### BS in Computer Science - Software Entrepreneurship Applied Option

**SAMPLE CURRICULUM 2020-2021**

<table>
<thead>
<tr>
<th>FIRST YEAR</th>
<th>SECOND YEAR</th>
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<tbody>
<tr>
<td><strong>FALL</strong></td>
<td><strong>WINTER</strong></td>
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<td><strong>FALL</strong></td>
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<td><strong>FALL</strong></td>
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<td><strong>FALL</strong></td>
<td><strong>WINTER</strong></td>
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- **CS 160 (3 cr)** Computer Science Orientation
  - Preq: Wireless Laptop

- **MTH 111 (3 cr)** College Algebra
  - Taught Fall, Winter & Summer
  - Preq: MTH 095 or MTH 103 or placement

- **WR 121 (3 cr)** English Composition
  - Taught Fall, Winter, Spring
  - Preq: WR 121

- **CS 290 (4 cr)** Web Development
  - Preq: CS 162 or CS 165

- **CS 261 (4 cr)** Data Structures
  - Preq: CS 162 or CS 165 & MTH 231 or CS 225

- **MTH 251 (4 cr)** Differential Calculus
  - Taught Fall & Summer
  - Preq: MTH 112

- **BA 260 (4 cr)** Introduction to Entrepreneurship
  - Taught Fall, Spring, Summer
  - Preq: Sophomore standing

- **HHS 231 (2 cr)** Lifetime Fitness for Health
  - Taught Fall, Winter, Spring
  &
  **HHS 241 or PAC (1 cr)**
  (All)

- **PERSPECTIVE**
  - Physical Science
    - (see bacc core guide)

- **COMM 111 (3 cr)** Public Speaking
  - Taught Fall, Winter
  or
  **COMM 114 (3 cr)** Argument & Critical Discourse
  - Taught Spring

- **PERSPECTIVE**
  - Social Processes & Institutions
    - (see bacc core guide)

- **PERSPECTIVE**
  - Biological Science
    - (see bacc core guide)

**NOTES:**
- Shaded courses are part of the CS Applied Option’s requirements and electives.
<table>
<thead>
<tr>
<th>FALL</th>
<th>WINTER</th>
<th>SPRING</th>
<th>FALL</th>
<th>WINTER</th>
<th>SPRING</th>
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<tbody>
<tr>
<td>CS 361 (4 cr) Software Engineering I</td>
<td>CS 362 (4 cr) Software Engineering II</td>
<td>CS 381 (4 cr) Programming Language Fundamentals</td>
<td>CS 461 (3 cr) Senior Software Engineering Project (WIC)</td>
<td>CS 462 (3 cr) Senior Software Engineering Project (WIC)</td>
<td>CS 463 (2 cr) Senior Software Engineering Project</td>
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<tr>
<td>Preq: CS 261</td>
<td>Preq: CS 261 &amp; MTH 231 or CS 225</td>
<td>Preq: CS 381</td>
<td>Preq: CS 361, Senior Standing</td>
<td>Preq: CS 362, CS 461, &amp; Senior Standing</td>
<td>Preq: CS 462</td>
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<tr>
<td>Preq: CS 161 or CS 165</td>
<td>Preq: CS 344 &amp; CS 271</td>
<td>PERSPECTIVE Western Culture (see bacc core guide)</td>
<td>CS 346 (4 cr) Web-based Start-up Project</td>
<td>Applied Option Elective</td>
<td>CS 434 (4 cr) Machine Learning &amp; Data Mining</td>
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<td>PERSPECTIVE Cultural Diversity (see bacc core guide)</td>
<td>CS 448 (4 cr) Mobile Software Development</td>
<td>PERSPECTIVE Difference, Power &amp; Discrimination (see bacc core guide)</td>
<td>Preq: CS 344</td>
<td>CS 478 (4 cr) Network Security</td>
<td>Applied Option Elective</td>
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<tr>
<td>Applied Option Elective</td>
<td>CS 372 (4 cr) Introduction to Computer Networks</td>
<td>Preq: Junior Standing</td>
<td>Preq: CS 261, CS 271, C programming &amp; Unix</td>
<td>Upper Division Restricted Elective</td>
<td>Preq: CS 372</td>
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<td>BA 352 (4 cr) Managing Individual &amp; Team Performance (Taught Fall &amp; Spring)</td>
<td>PERSPECTIVE Contemporary Global Issues (see bacc core guide)</td>
<td>Applied Option Elective</td>
<td>Upper Division Restricted Elective</td>
<td>SYNTHESES</td>
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<td>CS 351 online</td>
<td>PERSPECTIVE Cultural Diversity (see bacc core guide)</td>
<td>Preq: Junior Standing</td>
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<tr>
<td>Preq: COMM 111 or 114, WR 222 or 327, &amp; Junior Standing</td>
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NOTES:
- Courses may not be offered in the term shown in future years. Students should check with their advisor about upcoming changes.
- Restricted Electives (RE): Required to complete two upper division restricted electives. Students should check with their advisor on upper division restricted elective course offerings.