**ESS Section 6**

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**Procedure.** In class, this MS Word document is written using a tablet PC. Page breaks and/or subsection headings can be moved. After class, students are offered both the modified Word document and a PDF printout of it.

# Digitalization of Analog PID Controllers

## Replacing s → z

### Backward-Euler Method

Matlab: c2d, c2d

### Forward-Euler Method

### Tustin‘s Bilinear Method

## Digital Controller

### Summation of P, I, D Control Units

Simulink: see → Model Based Design (MBD)

## References

1. *MathWorks,* available: <https://de.mathworks.com/>