**Program of Study:** Electrical Engineering  
**Degree:** Bachelor of Science in Electrical and Computer Engineering (BSECE)

**EES/GE**

<table>
<thead>
<tr>
<th><strong>CORE (74 HRS)</strong></th>
<th><strong>AU</strong></th>
<th><strong>Bold courses are included in EPHR</strong></th>
<th><strong>SP</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Engr (Fund. Of Engr I)</em></td>
<td>1181 2</td>
<td><em>Engr (Fund. Of Engr I)</em></td>
<td>1182 2</td>
</tr>
<tr>
<td><em>Math (Engr. Calculus I)</em></td>
<td>1151 5</td>
<td><em>Math (Engr. Calculus I)</em></td>
<td>1172 5</td>
</tr>
<tr>
<td><strong>Chemistry for Engineers</strong></td>
<td>1250 4</td>
<td><strong>Physics I</strong></td>
<td>1250 5</td>
</tr>
<tr>
<td><strong>Engr (Survey)</strong></td>
<td>1100 1</td>
<td><strong>CSE (Programming C/C++)</strong></td>
<td>1222 3</td>
</tr>
</tbody>
</table>

**Yr. 1**

| **Physics II** | 1251 5 | *Math (DiffEq&ComplexMath)* | 2415 3 |
| **Math (Linear Algebra)** | 2568 3 | **ECE (Intro to ECE II)** | 2100 4 |
| **ECE (Intro to ECE I)** | 2000 4 | **ECE (Microcontrollers)** | 2560 2 |

**Yr. 2**

| **Stats (Prob & Stat)** | 3470 3 | **ECE (Energy & Power Sys. 1)** | 3040 3 |
| **ECE (RF & Optical Engr.)** | 3010 3 |  |  |
| **ECE (Intro to Electronics)** | 3020 3 |  |  |
| **ECE (Signals & Systems)** | 3050 3 |  |  |

**Yr. 3**

| **ISE (Engr. Econ.)** | 2040 2 | **ECE (Capstone Design)** | 4900 3 |
| **ECE (Ethics & Prof.)** | 3080 1 |  |  |
| **ECE (Tech. Writing)** | 3090 1 |  |  |

**Yr. 4**

**Electives (31 HRS)**

- At least 16 hours of the Electives must be ECE Technical Electives.
  - Must take a concentration of 6 hours in one of the domains below.
  - Must take at least 3 hours in each of two other domains below.
  - Must include at least one 5000 level ECE Technical Elective.
- At least two ECE Technical Elective courses must be labs.
- Up to 15 hours of the Electives may be Directed Electives from the ECE approved list. Directed Electives generally include: courses required for entry into other engineering majors; required and technical elective courses in other engineering majors; pre-med courses; business or entrepreneurship courses; math, statistics, physics and chemistry courses at higher level than required in the ECE core; and other physical science or biological science courses. For physical science or biological science courses a maximum of 7 hours numbered below 2000 may be counted as Directed Electives.

**COM/DS/P**

- Lectures
- ECE 5000 3
- ECE 5101 3
- ECE 5200 3
- ECE 5206 3
- ECE 5400 3
- ECE 4007 0.5
- ECE 4207 0.5
- TOTAL

**COMPUTER**

- Lectures
- ECE 3561 3
- ECE 5362 3
- ECE 5460 3
- ECE 5463 3
- ECE 5465 3
- TOTAL

**ELECTRONICS & PHOTONICS**

- Lectures
- ECE 5031 3
- ECE 5033 3
- ECE 5131 3
- ECE 5132 3
- ECE 5530 3
- ECE 5531 3
- ECE 5532 3
- ECE 5037 4
- ECE 5137 0.5
- ECE 5237 3
- TOTAL

**SOLID STATE ELECTRONICS & OPTICAL MATERIALS**

- Lectures
- ECE 5020 3
- ECE 5021 3
- ECE 5022 3
- ECE 5023 3
- ECE 5026 3
- ECE 5027 4
- ECE 5028 4
- ECE 5029 4
- TOTAL

**ENERGY & POWER**

- Lectures
- ECE 5051 3
- ECE 5052 3
- ECE 5053 3
- ECE 5054 3
- ECE 5055 3
- ECE 5056 3
- ECE 5057 4
- ECE 5058 4
- TOTAL

**CONTROL**

- Lectures
- ECE 5051 3
- ECE 5052 3
- ECE 5053 3
- ECE 5054 3
- ECE 5055 3
- ECE 5056 3
- ECE 5057 4
- ECE 5058 4
- TOTAL

**DIRECTED ELECTIVES**

- At least 16 hours of the Electives must be ECE Technical Electives.
- Must take a concentration of 6 hours in one of the domains below.
- Must take at least 3 hours in each of two other domains below.
- Must include at least one 5000 level ECE Technical Elective.
- At least two ECE Technical Elective courses must be labs.
- Up to 15 hours of the Electives may be Directed Electives from the ECE approved list. Directed Electives generally include: courses required for entry into other engineering majors; required and technical elective courses in other engineering majors; pre-med courses; business or entrepreneurship courses; math, statistics, physics and chemistry courses at higher level than required in the ECE core; and other physical science or biological science courses. For physical science or biological science courses a maximum of 7 hours numbered below 2000 may be counted as Directed Electives.

**OTHER ECE TECHNICAL ELECTIVES**

- At least 16 hours of the Electives must be ECE Technical Electives.
- Must take a concentration of 6 hours in one of the domains below.
- Must take at least 3 hours in each of two other domains below.
- Must include at least one 5000 level ECE Technical Elective.
- At least two ECE Technical Elective courses must be labs.
- Up to 15 hours of the Electives may be Directed Electives from the ECE approved list. Directed Electives generally include: courses required for entry into other engineering majors; required and technical elective courses in other engineering majors; pre-med courses; business or entrepreneurship courses; math, statistics, physics and chemistry courses at higher level than required in the ECE core; and other physical science or biological science courses. For physical science or biological science courses a maximum of 7 hours numbered below 2000 may be counted as Directed Electives.

**Total Directed Electives**

**Total Other ECE Electives**

**Total ECE Domain Electives**

**TOTAL ECE Tech Electives**

Revised 5/21/12: gjv