

Bachelor of Science - Data Science, Comp Track - 120 Credits

		Fall Semester		Spring Semester		
Freshman	CS 100	Roadmap to Computing	3	CS 113	Introduction to Computer Science I	3
	HUM 101	English Composition: Writing, Speaking, Thinking I	3	HUM 102	English Composition: Writing, Speaking, Thinking II	3
	MATH 111	Calculus I	4	MATH 112	Calculus II	4
	PHYS 111	Physics I	3	PHYS 121	Physics II	3
	PHYS 111A	Physics I Lab	1	PHYS 121A	Physics II Lab	1
	FRSH SEM	Freshman Seminar	0			
		Credits:		14	Credits:	14
Sophomore	CS 114	Introduction to Computer Science II	3	CS 241	Foundations of Computer Science I	3
	MATH 244	Introduction to Probability Theory	3	CS 280	Programming Language Concepts	3
	Lower Humanities GER	Any 200-level course from COM, ENG, HIST, HUM, LIT, PHIL, STS, or THTR	3	MATH 341	Statistical Methods II	3
	MATH 337	Linear Algebra	3	IS 350	Computers, Society and Ethics	3
	Social Science / Management GER	ENTR 410, HRM 301, IE 492, MGMT 390, or any 200-level course from ECON/EPS	3	YWCC 207	Computing & Effective Communication	1
				Data Science Elective 1	Select from Data Science Elective list in the catalog	3
		Credits:		15	Credits:	16
Junior	CS 288	Intensive Programming in Linux	3	CS 435	Advanced Data Structures & Algorithm Design	3
	CS 301	Introduction to Data Science	3	CS 482	Data Mining	3
	CS 331	Database System Design and Management	3	CS 375	Machine Learning	3
	CS 370	Introduction to Artificial Intelligence	3	Upper Humanities GER	Any 300-level course from COM, ENG, HIST, HUM, LIT, PHIL, STS, or THTR	3
	ENG 340 or ENG 352	Oral Presentations or Technical Writing	3	Data Science Elective 2	Select from Data Science Elective list in the catalog	3
				YWCC 307	Professional Development in Computing	1
	Credits:		15	Credits:	16	
Senior	CS 450	Data Visualization	3	CS 493	Data Science Capstone 2	3
	CS 444	Big Data Systems	3	MATH 344	Regression Analysis	3
	CS 492	Data Science Capstone 1	3	Data Science Elective 4	Select from Data Science Elective list in the catalog	3
	MATH 478	Statistical Methods in Data Science	3	Humanities Capstone	HSS 400-level	3
	Data Science Elective 3	Select from Data Science Elective list in the catalog	3	Free Elective		3
	Credits:		15	Credits:	15	