

# Dynamic Systems for Computer Science Students

## Content

Embedded system design is an important link between computer science and control theory. Further, it is often not possible to classify a problem to clearly belong to only one of these two disciplines. As such, it is a vital part of the educational process to provide computer science students with an understanding of basic engineering principles. In the lecture Dynamic Systems for Computer Science Students, we teach system and control theory basics, necessary to understand many of embedded systems applications. First, a brief survey on system models and modeling of systems is given. Next, we focus on linear systems and their most important properties, leading to frequency domain analysis and transfer functions. The lecture closes with closed loop control and in particular PID controller tuning. Exercises during the semester give, amongst others, hands-on experience in solving typical problems using MATLAB.

## Dates

Regular Dates are Thursdays 10:00-11:30, and Fridays 11:45-13:15. Exercises will be announced dynamically and take place in the before mentioned regular time slots.

The first lecture takes place on Friday, Oct 9th. All courses will take place in room 2002 (unless otherwise announced).

## Exam

The first exam will take place on Feb 13th 2013, in the time of 9:00-11:00. The second exam is on March 8th 2013, 9:00-11:00.

Take note of the deadlines for exam registration, as explained [here](#).

## contact

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