

**UNDERGRADUATE AND PROFESSIONAL MAJOR CHANGE BULLETIN NO. 4  
SPRING 2021**

**—REQUIREMENTS—**

The requirements listed below reflect the undergraduate major curricular changes approved by the Catalog Subcommittee since approval of the last Undergraduate Major Change Bulletin. All changes are underlined. Deletions are crossed out. The column to the far right indicates the date each change becomes effective. Note: Items marked {S} have been streamlined and do not require Catalog Subcommittee review.

Dept	Proposed	Effective Date
<p><b>Electrical Engineering and Computer Science</b> Revise plan footnotes 3 and 4 for Bachelor of Science in Computer Engineering</p>	<p><b>Computer Engineering (123 Credits)</b></p> <p><b>Footnotes</b></p> <p><sup>1</sup> Students may choose between a C/C++ (CPT S 121, 122, 223, 360) path or a Java programming (CPT S 131, 132, 233, 370) path. Students should stick to one path option. The Java track is not available in Tri-Cities.</p> <p><sup>2</sup> Engineering Science Elective: Choose from E E 331, 341, ME 301, or MSE 302. (Note: If either E E 331 or E E 341 is taken as an engineering science elective, it cannot also count as a technical elective.)</p> <p><sup>3</sup> Technical electives (9 credits) must be 300-400-level courses and must be chosen with an advisor's approval. Any of the following courses may be chosen to fulfill technical elective requirements: CPT S 317, 322, 350, 355, <u>411</u>, 422, <del>423</del>, 430, <u>437</u>, 440, 442, 443, 451, 452, 455, 460, 466; E E 331, 341, 351, 431, 432, 434, 451, 464, 466, 470, 476, 489, 496; One only of MATH 325, 340, 364, 415, 421, 440, 441, 448, 453, 464, 466.</p> <p><sup>4</sup> Senior Design Electives adhere to one of the following sequences: (1) ASIC &amp; Digital Systems: E E 416 and 434; (2) <del>Embedded and Microcomputer Systems: CPT S 466 and E E 416</del>; (3) VLSI Design: E E 466 and 416. <u>Students are strongly recommended to complete both senior design elective sequences.</u></p>	<p align="center"><b>8-21</b></p>
<p><b>Engineering and Computer Science WSU-V</b> Revise graduation requirements for Bachelor of Science in Computer Science (Vancouver Only)</p>	<p><b>Bachelor of Science, Computer Science (Vancouver Only) (120 Credits)</b></p> <p>For the major in the Computer Science degree program on the Vancouver campus, <del>there are different benchmarks for incoming students based on their academic standing</del></p> <p><del>Incoming Freshmen who</del> <u>students are admitted to the major upon demonstrating they are ready to take MATH 171 (Calculus 1) or higher are admitted to the major upon and making their intentions known to the department.</u></p> <p>To remain in <del>the major the</del> <u>good standing</u>, students must pass CS 121, <del>CS-122, CS-166</del>, MATH 171, <del>MATH-172</del>, and PHYSICS 201 <u>(or their transfer equivalents) with a grade of C or better and maintain good academic standing (i.e. overall have a WSU cumulative GPA of 2.5 in first three semesters).</u> <u>when the final</u></p>	<p align="center"><b>8-21</b></p>

benchmark course is completed.

Incoming Freshmen who are not ready to take MATH 171 (Calculus 1) are admitted to the major upon completing CS 121, CS 122, CS 166, MATH 171, MATH 172, and PHYSICS 201 with a grade of C or better; earning a cumulative WSU GPA of 2.5 or better; and making their intention know to the department. To remain in the major the student must maintain good academic standing (i.e. 2.0 or higher GPA each term; 2.0 or higher CS GPA).

Incoming transfer students are admitted to the major upon completing CS 121, CS 122, CS 166, MATH 171, MATH 172, and PHYSICS 201 with a grade of C or better; earning a cumulative GPA of 2.5 or better at previous institution; and making their intention know to the department. To remain in the major the student must maintain good academic standing (i.e. 2.0 or higher GPA each term; 2.0 or higher CS GPA).

Current WSU students seeking to change their major are admitted to the major upon completing CS 121, CS 122, CS 166, MATH 171, MATH 172, and PHYSICS 201 with a grade of C or better; earning a cumulative WSU GPA of 2.5 or better; and making their intention known to the department. To remain in the major the student must maintain good academic standing (i.e. 2.0 or higher GPA each term; 2.0 or higher CS GPA).

No courses listed in this schedule of studies may be taken on a pass/fail basis. All listed computer science courses, and their prerequisites, must be completed with a grade of C or better.

### **First Year**

<i>First Term</i>	<i>Credits</i>
CS 121	4
HISTORY 105 [ROOT]	3
Humanities [HUM]	3
MATH 171 [QUAN]	4

<i>Second Term</i>	<i>Credits</i>
CS 122	4
CS 166	3
ENGLISH 101 [WRTG]	3
MATH 172	4

### **Second Year**

<i>First Term</i>	<i>Credits</i>
CS 223	3
CS 260	3

ECONS 101 [SSCI] or 102 [SSCI]	3
<u>MATH 220</u>	<u>2</u>
<del>MATH 273</del>	<del>2</del>
PHYSICS 201 [PSCI]	4
<b><i>Second Term</i></b>	<b><i>Credits</i></b>
Biological Sciences [BSCI] with lab	4
CS 224	3
CS 261	3
<u>MATH 273 or 301</u>	<u>2-3</u>
<del>MATH 220</del>	<del>2</del>
PHYSICS 202	4
Complete Writing Portfolio	
<b>Third Year</b>	
<b><i>First Term</i></b>	<b><i>Credits</i></b>
CS 317	3
<del>CS 320 [M]</del>	<del>3</del>
<u>CS 360</u>	<u>4</u>
CS Option Courses <sup>1</sup>	3
ENGLISH 402 [WRTG]	3
STAT 360	3
<b><i>Second Term</i></b>	<b><i>Credits</i></b>
<u>CS 320 [M]</u>	<u>3</u>
CS 351	3
CS 355	3
<del>CS 360</del>	<del>4</del>
CS Option Courses <sup>1</sup>	3
Diversity [DIVR]	3
<b>Fourth Year</b>	
<b><i>First Term</i></b>	<b><i>Credits</i></b>
Arts [ARTS]	3
CS 420 [CAPS] [M]	3
CS 450	3
CS Option Courses <sup>1</sup>	6
<b><i>Second Term</i></b>	<b><i>Credits</i></b>
CS 402 [M]	3
CS 421	3
<del>CS 427</del>	<del>3</del>

	CS 460 3 CS Option Courses <sup>1</sup> 3 <u>CS Security Option Courses<sup>2</sup></u> 3	
<p><b>Footnotes</b></p> <p><sup>1</sup> CS Option Courses: 15 credits <del>hours</del> of option area courses are required for completion of the degree program. The option courses must be chosen from 300-400-level CS courses and may also include up to 6 hours from the following list: MATH 315, 320, 325, 364, 420, 448, 453, 466, ECE 324, 366, and 424. Other computer science-related courses may be substituted, as approved by the department.</p> <p><sup>2</sup> <u>CS Security Option Courses: 3 credits of security option area courses are required for completion of the degree program. These credits are in addition to the 15 credits of CS Option Courses required above. CS Security Option Courses must be chosen from the following courses: CS 425, 426, and 427.</u></p>		