

---

## Safety and Reliability of Embedded Systems (Sicherheit und Zuverlässigkeit eingebetteter Systeme)

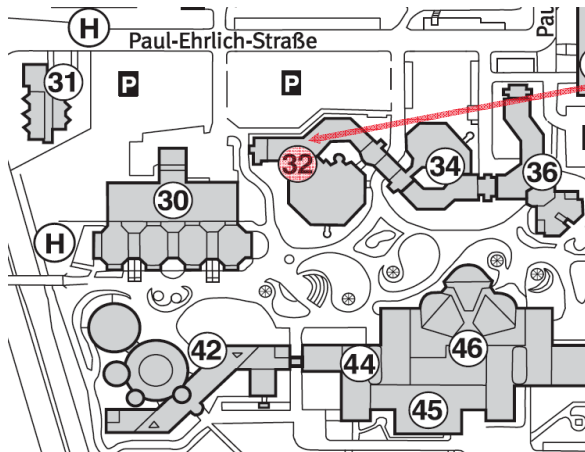
Welcome!

### Administrative Issues

---

- ☐ Lecture held by AG Software Engineering: Dependability
  - <http://agde.informatik.uni-kl.de/teaching/suze/ws2007>
- ☐ Lecturer
  - Prof. Dr. Peter Liggesmeyer
    - Email: [liggesmeyer@informatik.uni-kl.de](mailto:liggesmeyer@informatik.uni-kl.de)
    - Office hours on appointment
    - Room: 32-425
- ☐ Tutor
  - Dipl.-Inf. Gerrit Hanselmann
    - Email: [hanselmann@informatik.uni-kl.de](mailto:hanselmann@informatik.uni-kl.de)
    - Phone: (0631) 205-3449
    - Office hours on appointment
    - Room: 32-429

## Administrative Issues

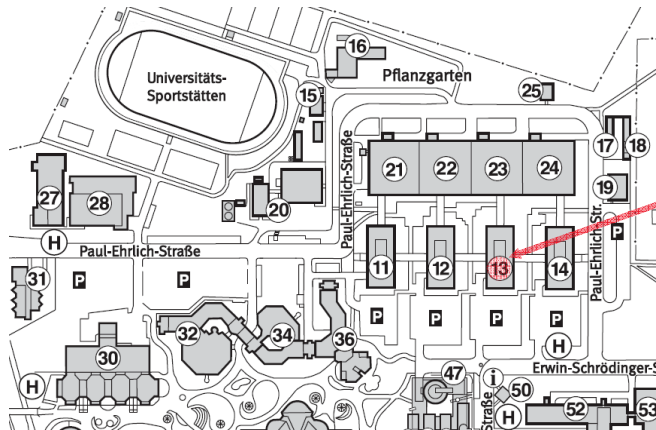


AG Software Engineering: Dependability  
 Technical University of Kaiserslautern  
 Building 32, 4th Floor  
 P.O. Box 3049  
 67653 Kaiserslautern  
 Germany

## Administrative Issues

- ☐ Schedule
  - Lecture (2 SWS)
    - Held weekly
    - Monday, 13:45 - 15:15, Room 13-305
  - Tutorial (1 SWS)
    - Held every two weeks (usually)
    - Thursday, 13:45 - 15:15, Room 13-305
    - Start of tutorials: Thursday, October 25 (only administrative topics)
- ☐ Grading by written or oral exam (mode and date will be announced within lecture and tutorial)

## Administrative Issues



Lecture and tutorial:  
Room 13-305

## Administrative Issues

- ☐ Lecture notes
  - Available online at:  
<http://agde.informatik.uni-kl.de/teaching/suze/ws2007/material/vorlesung/>
  - Format: PDF or Postscript
- ☐ Problem sheets
  - Available online at:  
<http://agde.informatik.uni-kl.de/teaching/suze/ws2007/material/uebung/>
  - Format: PDF or Postscript
  - 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

## Administrative Issues

---

- ☐ Goals of lecture
  - Get to know selected formal and stochastic techniques for safety and reliability analysis of software and systems
  - Be able to use particular analysis methods in practice

## Administrative Issues

---

- ☐ Topics
  - Introduction
  - Terminology
  - Risk Acceptance Methods
  - Safety and Reliability Analysis Models
  - FMECA (Failure Modes, Effects and Criticality Analysis)
  - Fault Tree Analysis
  - Symbolic Model Checking
  - Stochastic Reliability Analysis
  - Quality Assurance and Quality Management

## Administrative Issues

---

- ☐ Goals of tutorial
  - Work-out solutions to problem sets
  - Clarification of issues concerning the lecture
  - But: The intention is not to provide a substitute for the lecture!
- ☐ Topics
  - Same as lecture