

* UJI KETERKENDALIAN

Matrix keterkendalian
(Controllability Matrix)

$[P]$

$$P = [B \quad AB \quad A^2B \quad \dots \quad A^{n-1}B]$$

$$A = [n \times n]$$

$$B = [n \times m]$$

$$[n \times (n * m)]$$

Kendalian SEPENUHNYA TERIKENDALI
(completely controllable) jika rank(P)
sama dengan n (full-rank)

[Khusus untuk $m=1$ (single input),
 $P [n \times n] \rightarrow$ full rank jika $\det(P) \neq 0$]