Design of Reactive Systems
Summer 2001

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Organization of Course

Part 0
People

♦ Instructor
  ‣ Prof. Dr. Stefan Leue
  ‣ office: building 051, room 02-007
  ‣ email: leue@uni-freiburg.de
  ‣ phone: 203 8181
  ‣ office hour: Thursdays, 11:00 - 12:00 h
  ‣ Teaching Assistant
  ‣ Dr. Richard Mayr
  ‣ office, building 051, room
  ‣ email: mayrri@informatik.uni-freiburg.de
  ‣ phone: 203 8196

♦ Tutorial
  ‣ Thursdays, 14:00 – 15:00 h c.t.
  ‣ room 00-034, building 051
  ‣ first meet: May 3 or May 10

♦ Course Web Site
  ‣ http://tele.informatik.uni-freiburg.de/lehre/ss01/dres.htm
  ‣ copies of lecture slides will be available there in pdf format
Course Content

♦ 1. Problems of the Software Design Process
♦ 2. State Machine based Requirements Specification
♦ 3. Temporal Logic based Requirements Specification
♦ 4. Symbolic Model Checking
♦ 5. Automata based Model Checking
♦ 6. Promela and the SPIN Model Checker
♦ 7. Model Checking of Large and Infinite State Spaces
♦ 8. Application Case Studies
♦ 9. Semi-formal, Automata-based Modeling Techniques
Language

♦ The course will be offered in **English**, and all course materials and tutorials will be offered in English as well.

♦ The course is suitable for international students in the Master of Science in Applied Computer Science programme, as well as for students in our Diploma programme (Hauptstudium).

♦ During lectures and tutorials, questions can be discussed in German.

♦ The final, oral examination will be held in the language that the examinee prefers.
Course Grading Scheme

♦ Tutorials
  ‣ Assignments must be submitted and will be graded. Solutions will be discussed during tutorials
  ‣ Details to be discussed by TA

♦ Grading Scheme
  ‣ unaboteneter Schein (alte DPO)
    – obtain at least 60% of the total of all assignment marks
  ‣ benoteneter Schein (alte DPO)
    – based on obtained assignment marks
      • 60%-69%: 4 (ausreichend),
      • 70-79%: 3 (befriedigend),
      • 80-89%: 2 (gut),
      • 90-100%: 1 (sehr gut).
  ‣ course grade (neue DPO, Master)
    – assignment marks, weight: 40%, scale as above
    – final examination, weight 60%
      • oral examination at the end of term

♦ Course Weight
  ‣ 6 credits
Literature


More references to follow.