

software engineering dependability

Quality Management of Software and Systems WS 2017/18

Welcome!

Administrative Issues



- Lecture held by the chair of Software Engineering: Dependability
 - http://seda.cs.uni-kl.de/teaching/qmss/ws2017/
- Lecturer:

Prof. Dr. Peter Liggesmeyer

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

Sebastian Müller

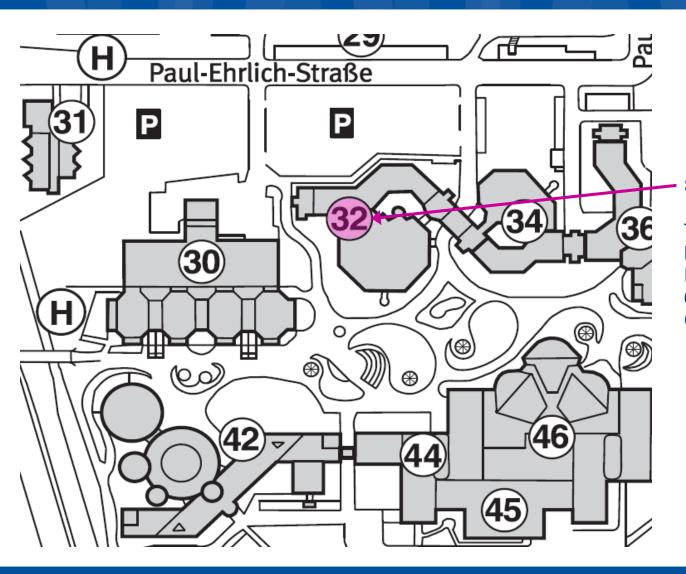
- Email: sebastian.mueller@informatik.uni-kl.de
- Office hours on appointment
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Administrative Issues





Software Engineering: Dependability

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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/ws2017/material/slides/
 - In PDF format
- Exercise sheets available online at
 - http://seda.cs.uni-kl.de/teaching/qmss/ws2017/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!

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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