## Electrical Engineering
### Energy Systems Track
#### Possible 4 Year Course Plan

<table>
<thead>
<tr>
<th>FRESHMAN</th>
<th>SOPHOMORE</th>
<th>JUNIOR</th>
<th>SENIOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>FALL</td>
<td>WINTER</td>
<td>SPRING</td>
<td>FALL</td>
</tr>
<tr>
<td>CALCULUS</td>
<td>LIN</td>
<td>DIF</td>
<td>CALC</td>
</tr>
<tr>
<td>I MATH</td>
<td>II MATH</td>
<td>EQ I</td>
<td>IV MATH</td>
</tr>
<tr>
<td>251</td>
<td>252</td>
<td>256</td>
<td>254</td>
</tr>
<tr>
<td>PHYSICS</td>
<td>MATH/SCI</td>
<td>PH</td>
<td>PH</td>
</tr>
<tr>
<td>CHEM</td>
<td>CH</td>
<td>211/221</td>
<td>212/222</td>
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<tr>
<td>221</td>
<td>227</td>
<td>214</td>
<td>215</td>
</tr>
</tbody>
</table>

### Math / Science Requirements

#### FRESHMAN
- **CALCULUS:**
  - I MATH (251)
  - II MATH (252)
  - LIN ALG MATH (261)
  - DIF EQ I MATH (256)

#### SOPHOMORE
- **CALC IV MATH:**
  - STAT (254)

#### JUNIOR
- **PHYSICS:**
  - MATH/SCI (MATHEMATICAL SCIENCES)

#### SENIOR
- **PHYSICS:**
  - PH (PHYSICS)
  - PH (PHYSICS)
  - PH (PHYSICS)

### Engineering / Computer Science Requirements

#### FRESHMAN
- **EXPLOR ELEC:**
  - ENGR COMP (ECE 101)
  - ENGR PROGR (ECE 102)

#### SOPHOMORE
- **ELEC CURCUIT ANALYSIS:**
  - I I (ECE 221)
  - II II (ECE 222)
  - III III (ECE 223)

#### JUNIOR
- **ELECTRONICS:**
  - I I (ECE 321)
  - II II (ECE 322)
  - BUSINESS ELECTRICAL ENGINEERING (ECE 325*)

#### SENIOR
- **SUSTAIN ABILITY:**
  - ENRGY SYST I (ECE 441)
  - ENRGY SYST II (ECE 442)

- **Track senior electives 4XX:**
  - Start MS program (ECE 413)

### General Education Requirements

- **FRESHMAN INQUIRY:**
  - UNST 1XX
  - UNST 1XX
  - UNST 1XX
- **SOPHOMORE INQUIRY:**
  - UNST 2XX
  - UNST 2XX
  - UNST 2XX
- **TECH RPT:**
  - WR 327

### Notes
- *The ECE department may offer a different course as a substitute for “ECE 325: Sustainability”. Students will be notified of any changes in a timely manner.*

### Course List

<table>
<thead>
<tr>
<th>(1) List of track specific senior electives:</th>
<th>(2) Continuation to Graduate program:</th>
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</thead>
<tbody>
<tr>
<td>ECE 451/2 Control Systems I, II</td>
<td>ECE 541 Transmission Operation and Control</td>
</tr>
<tr>
<td>ECE 465 DSP</td>
<td>ECE 542 Generation Operation and Control</td>
</tr>
<tr>
<td>ECE 455/6 Neural nets I, II</td>
<td>ECE 543 Electric Energy Systems Control</td>
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<tr>
<td>ECE 445/6 Power Electronics I, II</td>
<td>ECE 547 Energy Economic Systems</td>
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<td>ECE 548 Power System Protection</td>
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<td>+ courses remaining from the left column</td>
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