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<tr>
<td><strong>EEE 110 - Advanced Analog IC (3) Prereq: EEE 109 or Instructor Permission</strong></td>
<td><strong>EEE 188 - +Digital Control Systems (3) Prereqs: EEE 180</strong></td>
<td><strong>EEE 163 - +Traveling Waves Lab (1)</strong> Prereqs: EEE 117, EEE 162; EEE 162 may be taken concurrently</td>
<td><strong>EEE 141- ** Power System Analysis (3)</strong> Prereqs: EEE 130 (may be taken concurrently)</td>
<td><strong>EEE 122 - Applied Digital Signal Processing (3) Prereqs: EEE 117, EEE 180</strong></td>
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<td><strong>EEE 111 - Adv. Analog IC Lab (1) Prereqs: EEE 109; either EEE 110 or EEE 230 may be taken concurrently</strong></td>
<td><strong>EEE 189 - +Controls Lab (1) Prereqs: EEE 184; may be taken concurrently</strong></td>
<td><strong>EEE 165 - Intro. To Optical Engineering (3) Prereqs: EEE 161, EEE 180, EEE 185; EEE 185 may be taken concurrently</strong></td>
<td><strong>EEE 142 - Energy System Control (3) Prereqs: EEE 130, EEE 141, EEE 184</strong></td>
<td><strong>EEE 135-Renewable Electrical Energy Sources &amp; Grid Integration (3) Prereq: EEE 130</strong></td>
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<tr>
<td><strong>EEE 166 - Physical Electronics (3) Prereqs: EEE 108</strong></td>
<td><strong>EEE 178 - Intro. to Microprocessors Prereqs: EEE 180 or ME 172, or Instructor approval</strong></td>
<td><strong>EEE 167 - +Electro-Optical Engr. Lab (1) Prereqs: EEE 161, EEE 165, EEE 180; EEE 165 may be taken concurrently</strong></td>
<td><strong>EEE 143 - +</strong> Power System Lab (1) Prereqs: EEE 130, EEE 141</td>
<td><strong>EEE 136 - Smart Electric Power Grid (3) Prereqs: EEE 142 or EEE 144</strong></td>
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<td><strong>CpE 166 - Advanced Logic Design (4) Prereqs: EEE 64, ENGR 17</strong></td>
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<td><strong>EEE 186 - +Communication Sys Lab (1) Prereqs: EEE 117, EEE 185 may be taken concurrently</strong></td>
<td><strong>EEE 147 - Power system Operation and Control Lab Prereq: EEE 141</strong></td>
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<td><strong>CPE 186- Computer Hardware Design (3) Prereqs: Cpe 185 or EEE 174</strong></td>
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<td><strong>EE 187 - +Embedded Process. Syst. Design (2) Prereqs: Cpe 166, CpE 185, EEE 102</strong></td>
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<td><strong>EEE 148 - Power Electronics Lab (1) Prereqs: EEE 146 (may be taken concurrently)</strong></td>
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**EEE Electives:**

- Students planning to complete EEE 193A/EEE 193B series must complete 7 units of depth electives + 6 units of electives from any area.
- Students planning to complete EEE 193A/EEE 193B series must complete 7 units of depth electives + 3 units of electives from any area.
- Students planning to complete EEE 193A/EEE 193B series may not use EEE 109 to meet depth/elective requirement.
- Students planning to complete EEE 192A/EEE 192B series may not use EEE 141, EEE 142 and EEE 143 to meet depth/elective requirement.
- Check with your advisor to see if any of the classes listed below can be counted as an elective in your program of study.
- + WPJ Score of 70+ OR ENGL 109W/M required

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*Rev. 02/08/2019*
## Electrical Electronic Engineering
### PREREQUISITE LIST (Effective Fall 2013)

<table>
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<tr>
<th>Required Lower Division Courses</th>
<th>Required Upper Division Courses</th>
<th>Required Design Project Series</th>
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</table>
| **Chem 1E** | **General Chemistry for Engineers**  
Prereq H.S. chemistry; Math 30 or eligibility to take MATH 30 passing score on a standardized Chemistry diagnostic exam given prior to each semester, or minimum grade of "C" in CHEM 4 | **EEE 108** | **Electronics I**  
Prereq EEE 117; Coreq EEE 108L |
| **EEE/ CpE 64** | **Intro. to Logic Design**  
Prereq CSC 15 or CSC 25 or ENGR 50 | **EEE 108L** | **Electronics I Lab**  
Prereq EEE 117, EEE 117L; Coreq EEE 108 |
| **Engl 20** | **College Composition II**  
Prereq Engl 5 or Engl 5M | **EEE 117** | **Network Analysis**  
Prereq Engr 17, Math 45, Phys 11C; Coreq EEE 117L |
| **ENGR 1 (96A)** | **Introduction to Engineering**  
Prereq Algebra & Trigonometry or Instructor Permission | **EEE 117L** | **Network Analysis Lab**  
Coreq EEE 117 |
| **ENGR 17** | **Introductory Circuit Analysis**  
Prereq Math 45, Phys 11A; may be taken concurrently, but not both | **EEE 130** | **Electromechanical Conversion**  
Prereq EEE 117 and EEE 161 |
| **ENGR 50** | **Computational Methods & Apps.**  
Prereq Math 30, Phys 11A; Phys 11A may be taken concurrently | **EEE 161** | **Applied Electromagnetics**  
Prereq Math 32, Math 45, Phys 11C, Engr 17, and CSC 25 |
| **Math 30** | **Calculus I**  
Prereq 76+ ALEKS PPL score or Math 29 | **EEE 174** | **Introduction to Microprocessors**  
Prereq EEE 64; Junior status |
| **Math 31** | **Calculus II**  
Prereq Math 30 | **EEE 180** | **Signals and Systems**  
Prereq EEE 117; may be taken concurrently |
| **Math 32** | **Calculus III**  
Prereq Math 31 | **EEE 184** | **Introduction to Feedback Systems**  
Prereq EEE 180 |
| **Math 45** | **Differential Equations**  
Prereq Math 31 | **EEE 185** | **Modern Communication Systems**  
Prereq EEE 180, Engr 120; Engr 120 may be taken concurrently |
| **Phys 11A** | **General Physics: Mechanics**  
Prereq Math 30, Math 31 - Math 31 can be taken concurrently | **ENGR 120** | **Probability and Random Signals**  
Prereq EEE 180; may be taken concurrently |
| **Phys 11C** | **General Physics: Electricty & Magnet.**  
Prereq Math 31, Phys 11A | **ENGR 140** | **Engineering Economics**  
Prereq ENGR 17 (EEE students do not need ENGR 30) |

### Required Design Project Series

- **POWER – Electrical Power Design Project**  
  **EEE 141**  
  Power System Analysis  
  Prereq EEE 117 and EEE 161
- **EEE 192A**  
  Electrical Power Design Project I  
  Prereq EEE 143 may be taken concurrently and any two of the following are needed: EEE 141, EEE 142, or EEE 144
- **EEE 192B**  
  Electrical Power Design Project II  
  Prereq EEE 192A, EEE 142, EEE 144; EEE 142 or EEE 144 may be taken concurrently--but not both

### ELECTRONICS - Product Design Project

- **EEE 109**  
  + Electronics II  
  Prereq EEE 108, EEE 108L, EEE 117, EEE 117L
- **EEE 193A**  
  +Product Design Project I  
  Prereq EEE 108, EEE 109, EEE 130, EEE 161, EEE 174, EEE 180; EEE 109 may be taken concurrently
- **EEE 193B**  
  Product Design Project II  
  Prereq EEE 193A

**NOTE**  
+ WPJ Score of 70+ OR ENGL 109W/M required

**Rev. 02/08/2019**