Roadmap to the Four-Year BSEE Program (effective Fall ’15)

Freshman Year
Fall (16)
- ES 110 (1) Intro. to Engineering Lab
- CS 115 (4) Program. I
- MATH 161 (4) Calculus I
- PHYS 114 (4) Intro. to Physics I
- GE (3)
- ENGL 101 (4)

Spring (16)
- PHYS 116 (1) Physics I Lab
- MATH 211 (4) Calculus II
- MATH 122 (4) Fund. of Logic Design Lab
- GE (6)

Sophomore Year
Fall (16)
- PHYS 214 (4) Intro. Physics II
- MATH 241 (4) Calculus III
- ES 220 and 221 (4) Elect. Circuits w/lab
- MATH 261 (4) Calculus IV
- GE (4)
- GE (4)

Spring (16)
- MATH 241 (4) Calculus III
- ES 230 and 231 (4) Electronics I w/lab
- ES 210 (4) Digital Circ. & Logic Design w/lab
- GE (4)
- GE (4)

Junior Year
Fall (16)
- ES 320 (2) Electronics II
- ES 314 (4) Adv. Program, Modeling & Simulation
- MATH 326 (4) Engg Probability & Statistics
- GE (4)
- GE (4)

Spring (14)
- ES 330 (2) Electromag. Theory & Applic
- ES 310 and 310L (4) Micropr. & System Design w/lab
- ES 442 and 442L (4) Analog & Digital Commun. w/lab
- GE (3)
- GE (3)

Senior Year
Fall (14)
- ES 443 (3) Intro. Networking w/lab
- ES 400 (3)
- ES 430 (3) Electromag. Theory & Applic
- ES 412 (3)
- ES 465 and 465L (3)

Spring (12)
- *Approved Technical Elective I (3)
- **ES 493 (3) Senior Design Project
- **ES 492 (1) Senior Design Project Planning
- *Approved Technical Elective II (3)
- *ES 497 (1) Engg. Science Colloquium

*: Indicates prerequisite for this course is senior standing in major (completion of all 300-level courses)
**: With permission only
Arrow: Indicates prerequisite  Arrow with C: Indicates Co-requisite
Numbers in parentheses indicate semester units

4/27/2016
Recommended GE Curriculum for the BSEE Majors  
Effective Fall 2015

<table>
<thead>
<tr>
<th>Area</th>
<th>Subjects</th>
<th>Suggested GE Courses</th>
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</thead>
<tbody>
<tr>
<td></td>
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<td>Courses</td>
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<tr>
<td>A. Communication and Critical Thinking (8)</td>
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<tr>
<td>A.2. Fund. of Communication</td>
<td>ENGL 101</td>
<td>4</td>
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<tr>
<td>A.3. Critical Thinking</td>
<td>ES 210</td>
<td>4</td>
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<tr>
<td>B. Natural Sciences and Mathematics (12)</td>
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<tr>
<td>B.1. Physical Sciences</td>
<td>PHYS 114 and PHYS 116</td>
<td>4+1</td>
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<tr>
<td>B.2. Biological Sciences</td>
<td>ANTH 201 or BIOL 115</td>
<td>3</td>
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<tr>
<td>B.4. Mathematical Concepts &amp; Quantitative Reasoning</td>
<td>MATH 161</td>
<td>4</td>
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<tr>
<td>C. The Arts and Humanities (12)</td>
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<tr>
<td>C.1. Fine Arts, Theatre, Dance and Music and Film</td>
<td>Select from the GE C.1 list in the SSU Catalog</td>
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<tr>
<td>C.2. Literature, Philosophies, Values</td>
<td>Select from the GE C.2 list in the SSU Catalog</td>
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<tr>
<td>C.3 Comparative Perspectives And /Or Foreign</td>
<td>Select from the GE C.3 list in the SSU Catalog</td>
<td>4</td>
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<tr>
<td>D. Social Sciences (15)</td>
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<tr>
<td>D.1. Individual and Society</td>
<td>Select from the GE D.1 list in the SSU Catalog</td>
<td>3</td>
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<tr>
<td>D.2. World History and Civilization</td>
<td>Select from the GE D.2 list in the SSU Catalog</td>
<td>3</td>
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<tr>
<td>D.3. United States History</td>
<td>Select from the GE D.3 list in the SSU Catalog</td>
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<tr>
<td>D.4. US Constitution and CA State and Local Govt.</td>
<td>POLS 200</td>
<td>3</td>
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<tr>
<td>D.5. Contemporary International Perspectives</td>
<td>Select from the GE D.5 list in the SSU Catalog</td>
<td>3</td>
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<tr>
<td>E. The Integrated Person (3)</td>
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<tr>
<td>E. The Integrated Person</td>
<td>Choose one from: BIOL 318, KIN 217, KIN 316, NURS 480</td>
<td>3</td>
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3/29/2016 For more info, visit [http://www.sonoma.edu/advising/ge/](http://www.sonoma.edu/advising/ge/).