

# E ELE - Electrical Engineering

**E ELE 203. Circuits II for Engineering. 4 Credits.** (3 Lec, 1 Lab) F,S,Su  
**PREREQUISITE:** E ELE 201, M 274. Natural and forced response of R-L-C circuits, frequency response of R-L-C circuits and Bode plots, frequency response, slew-rate and DC imperfections of real op-amps; Laplace Transform, Fourier series and Fourier Transform techniques in circuit analysis; basic R-L-C and op-amp filters; two port networks.

| Term                 | CRN   | Section | Session/Dates  | Days | Location  | Time             |
|----------------------|-------|---------|----------------|------|-----------|------------------|
| 2020 Summer Semester | 10512 | 001     | May-start: 4x4 | MTWR | -         | 9:00am - 11:00am |
| 2020 Summer Semester | 10513 | 002     | May-start: 4x4 | MTWR | COBLEI602 | 1:00pm - 4:00pm  |

**E ELE 250. Circuits, Devices and Motors. 4 Credits.** (3 Lec, 1 Lab) F,S,Su  
**PREREQUISITE:** M 166Q or M 172Q and PHSX 207 or PHSX 222. Introduction for non-majors to electrical circuit principles, voltage and current laws, frequency response; introduction to electronic circuits including operational amplifiers, and power electronics; introduction to electromechanical energy conversion devices, DC and AC machines.

| Term                 | CRN   | Section | Session/Dates      | Days | Location  | Time              |
|----------------------|-------|---------|--------------------|------|-----------|-------------------|
| 2020 Summer Semester | 11217 | 001     | First Half Session | MTWR | ROBERT210 | 8:00am - 8:50am   |
| 2020 Summer Semester | 11217 | 001     | First Half Session | MTWR | ROBERT210 | 10:00am - 10:50am |
| 2020 Summer Semester | 11217 | 001     | First Half Session | MTWR | ROBERT210 | 12:00pm - 12:50pm |
| 2020 Summer Semester | 11218 | 002     | First Half Session | MTWR | COBLEI620 | 2:00pm - 4:00pm   |

**E ELE 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.

| Term                 | CRN   | Section | Session/Dates      | Days | Location   | Time |
|----------------------|-------|---------|--------------------|------|------------|------|
| 2020 Summer Semester | 11155 | 802     | June-start: 4x4    | -    | -          | -    |
| 2020 Summer Semester | 11156 | 803     | First Half Session | -    | -          | -    |
| 2020 Summer Semester | 11157 | 801     | Full Semester      | -    | ONLINEWEB- | -    |
| 2020 Summer Semester | 10846 | 804     | May-start: 4x4     | -    | -          | -    |

**E ELE 367. Logic Design. 4 Credits.** (3 Lec, 1 Lab) S,Su  
**PREREQUISITE:** E ELE 261 Advanced combinational and sequential logic design. Hardware descriptive language (HDL) programming knowledge. Laboratory experience implementing advanced logic designs using FPGAs.

| Term                 | CRN   | Section | Session/Dates                               | Days | Location   | Time |
|----------------------|-------|---------|---|------|------------|------|
| 2020 Summer Semester | 11076 | 803     | May-start: 4x4                              | -    | -          | -    |
| 2020 Summer Semester | 11158 | 802     | June-start: 4x4                             | -    | -          | -    |
| 2020 Summer Semester | 11159 | 801     | Non-standard term dates 18-MAY-20 07-AUG-20 | -    | ONLINEWEB- | -    |
| 2020 Summer Semester | 11160 | 804     | Second Half Session                         | -    | -          | -    |
| 2020 Summer Semester | 11161 | 805     | Full Semester                               | -    | -          | -    |

**E ELE 371. Microprocess HW and SW Systems. 4 Credits.** (3 Lec, 1 Lab) F,S  
**PREREQUISITE:** E ELE 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.

| Term                 | CRN   | Section | Session/Dates | Days | Location   | Time |
|----------------------|-------|---------|---------------|------|------------|------|
| 2020 Summer Semester | 11373 | 801     | Full Semester | -    | ONLINEWEB- | -    |

**E ELE 508. Solar Cell Basics for Teachers. 2 Credits.** (1 Lec. 1 Lab.) Su  
**PREREQUISITES:** Graduate students enrolled in E ELE 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 E ELE 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.

| Term                 | CRN   | Section | Session/Dates                               | Days  | Location  | Time            |
|----------------------|-------|---------|---|-------|-----------|-----------------|
| 2020 Summer Semester | 11121 | 001     | Non-standard term dates 06-JUL-20 10-JUL-20 | MTWRF | COBLEI632 | 8:00am - 5:00pm |

### **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.