# Electrical Engineering
## Digital/VLSI Track
### Possible 4 Year Course Plan

#### FRESHMAN
- **Fall**: Calculus I (MTH 251), Engineering / Computer Science Elective (ECE 101)
- **Winter**: Calculus II (MTH 252), Electrical Engineering Elective (ECE 102)
- **Spring**: Mathematics for Electrical Engineering I (MTH 261), Engineering / Computer Science Elective (ECE 103)

#### SOPHOMORE
- **Fall**: Calculus III (MTH 256), Digital Circuit Analysis I (ECE 221)
- **Winter**: Calculus IV (MTH 254), Digital Circuit Analysis II (ECE 222)
- **Spring**: Calculus IV (MTH 254), Digital Circuit Analysis I (ECE 221)

#### JUNIOR
- **Fall**: Elective (ECE 223), Electronics I (ECE 321)
- **Winter**: Elective (ECE 223), Electronics I (ECE 321)
- **Spring**: Elective (ECE 223), Electronics I (ECE 321)

#### SENIOR
- **Fall**: Elective (ECE 321), Electronics I (ECE 321)
- **Winter**: Elective (ECE 321), Electronics I (ECE 321)
- **Spring**: Elective (ECE 321), Electronics I (ECE 321)

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### Math / Science Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
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<tbody>
<tr>
<td>MTH 251</td>
<td>Calculus I</td>
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<tr>
<td>MTH 252</td>
<td>Calculus II</td>
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<tr>
<td>MTH 261</td>
<td>Calculus III</td>
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<tr>
<td>MTH 256</td>
<td>Calculus IV</td>
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<tr>
<td>MTH 254</td>
<td>Prob/Stat Elective</td>
</tr>
</tbody>
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### Engineering / Computer Science Requirements

<table>
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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>ECE 101</td>
<td>Electrical Engr</td>
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<tr>
<td>ECE 102</td>
<td>Computational Comp</td>
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<tr>
<td>ECE 103</td>
<td>Electrical Engr</td>
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<tr>
<td>ECE 221</td>
<td>Electric Circuit Analysis I</td>
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<tr>
<td>ECE 223</td>
<td>Electric Circuit Analysis III</td>
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<tr>
<td>ECE 321</td>
<td>Electronics I</td>
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<tr>
<td>ECE 322</td>
<td>Electronics II</td>
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<tr>
<td>ECE 323</td>
<td>Electronics III</td>
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<tr>
<td>ECE 411</td>
<td>Industry Design Process</td>
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### General Education Requirements

- **Freshman Inquiry**: 1XX
- **Sophomore Inquiry**: 2XX

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(1) List of track specific senior electives:
- ECE 415 Fundamentals of Semiconductor Devices
- ECE 416 IC Technologies
- ECE 421 Analog IC Design I
- ECE 426 Digital IC Design II
- ECE 428 VLSI Computer-Aided Design
- ECE 431 Microwave Circuits I
- ECE 461 Communication Systems Design I
- ECE 483 Low Power Digital IC Design

(2) Continuation to Graduate program:
- ECE 475 Intro to IC Test
- ECE 522 Analog IC Design II
- ECE 532 Microwave Circuits II
- ECE 551/2 Controls I, II
- ECE 562 Communication Systems Design II
- + courses remaining from the left column

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**CORE ADMISSION REQUIREMENTS**

**JUNIOR ELECTIVE**

**GRADUATE PROGRAM**

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09/14/2016