Vorlesung

Operating Systems II

Jörg Kaiser
IVS – EOS

Embedded Systems and OS

General Course Information

Lecture: Prof. Dr. Jörg Kaiser
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Exerises: Thomas Kiebel
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General Course Information

Time:
Lecture: Tuesday, 9:00 c.t.
Exercises: Monday, 15:00 c.t.; Thursday, 9:00 c.t.

Location:
Lecture: G29-307
Exercises: G29-334

Qualifications: Vordiplom, VL Betriebssysteme 1,
                            VL Technische Informatik II.

Creditpoints: 6 ECTS

**Conditions for
successful participation**: exercises, exam

General Course Information

- Exercises, information etc. will be availbale on the web.
- Slides of the course will be made available **AFTER** the respective lecture

http://ivs.cs.uni-magdeburg.de/eos/lehre/SS2005/vl_bs2/

- information is also accessable via UNIVIS

Participation requires registration on the web-page !

https://bode.cs.uni-magdeburg.de/eos/anmeldung/form_in.php

Basic knowledge from OS I

Organization of a computer from the OS perspective
Basic concepts and mechanisms of an OS
Introduction to programming on low system levels

- memory and processor abstractions
- input/output and asynchronous operations
- processes and threads
- scheduling
- concurrency and synchronization

roadmap for OS II:

- ## memory management

- ## file systems

- ## access control and protection

- ## distributed OS

Goals OS II

- Extending the basic knowledge of OS I

- Knowing the main principle problems and issues in the presented topics

- Understanding of the trade-offs and design decisions for the presented OS concepts

- Being able to assess the impact of a solution in an off-the-shelf OS

Literature:

Andrew S. Tanenbaum:
Moderne Betriebssysteme, 2. Auflage, Pearson Studium, 2003

William Stallings:
 Betriebssysteme, Prinzipien und Umsetzung, 4. Auflage, Pearson Studium, 2003

G. Coulouris, J. Dollimore, T. Kindberg:
Verteilte Systeme – Konzepte und Design, Paerson Studium, 2002

further readings will be indicated during the course