Name of the Course: Real time embedded systems – EL 518

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Credit structure: 3-0-0-3

The motivation of the course is to introduce concepts of embedded real time systems and their implementation using software and hardware methodologies.

The software methodology covers,
- Microprocessor architecture and peripherals
- Build process
- Memory management
- Interrupts and ISRs
- Real time theory and real time operating systems

The hardware design methodology covers,
- Hardware description language based design
- Synthesis of digital circuits
- Static timing analysis and timing closure

Grading Policy

- In-semester exam 20%
- Lab and project 50%
- Final exam 30%

Recommended books:

1. Embedded real time systems programming, Iyer & Gupta, Tata McGraw Hill
2. Computers as Components, Wayne Wolf, Elsevier
3. uC/OS references from the internet