EELE - Electrical Engineering

EELE 203. Circuits II for Engineering. 4 Credits. (3 Lec, 1 Lab) F,S,Su

Laboratory experience in assembly level programming of microprocessor applications.

EELE 250. Circuits, Devices and Motors. 4 Credits.
PREREQUISITE: EEE 261. Advanced combinational and sequential logic design. Laboratory experience implementing advanced logic designs using FPGAs.

EELE 261. Intro To Logic Circuits. 4 Credits. (3 Lec, 1 Lab) F,S,Su
An introductory course in the fundamental concepts of classical digital design. Course covers design and implementation of combinational logic circuits, synchronous sequential circuits and information storage circuits. Basic concepts of Hardware Description Languages (HDLs), design and simulation of digital systems using HDLs, and digital system implementation with programmable logic devices are presented.

EELE 267. Logic Design. 4 Credits. (3 Lec, 1 Lab) S,Su
PREREQUISITE: EELE 261. Advanced combinational and sequential logic design. Hardware descriptive language (HDL) programming knowledge. Laboratory experience implementing advanced logic designs using FPGAs.

EELE 271. Microprocess HW and SW Systems. 4 Credits. (3 Lec, 1 Lab) F,S
PREREQUISITE: EELE 261 and knowledge of a programming language or consent of instructor. Introduction to the structure of microprocessors, arithmetic and logic units, processor control, interrupts, memories, and input/output. Laboratory experience in assembly level programming of microprocessor applications.

EELE 508. Solar Cell Basics for Teachers. 2 Credits. (3 Lec, 1 Lab) F,S,Su
PREREQUISITES: Graduate students enrolled in EELE 508 must be graduate students admitted the MSSE degree program or have the permission of the instructor to take the course. There are no prerequisite courses for EELE 508. This graduate course introduces the concepts of the design, fabrication and operating principles of solar cells and how they are integrated into photovoltaics systems. The course contains a laboratory experience where the graduate students perform the steps required to produce and characterize silicon solar cells.

EELE 509. Power System Analysis. 4 Credits. (3 Lec, 1 Lab) F,S,Su
PREREQUISITE: M 166Q or M 172Q and PHSX 207 or PHSX 222. Introduction to the operation of DC and AC machines. Power electronics; introduction to electromechanical energy conversion devices, and Fourier Transform techniques in circuit analysis; basic R-L-C and op-amp filters; two port networks.

EELE 261. Intro To Logic Circuits. 4 Credits. (3 Lec, 1 Lab) F,S,Su
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EELE 267. Logic Design. 4 Credits. (3 Lec, 1 Lab) S,Su
PREREQUISITE: EELE 261. Advanced combinational and sequential logic design. Hardware descriptive language (HDL) programming knowledge. Laboratory experience implementing advanced logic designs using FPGAs.
Font Notice

This document should contain certain fonts with restrictive licenses. For this draft, substitutions were made using less legally restrictive fonts. Specifically:

Times was used instead of Adobe Garamond Pro.

The editor may contact Leepfrog for a draft with the correct fonts in place.