

# PE Course: Introduction to Process Control

<http://www.cs.aue.auc.dk/~yang/course/2004fall/process04.html>  
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## Content

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### 1 Course Webpage

<http://www.cs.aue.auc.dk/~yang/course/2004fall/process04.html>

### 2 Textbook

- **(FC)** G. F. Franklin, J. D. Powell and A. Emami-Naeini: "Feedback Control of Dynamic Systems", Addison-Wesley Publishing Company, 1995.
- **(DC)** G. F. Franklin, J. D. Powell and M. Workman: "Digital Control of Dynamic Systems", Addison-Wesley Publishing Company, 1998.

### 3 Software

*Control Tutorials for Matlab:*

<http://www.engin.umich.edu/group/ctm/home.text.html>

### 4 Planned Content

- **MM1-5:** see Niels Erik Bdker Jensen's lectures  
[http://aaue.dk/~nbj/de5\\_control.htm](http://aaue.dk/~nbj/de5_control.htm)
- **MM6:** Modelling issues and control specifications
- **MM7:** PID Control
- **MM8:** Frequency response design methods
- **MM9:** Root-locus method
- **MM10:** Introduction to State-Space Design
- **MM11:** Control Design for Full State Feedback
- **MM12:** Control design using estimator
- **MM13:** Introduction of Reference Inputs
- **MM14:** Integral Control, Robust Tracking and LQR control
- **MM15:** Control Design for MIMO Systems