Computer Science, BS - Data Science Concentration

4-Year Pathway 2025/26 - 2029/30

*The purple courses are offered once a year only!

Fall Freshman Courses Course Prefix and Number	Course Title Abbreviate Course Title	Units	Requirements Met
FYS145	Digital Media and Culture	3	FYS & GE 3B
MATH 130	Precalculus	5	GE 2
Any approved course		3	GE 1A
CST286 (Fall only)	Physics of Computing	4	GE 5A & 5C
Spring Freshman Courses Course Prefix and Number	Course Title Abbreviate Course Title	Units	Requirement Met GE/UR/Major
CST231	Problem-Solving/Programming	4	Major
MATH 170	Discrete Mathematics	4	Major
Any approved course		3	GE 1B
Any approved course	E.g., CST328	3	GE 3A
Any approved course		3	GE 5B
Fall Sophomore Courses Course Prefix and Number	Course Title Abbreviate Course Title	Units	Requirement Met
CST238	Intro to Data Structures	4	Major
MATH 150	Calculus I	4	Major
Any approved course		3	GE 1C
Any approved course		3	GE 4B & LDSL
Spring Sophomore Courses Course Prefix and Number	Course Title Abbreviate Course Title	Units	Requirement Met GE/UR/Major
MATH270	Mathematics of Computing	4	Major
CST237	Intro to Computer Architecture	4	Major
CST274	History of Communication Technology	3	GE 4A & US 1
CST338	Software Design	4	Major
Fall Junior Courses	Course Title	Units	Requirement Met

Course Prefix and Number	Abbreviate Course Title		GE/UR/Major
CST300	Graduate Writing Assessment for Computing and Design	3	GWAR
CST383	Intro to Data Science	4	Conc 1
CST349	Computer Science Proseminar	2	Major
CST370	Design and Analysis of Algorithms	4	Major
Any approved course		3	GE 6
Spring Junior Courses Course Prefix and Number	Course Title Abbreviate Course Title	Units	Requirement Met GE/UR/Major
CST329	Reasoning with Logic	3	GE UD 2
CST334	Operating Systems	4	Major
CST363	Intro to Database Systems	4	Conc 2
Major Elective #1		4	Major Elective 1
Fall Senior Courses Course Prefix and Number	Course Title Abbreviate Course Title	Units	Requirement Met GE/UR/Major
Major Elective #2		4	Major Elective 2
Major Elective #3		4	Major Elective 3
CST463	Advanced Machine Learning	4	Conc 3
CST462s	Race, Gender, Class in the Digital World	3	GE UD 4 & UDSL
Spring Senior Courses Course Prefix and Number	Course Title Abbreviate Course Title	Units	Requirement Met GE/UR/MajorCST
CST499	Computer Science Capstone	4	Major
Any approved course		3	UD 3 & WLC
Any approved course		3	Elective
Any approved course		3	Elective