

Computer Science B.S. Software Engineering 4-Year Pathway 2023-2024

| Fall Freshman Courses (15 units total) | Course or GE Title | Units | GE/Major |
|---|--|------------|------------------|
| FYS 145 | Digital Media Arts & Culture | 3 | FYS, C2 |
| MATH 130 | Precalculus | 5 | B4 |
| HCOM 110 | Fundamentals of Speaking & Listening | 3 | A1 |
| CST 286 | Physics of Computing | 4 | B1 & B3 |
| Spring Freshmen Courses (17 units total) | Course or GE Title | Units | GE/Major |
| CST 231 | Problem Solving/ Programming | 4 | Core |
| MATH 170 | Discrete Mathematics | 4 | Core |
| HCOM 125, SBS 110, CAD 101B or (CAD 102 +CAD 90) | Critical Reading and Writing | 3 | A2 |
| Any approved course | Arts GE Area C1 course | 3 | C1 |
| BIO 204 or ENVS 201 | Life Science GE area B2 course | 3 | B2 |
| Fall Sophomore Courses (14 units total) | Course or GE Title | Units | GE/Major |
| CST 238 | Intro to Data Structures | 4 | Core |
| MATH 150 | Calculus I | 4 | Core |
| SL210S, ED212S, HCOM260S, SBS212S | Civics/Service Learning GE course | 3 | D3-Civic/SL |
| HCOM 200 or 202 or ENSTU 130 | Critical Thinking GE | 3 | A3 |
| Spring Sophomore Courses (15 units total) | Course or GE Title | Units | GE/Major |
| MATH 270 or MATH 151 | Calculus II or Math for Computing | 4 | Major core |
| CST 338 | Software Design | 4 | Core |
| GS 236, HCOM 220, 224, 229, 243*, 246, or 247, HOSP 221, SBS 249* or SPAN 260 | GE area F (SBS 249 and HCOM 243 double-count for US History) | 3 | F |
| CST 237 | Computer Architecture | 4 | Core |
| Fall Junior Courses (15 units total) | Course or GE Title | Units | GE/Major |
| CST 300 | Major ProSeminar | 4 | GWAR, Core |
| CST 370 | Design & Analysis of Algorithms | 4 | Core |
| CST 205 or 311 or 312 or 325 or 363 | CS elective not counted elsewhere | 4 | CS Elective #1 |
| Any C1 or C2 course | Arts or Humanities GE Area C course | 3 | C1 or C2 GE |
| Spring Junior Courses (15 units total) | Course or GE Title | Units | GE/Major |
| CST 334 | Operating Systems | 4 | Core |
| CST 336 | Internet Programming | 4 | Conc #1 |
| CST 325 or 383 (Spring only) | Graphics Programming or Intro Data Sci | 4 | Conc #2 |
| CST 329 or other UDB | Reasoning with Logic | 3 | UDB |
| Fall Senior Courses (15 units total) | Course or GE Title | Units | GE/Major |
| CST 438 | Software Engineering | 4 | conc 2 |
| CST 205 or 311 or 312 or 325 or 363 or 383 | CS elective not counted elsewhere | 4 | CS Elective #2 |
| CST 205 or 311 or 312 or 325 or 363 or 383 | CS elective not counted elsewhere | 4 | CS Elective #3 |
| CST 274, HCOM 251 or 265, or SBS 111 | US History GE/CSU requirement | 3 | DHIS |
| Spring Senior Courses (14 units total) | Course or GE Title | Units | GE/Major |
| CST 499 | Computer Science Capstone | 4 | Major |
| KIN 161 or 263 or HDFS 200 or PSY 210 | Lifelong Learning & Self-Development | 3 | E |
| CST 462S | Race, Gender, Class in the Digital World | 3 | Core, UDSDL, UDD |
| SPAN 340 or 350 or JAPN 340 or 350 | UDC with World Culture & Language | 3 | UDC, WCL |
| Free Elective | Free Elective to reach 120 units | 1 | free elective |
| Total Units Software Engineering 4-yr | | 120 | |