

Computer Science B.S. Data Science 4-Year Pathway 2026-2027

Fall Freshman Courses (15 units total)		Course or GE Title	Units	GE/Major
FYS 145		Digital Media Arts & Culture	3	FYS, GE 3B
MATH 130		Precalculus	5	2
HCOM 125 or HCOM 120 or CAD101B or ENTSTU 120 or LS 120 or SSCI 110		English Composition	3	1A
CST 286		Physics of Computing	4	5A & 5C
Spring Freshman Courses (14 units total)		Course or GE Title	Units	GE/Major
CST 231		Problem Solving/ Programming	4	Major
MATH 150		Calculus I	4	Major
HCOM 200 or 202 or ENTSU 130		Critical Thinking	3	1B
Any approved course		3A. Arts	3	3A
Fall Sophomore Courses (14 units total)		Course or GE Title	Units	GE/Major
CST 238		Intro to Data Structures	4	Major
MATH 170		Discrete Math	4	Major
SL210S or ED212S or HCOM260S or SBS212S		Civics/Service Learning GE course	3	4B & LD Service Learning
HCOM 110 or ENSTU 111		Oral Communication	3	1C
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
CST 338		Software Design	4	Major
BIO 204 or ENVS 201 or KIN 159		Biological Science	3	5B
CST 237		Computer Architecture	4	Major
Fall Junior Courses (16 units total)		Course or GE Title	Units	GE/Major
CST 300		Graduate Writing Assessment	3	GWAR, Major
CST 349		Major ProSeminar	2	Major
CST 370		Design & Analysis of Algorithms	4	Core
CST 383		Intro to Data Science	4	Conc #1
CST 274		History of Communication Technology	3	4A & US1
Spring Junior Courses (15 units total)		Course or GE Title	Units	GE/Major
CST 334		Operating Systems	4	Core
CST 205 or 311 or 315 or 325 or 326 (Spring only) or 336 or 380 (Spring only) or 438		CS elective not counted elsewhere	4	CS Elective #1
CST 363		Intro. to Database Systems	4	Conc #2
Any Area 6 Course		Ethnic Studies	3	6
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 or 311 or 315 or 325 or 336 or 438		CS elective not counted elsewhere	4	CS Elective #2
CST 205 or 311 or 315 or 325 or 336 or 438		CS elective not counted elsewhere	4	CS Elective #3
CST 329 or other UD2/UD5		Reasoning with Logic	3	UD2/UD5
Spring Senior Courses (16 units total)		Course or GE Title	Units	GE/Major

CST 499	Computer Science Capstone	4	Major core
CST 462S	Race, Gender, Class in the Digital World	3	Core, UDSL, UD4
SPAN 350 or JAPN 350 (or any UDC if language complete)	UDC with World Culture & Language	3	UD3, WCL
Free Elective	Free Elective to reach 120 units	3	free elective
Free Elective	Free Elective to reach 120 units	3	free elective
Total Units Software Engineering 4-yr		120	