Exam

- Dates: 15. 1. 2020, 22. 1. 2020, (12. 2. 2020)
- Written test:
  - 10 questions, 75 minutes
  - Topics: see next slide
  - Allowed tools: writing materials (paper, pen), simple calculator
- Oral exam: anything related to real-time and/or embedded systems

Written test topics

- Real-Time theory (most important, high number of points)
  - RT systems modelling
  - Cyclic executives, slack stealing, off-line scheduling
  - EDF, schedulability condition
  - RM, DM: schedulability conditions and tests (utilization based, response-time analysis, $D <= T$)
  - Resource management, priority inversion, synch. protocols (PI, PCP, SRP, ...), influence on response time and schedulability analysis
  - Mixing Real-Time and Non-Real-Time (slack stealing, polling server, deferrable server, total bandwidth server, constant utilization server)
- Safety engineering (generic approach, SIL)
- C language, Coding standards
- RTOS internals with focus on VxWorks OS and its properties
- POSIX 1003.1b – what, why, how