

Computer Science B.S. Data Science 4-Year Pathway 2022-2023

Fall Freshman Courses (15 units total)	Course or GE Title	Units	GE/Major
FYS 145	Digital Media Arts and 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 120 or 125, SBS 110, CAD 101B or (CAD 102 +CAD 90)HCOM 120	Critical Reading and Writing	3	A2
Any approved course	Arts GE Area C1 course	3	C1
BIO 204 or 230 or ENV 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, HCOM 260S, or SBS 212S	Civics/Service Learning GE course	3	DCSL
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	Core
CST 338	Software Design	4	Core
HCOM 220, 224, 229, 243**, 246, or 247, or SBS 249** or SPAN 260	GE area F (ethnic Studies) ** double-count for US History US1	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 363	Introduction to Database Systems	4	Conc #1
C1 or C2	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 383 (spring only)	Introduction to Data Science	4	Conc #2
CST 205, 311, 312, 325, 326, 336, 438	CS elective not counted elsewhere	4	CS Elective #1
CST 329 or other UDB	Reasoning with Logic	3	UDB
Fall Senior Courses (15 units total)	Course or GE Title	Units	GE/Major
CST 463 (Fall only)	Advanced Machine Learning	4	Conc #3
CST 205, 311, 312, 325, 326, 336, 438	CS elective not counted elsewhere	4	CS Elective #2
CST 205, 311, 312, 325, 326, 336, 438	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, UDSL, 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 Data Science 4-yr Pathway:		120	