# ELECTRICAL ENGINEERING 2013-2014

## MAJOR REQUIREMENTS:

### Lower Division
- MATH 20A (Calculus I)
- MATH 20B (Calculus II)
- MATH 20C (Calculus III)
- MATH 20D (Differential Equations)
- MATH 20E (Vector Calculus)
- MATH 20F (Linear Algebra)
- PHYS 2A (Mechanics)
- PHYS 2B (Electricity and Magnetism)
- PHYS 2C (Flu, Wav, Thrm, Dyn, Optics)
- PHYS 2D (Relativity & Quantum)
- CHEM 6A (General Chemistry I)
- ECE 15 (Engineering Computation)
- ECE 25 (Intro to Digital Design)
- ECE 30 (Intro to Computer Eng)
- ECE 35 (Intro to Analog Design)
- ECE 45 (Circuits & Systems)
- ECE 65 (Components & Circuits Lab)

### Upper Division
- ECE 100 (Linear Electronic Systems)
- ECE 101 (Linear Systems Fundamentals)
- ECE 102 (Intro Active Circuit Design)
- ECE 103 (Fundamentals/Devices & Materials)
- ECE 107 (Electromagnetism)
- **ECE 108 (Digital Circuits)**
- ECE 109 (Eng. Probability & Stats)

### DEPTH (5 courses; see below for sequences):
- Design (Pick One):
  - ECE 111 (Adv Digital Design Proj) or ECE 118 (Computer Interfacing) or ECE 191 (Eng Group Design Proj) or ECE 190 (Engineering Design)

### Professional Electives (3 Courses):
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### Technical Electives (3 Courses):
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### ALL courses used to satisfy major requirements **MUST** be taken for a **LETTER GRADE**.

### Possible Depth Sequences (Effective FA13):
- **Communication Systems:** ECE 153, ECE 154A, ECE 154B, ECE 154C, and ECE 158A
- **Electronic Devices & Materials:** ECE 135A, ECE 135B, ECE 136L, ECE 183
- **Electronics Circuits & Systems:** ECE 163, 164, 165, 166
- **Machine Learning & Controls:** ECE 171A, ECE 174, ECE 175A, one of ECE 171B, ECE 172A, or ECE 175B
- **Photonics:** ECE 181, ECE 182, ECE 183 and either ECE 184 or ECE 185
- **Signal and Image Processing:** ECE 153, ECE 161A, ECE 161B, ECE 161C
- **Computer System Design:** CSE 141, ECE 165 and any two of ECE 118, ECE 158A, ECE 111 and CSE 143

*ECE 108 was offered for the last time in SP14. Students who did not complete ECE 108 must replace the course with a Technical Elective. Students must also let the ECE Undergraduate Advisors know which course they plan to use in order to update their degree audits manually.*