### OSU-Cascades

#### B.S. in Computer Science

**Applied Option: Software Engineering 2021-2022**

<table>
<thead>
<tr>
<th></th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Year</strong></td>
<td><strong>ENGR 100: Creative Code:</strong> Designing Apps for Everyone</td>
<td><strong>ENGR 102: Virtual Architecture:</strong> Designing Sustainable &amp; Scalable Software Systems</td>
<td><strong>ENGR 103: Hack the Planet:</strong> Introduction to Software Engineering</td>
<td><strong>Total Credits 16-17</strong></td>
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<td></td>
<td><strong>MTH 111: College Algebra</strong></td>
<td><strong>MTH 112: Elementary Functions</strong></td>
<td><strong>MTH 231: Discrete Math</strong></td>
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<td></td>
<td><strong>WR 121: English Composition</strong></td>
<td><strong>WR 222: English Composition</strong></td>
<td><strong>WR 327: Technical Writing</strong></td>
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<td></td>
<td><strong>Bacc Core: Physical Science</strong></td>
<td><strong>Bacc Core: Additional Science</strong></td>
<td><strong>COMM 111: Public Speaking</strong></td>
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<td><strong>Bacc Core: Lifetime Fitness for Health + PAC</strong></td>
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<td><strong>Total Credits</strong></td>
<td>3</td>
<td>4-5</td>
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<tr>
<td><strong>Co-Curricular and Academic Opportunities First Year</strong></td>
<td>Join Cascades Tech Club for projects, homework help, and industry speakers.</td>
<td>Join Apprenticeship – starting winter term, 2 hrs/wk, paired programming with a professional developer</td>
<td>Check out resources for student wellness, time management and study skills</td>
<td>Participate in FY campus read and FY experiences</td>
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<tr>
<th></th>
<th><strong>Second Year</strong></th>
<th><strong>Second Year</strong></th>
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<tbody>
<tr>
<td>SE 201: Software Development I</td>
<td><strong>Total Credits 16</strong></td>
<td>CS 290: Web Development</td>
<td>CS 340: Intro. to Databases</td>
<td><strong>Total Credits 16-17</strong></td>
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<tr>
<td>CS 261: Data Structures</td>
<td></td>
<td>CS 325: Analysis of Algorithms</td>
<td>CS 391: Social &amp; Ethical Issues in CS</td>
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<td>MTH 251: Differential Calculus</td>
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<td>MTH 252: Integral Calculus</td>
<td>ST 314: Intro. to Statistics for Engineers</td>
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<td>Bacc Core: Social Processes &amp; Institution</td>
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<td>Bacc Core: Biological Science</td>
<td>Bacc Core: Literature and Arts Bacc</td>
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<tr>
<td>CS 162: Intro. to Computer Sci. II (Offered FALL 2022)</td>
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<td><strong>Total Credits</strong></td>
<td>4</td>
<td>4-5</td>
<td>4-5</td>
<td><strong>Total Credits 13-14</strong></td>
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<tr>
<td><strong>Co-Curricular and Academic Opportunities Second Year</strong></td>
<td>Check out Career Development Center resources for assistance with resume development and apprenticeships</td>
<td>Continue Cascades Tech Club and apprenticeships</td>
<td>Research study abroad opportunities and integrate into academic plan</td>
<td>Think about adding a minor or Sustainability double degree</td>
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</table>
| Third Year | CS 361: Software Engineering I  
CS 271: Computer Architecture & Assembly Language  
CS 352: Intro. to Usability Engineering  
Bacc Core: Cultural Diversity | CS 362: Software Engineering II  
CS 344: Operating Systems I  
Core: Difference, Power, & Discrimination  
Bacc Core: Western Culture | SE 303: Software Engineering III  
CS 444: Operating Systems II  
CS 381: Programming Language Fundamentals  
Synthesis: Contemporary Global Issues | 4  
4  
4  
3-4 | 4  
4  
3-4 | 4  
4  
3-4 | 15-16 | 14-16 | 15-16 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Total Credits | Total Credits | Total Credits | Co-Curricular and Academic Opportunities Third Year | □ Continue to work with Career Development Center for internship application development  
□ Work with faculty on internship placement and planning (part-time work w/ local business)  
□ Connect with faculty about community outreach – high school volunteer in teaching, leading workshops, judging competitions  
□ Connect with Faculty about undergraduate research and projects | | | | |
| Fourth Year | CS 461: Senior Software Engineering Project (WIC)  
CS 466: Web-based Start-up Project  
CS 372: Intro. to Comp. Networks  
CS 492: Mobile Software Development | CS 462: Senior Software Engineering Project (WIC)  
SE 467: Business of Software II  
CS 493: Cloud Application Development  
Upper Division Restricted Elective | CS 463: Senior Software Engineering Project  
SE 468: Business of Software III  
CS 434: Machine Learning & Data Mining Upper Division Restricted Elective | 3  
4  
4  
4 | 3  
4  
4  
4 | 3  
4  
4  
4 | 15 | 15 | 14 |
| Total Credits | Total Credits | Total Credits | Co-Curricular and Academic Opportunities Fourth Year | □ Begin post grad job search, continue connecting with Career Development Center  
□ Connect with faculty about starting a business and Innovation Center for Entrepreneurship  
□ Plan for Commencement Ceremony and celebrations in June! | | | | |

This is a sample schedule intended for informational purposes only. Students should consult with their OSU academic advisor to create a personalized degree plan.