COMPUTER SCIENCE – APPLIED OPTION (On-Campus)

### FIRST YEAR

**Academic Year 2021-2022**

<table>
<thead>
<tr>
<th>Term</th>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>ENGR 100</td>
<td>The Oregon State Engineering Student</td>
<td>3</td>
</tr>
<tr>
<td>Fall</td>
<td>ENGR 102</td>
<td>Design Engineering And Problem Solving</td>
<td>3</td>
</tr>
<tr>
<td>Winter</td>
<td>ENGR 102 &amp; co-req MTH 112</td>
<td>Engineering Computation and Algorithmic Thinking</td>
<td>3</td>
</tr>
<tr>
<td>Winter</td>
<td>MTH 251</td>
<td>Differential Calculus</td>
<td>4</td>
</tr>
<tr>
<td>Winter</td>
<td>MTH 252</td>
<td>Integral Calculus</td>
<td>4</td>
</tr>
<tr>
<td>Winter</td>
<td>WR 121</td>
<td>English Composition Alpha Sectioned</td>
<td>4</td>
</tr>
<tr>
<td>Winter</td>
<td>HHS 231 + 241/PAC</td>
<td>Lifetime Fitness</td>
<td>2+1</td>
</tr>
<tr>
<td>Spring</td>
<td>MTH 231</td>
<td>Discrete Math</td>
<td>4</td>
</tr>
<tr>
<td>Spring</td>
<td>WR 214/222</td>
<td>Writing for Bus./English Comp.</td>
<td>3</td>
</tr>
<tr>
<td>Spring</td>
<td>Perspectives</td>
<td>Social Processes &amp; Institutions</td>
<td>3</td>
</tr>
<tr>
<td>Spring</td>
<td>Perspectives</td>
<td>Biological Science</td>
<td>3</td>
</tr>
<tr>
<td>Spring</td>
<td>Perspectives</td>
<td>Western Culture</td>
<td>3</td>
</tr>
<tr>
<td>Spring</td>
<td>Perspectives</td>
<td>Literature &amp; Arts</td>
<td>3</td>
</tr>
<tr>
<td>Spring</td>
<td>Perspectives</td>
<td>Cultural Diversity</td>
<td>3</td>
</tr>
<tr>
<td>Spring</td>
<td>Perspectives</td>
<td>Second Biological or Physical Science</td>
<td>4</td>
</tr>
<tr>
<td>Spring</td>
<td>Unrestricted Electives</td>
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<td>3</td>
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### SECOND YEAR

<table>
<thead>
<tr>
<th>Term</th>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>ENGR 103</td>
<td>Intro to Comp. Sci. II C++, C</td>
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<tr>
<td>Fall</td>
<td>CS 162</td>
<td>Computer Arch. &amp; Assembly Lang.</td>
<td>4</td>
</tr>
<tr>
<td>Fall</td>
<td>CS 271</td>
<td>Physical Science</td>
<td>4</td>
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<tr>
<td>Fall</td>
<td>CS 261</td>
<td>Data Structures C</td>
<td>4</td>
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<tr>
<td>Winter</td>
<td>MTH 231 &amp; CS 162</td>
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<tr>
<td>Winter</td>
<td>WR 121</td>
<td>Technical Writing</td>
<td>3</td>
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<tr>
<td>Winter</td>
<td>Perspectives</td>
<td>Difference, Power &amp; Discrimination</td>
<td>3</td>
</tr>
<tr>
<td>Winter</td>
<td>Perspectives</td>
<td>Second Biological or Physical Science</td>
<td>4</td>
</tr>
<tr>
<td>Winter</td>
<td>Unrestricted Electives</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Notes:
1. F, W, S, U: Represents the term the course is offered (Fall, Winter, Spring, Summer)
2. ( ) : Represents the credits of the course
3. Arrows: Prerequisites and co-requisites for that course
4. Summer Courses may be cancelled due to low enrollment
5. Students cannot S/U major courses
6. 180 total credits are needed to graduate
7. Majority of courses are also offered through Ecampus

Updated 6/21/2021
COMPUTER SCIENCE – APPLIED OPTION (On-Campus)

THIRD YEAR

Fall
CS 261 & CS 271

CS 344
Operating Systems I
F, W, U (4)

CS 325
Analysis of Algorithms
F, W, S, U (4)

CS 361
Software Engineering I
F, W, U (4)

Approved
Applied Elective
(4)

Junior Standing

Approved
Applied Elective
(4)

CS 391
Social/Ethical Issues
(STS Synthesis)
F, S (3)

Winter
CS 261 & (CS 225 or MTH 231)

CS 362
Software Engineering II
W, S, U (4)

CS 381
Programming Language Fund.
W, S, U (4)

Approved
Applied Elective
(4)

Spring
CS 261 & (CS 271 or ECE 271)

CS 372
Intro. to Computer Networks
F, W, S, U (4)

CS 461
Senior Capstone I
F (3)

CS 325, CS 361, & CS 362

CS 462
Senior Capstone II
Must be taken sequentially:
F, W, S

Approved
Applied Elective
(4)

CS 391
Social/Ethical Issues
(STS Synthesis)
F, S (3)

Fourth Year

Fall
CS 344 & (CS 271 or ECE 375)

CS 464
Operating Systems II
F, S (4)

CS 444
Synthesis Contemporary Global Issues
F, W, S, U (3)

CS 462
Senior Capstone II
F, W, S

CS 352
Intro. to Usability Engineering
W, U (4)

CS 463
Senior Capstone III
S (2)

CS 391
Social/Ethical Issues
(STS Synthesis)
F, S (3)

Approved
Applied Elective
(4)

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4. Summer Courses may be cancelled due to low enrollment
5. Students cannot S/U major courses
6. 180 total credits are needed to graduate
7. Majority of courses are also offered online through Ecampus
8. Approved Applied Plans require a minimum of 32 credits approved by the Department
9. CS 391 counts for both Major and Science, Technology and Society (Synthesis) credits

Updated 6/21/2021