEU (pekan 9-16)
- 1 SKS PRAKTIKUM (pekan 9-16, LSKI)

↳ Individu } dikumpul
↳ kelompok } pada saat FINAL

Penilaian: (1) RHZ → MID (50%), FIN (50%)
(2) AEU
(3) Praktikum IND & KEL

Referensi:

- * Aström & Wittenmark
"Computer-controlled Systems"
- * <http://www.unhas.ac.id/rhiza/arip/>
Kaloah/
- * Internet keyword: Digital Control System
- Sistem Kendali Digital

Kata kunci lain:

- * Computer-controlled Systems
(Sistem yang di-kendali-kan oleh Komputer)
- * Sampled-Data Control Systems
(Sistem Kendali Data Tercuplik)
- * Discrete-time Control Systems
(Sistem Kendali waktu Diskrit)

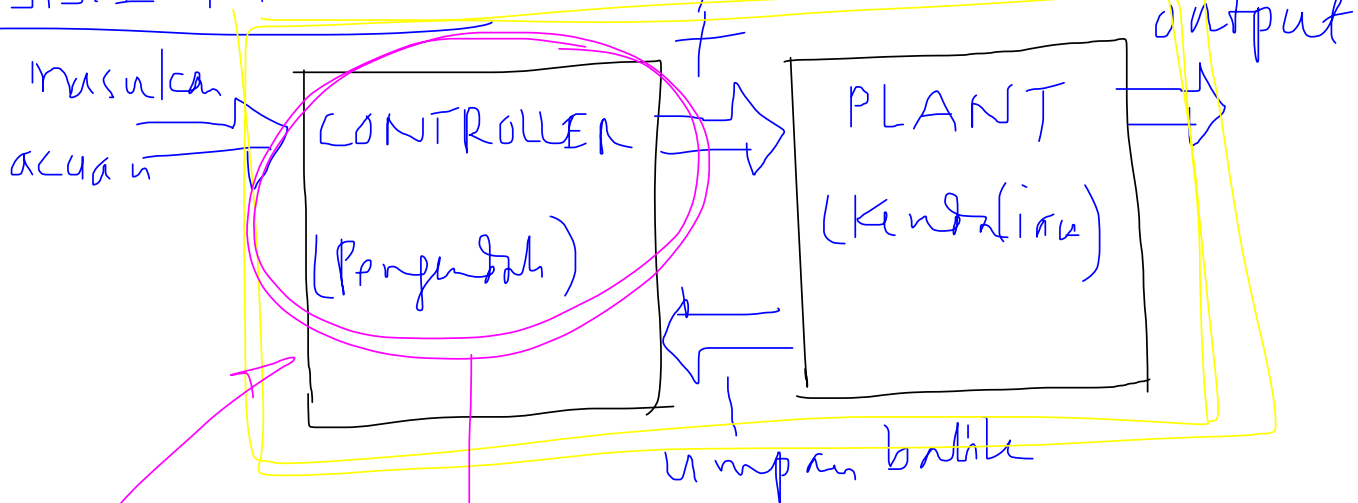
Yang dipelajari:

"Sistem Kendali Digital"
(A&W, nah?):

- * Pengetahuan ttg. PROSES (kendali, PLANT yang di kendalikan)
- * PENYUKURAN (instrumen, sensor, dll)
- * Teknologi KOMPUTER (sistem DIGITAL) (pengendali, CONTROLLER)
- * TEORI KENDALI

SISTEM KENDALI

isyarat kendali



Sistem Kendali Digital:

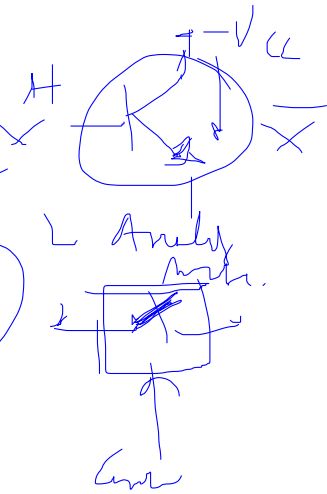
Sistem Kendali yang pengendalinya merupakan suatu sistem Digital
(DIGITAL CONTROLLER)

Digital Controller : (Contoh-contohnya)

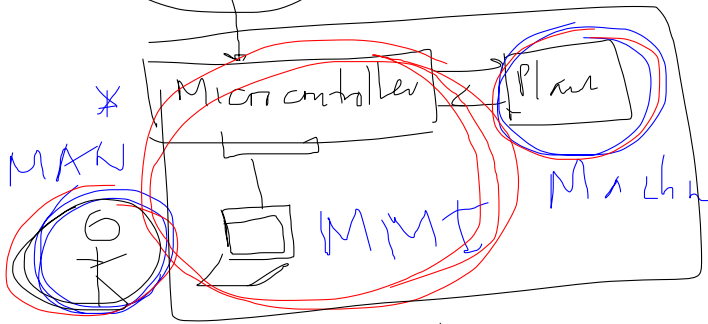
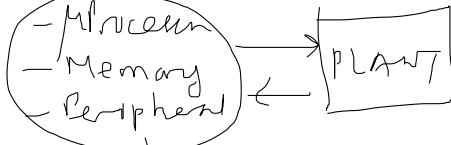
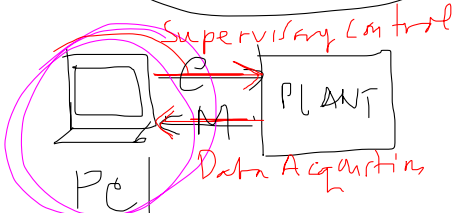
* Gerbang Logika → Rangkaian Logika
 Kombinatorik
 (clock) Sekuensial

* Rangkaian Logika + Programming
 + Memory

Relay



* KOMPUTER



* PLC
 (Programmable Logic Controller)

* DCS
 (Distributed Control System)

* APC
 (Advanced Process Control)

* MMI :
 Man-Machine Interface

* SCADA
 Supervisory Control and Data Acquisition

* Jaringan Komputer (NETWORK) * M & C

