Technische Universität
Kaiserslautern

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software engineering dependability

Quality Management of Software and Systems
WS 2015/16

Welcome!

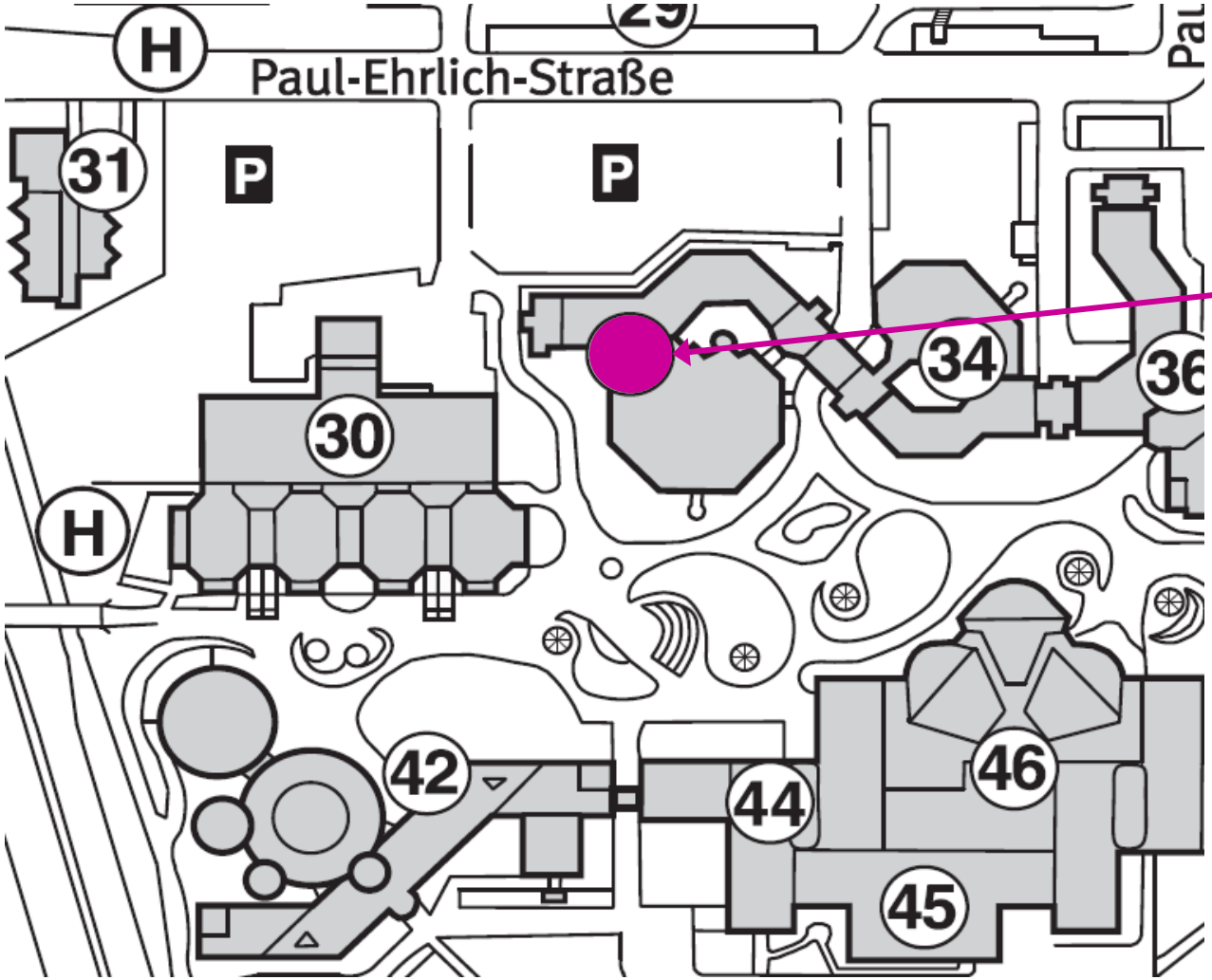
Administrative Issues

- Lecture held by the chair of Software Engineering: Dependability
  - http://seda.cs.uni-kl.de/teaching/qmss/ws2015/
- Lecturer:

  Prof. Dr. Peter Liggesmeyer
  - Email: liggesmeyer@informatik.uni-kl.de
  - Office hours on appointment
  - Room: 32-425
- Tutor:

  Sebastian Müller
  - Email: sebastian.mueller@informatik.uni-kl.de
  - Office hours on appointment
  - Room: 32-429

Administrative Issues



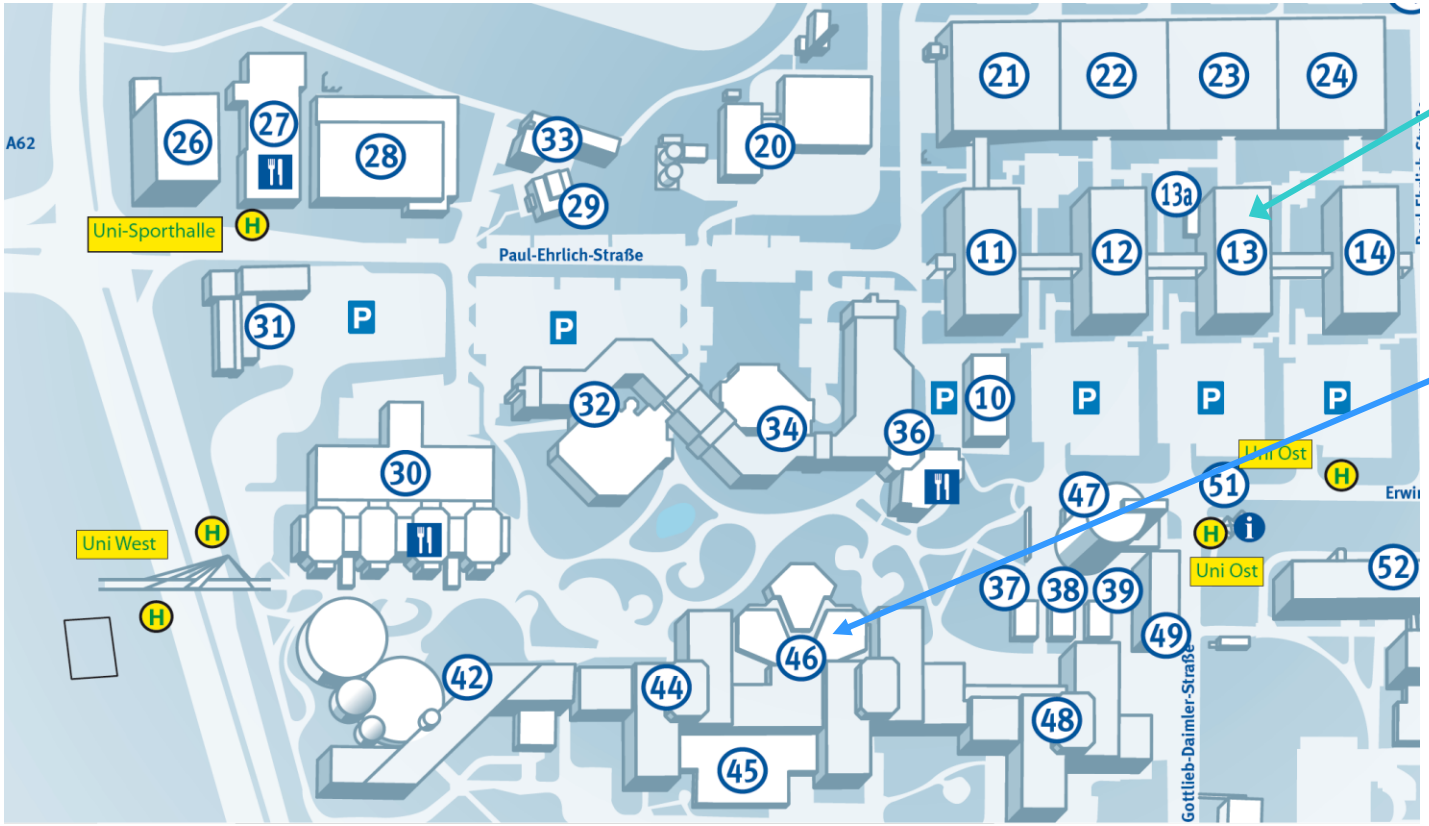
Software Engineering: Dependability

Technical University of Kaiserslautern
Building 32, 4th Floor
P.O. Box 3049
67653 Kaiserslautern
Germany

Lecture and Tutorial - Organization

- Lecture (2 SWS)
  - Held weekly
  - Monday, 08:15 - 09:45, Room 13-305
- Tutorial (1 SWS)
  - Held every two weeks (usually)
  - Wednesday, 15:30 - 17:00, Room 46-260
  - Start of tutorials: Wednesday, November 11th
- Grading by written exam (date will be announced within lecture and tutorial)

Lecture and Tutorial - Organization



Lecture and Tutorial - Material

- Lecture notes available online at
  - http://seda.cs.uni-kl.de/teaching/qmss/ws2015/material/slides/
  - In PDF format
- Exercise sheets available online at
  - http://seda.cs.uni-kl.de/teaching/qmss/ws2015/material/excercise/
  - In PDF format
  - There will be no solutions published, so it is highly recommended to attend the tutorial sessions!
  - Please note that there is no handing-in and no marking of solved problem sheets

Lecture and Tutorial - Goals

- Goals of the lecture:
  - Understand the role and importance of quality management in software and systems.
  - Get to know several methods and techniques dedicated to the quality management, e.g. TQM, QFD, QIP, GQM, etc, and understand how are they applied in practice.
  - Be acquainted with several quality standards and assessment procedures.
  - Get familiar with the construction of a quality management system.

- Goals of the tutorial:
  - Work out solutions of exercise sheets.
  - Clarification of issues/questions concerning the lecture.
  - The tutorial is not a substitute for the lecture!

Lecture and Tutorial - Topics

1. Introduction
2. Terminology
3. Continuous improvement approaches
4. Model based improvement approaches
5. Supporting techniques
6. Processes and Quality Management
7. Software process assessments
8. DIN ISO 9000 standards
9. Organization of tests
10. Software measurement
11. Quality Function Deployment (QFD)
12. Reuse