El E 385: Advanced Digital Systems

Electrical and Computer Engineering

Advanced Digital Systems: RTL hardware design using VHDL; coding, simulation, synthesis, and implementation of digital system in FPGA; combinational and sequential building blocks; timing analysis; trade- offs in design metrics; overview of transistor-level design; arithmetic circuits; number system; memory arrays; logic arrays; temporal and spatial parallelism.

3 Credits

Prerequisites

- El E 235: Principles of Digital Systems (Minimum grade: C-)
- Pre-Requisite: 24 Earned Hours

Corequisites

- El E 386: Advanced Digital Systems Laboratory

Instruction Type(s)

- Lecture: Lecture for El E 385

Subject Areas

- Computer Engineering, General
- Electrical and Electronics Engineering