

Computer Science B.S. Software Engineering 4-Year Pathway 2024-2025

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 Freshman 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 or ED212S or HCOM260S or SBS212S	Civics/Service Learning GE course	3	D3-Civic/SL, US 2/3
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 325	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 or 325 or 380 (Spring only)	Internet Programming or Graphics Programming or Mobile Ubiquitous Computing	4	Conc #1
CST 363	Intro. to Database Systems	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 #3
CST 205 or 311 or 312 (Fall only) or 325 or 363 or 383 or 412 (Fall only) or 463 (Fall only)	CS elective not counted elsewhere	4	CS Elective #2
CST 205 or 311 or 312 (Fall only) or 325 or 363 or 383 or 412 (Fall only) or 463 (Fall only)	CS elective not counted elsewhere	4	CS Elective #3
CST 274, HCOM 251 or 265, or SBS 111	US History GE/CSU requirement	3	DGSS, US1, GE
Spring Senior Courses (14 units total)	Course or GE Title	Units	GE/Major

CST 499	Computer Science Capstone	4	Major core
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, UDSL, UDD
SPAN 340 or 350 or 312 or JAPN 340 or 350 (or any UDC if language complete)	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	