

B.S. Math Data Science Concentration with B.S. Computer Science Eight Semester Plan

(Revised October 2020)

Freshman Year			
Fall		Spring	
	17		17
MATH 153 (Calculus I)	4	MATH 250 (Introduction to Logic and Proof)	3
MATH 270 (Statistical Methods I)	3	MATH 255 (Calculus II)	4
CS 150 (Problem Solving and Programming I)	4	CS 151 (Problem Solving and Programming II)	4
First Year Seminar (consider CS 191 or MATH 19x)	3	COMM 201 (Foundations of Communication)	3
LS Elective	3	ENGL 101 (Writing and Rhetoric)	3
Sophomore Year			
Fall		Spring	
	17		15
MATH 256 (Calculus III)	4	MATH 310 (Discrete Structures)	3
CS 253 (Software Development)	3	CS 263 (Software Engineering)	3
CS 351 (Data Structures and Algorithms)	4	CS 352 (Programming Languages)	3
ENGL 202 (Writing and Critical Inquiry)	3	LS Elective	3
LS Elective	3	LS Elective	3
Junior Year			
Fall		Spring	
	16		16
MATH 362 (Linear Algebra I)	3	MATH 472 (Data Science)/MATH 474 (Stat Modeling)	3
MATH 475 (Machine Learning)/CS Elective	3	CS 370 (Operating Systems)	3
CS 350 (Computer Organization)	3	CS 453 (Database Systems)	3
CS 465 (Computer Networking)	3	LS Elective	3
LS Elective (C5 Lab Science)	4	LS Elective (C5 Lab Science)	4
Senior Year			
Fall		Spring	
	13		12
MATH 475 (Machine Learning)/CS Elective	3	MATH 472 (Data Science)/MATH 474 (Stat Modeling)	3
MATH 479 (Capstone)	2	CS 353 (Social and Ethical Issues in Computing)	2
CS 325 (Information Security I)	3	CS 496 (Capstone II)	2
CS 495 (Capstone I)	2	LS Elective	3
LS Elective	3	General Elective	2

LS Elective: Students must complete 42 hours of liberal studies courses. One of these courses should be taken at the 300- or 400-level to satisfy the upper level perspective requirement (ULP). The P1 courses must be in two different disciplines. To complete the BS in Computer Science, the two C5 science courses must be lab courses in different disciplines.

MATH/CS Elective: Some courses may count for BOTH a MATH Elective and CS Elective for efficiency.