

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

		Fall Semester		Spring Semester		
<b>Freshman</b>	CS 100	Roadmap to Computing	3	CS 113	Introduction to Computer Science I	3
	ENGL 101	English Composition: Introduction to Academic Writing	3	ENGL 102	English Composition: Introduction to Writing for Research	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
	FYS	First-Year Student Seminar	0			
	<b>Credits:</b>			<b>14</b>	<b>Credits:</b>	
<b>Sophomore</b>	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
	<b>Credits:</b>			<b>15</b>	<b>Credits:</b>	
<b>Junior</b>	CS 288	Intensive Programming in Linux	3	CS 435	Advanced Data Structures & Algorithm Design	3
	DS 340	Fundamentals and Principles of 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
	COM 312 or COM 313	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
<b>Credits:</b>			<b>15</b>	<b>Credits:</b>		<b>16</b>
<b>Senior</b>	CS 450	Data Visualization	3	DS 493	Data Science Capstone 2	3
	CS 444	Big Data Systems	3	MATH 344	Regression Analysis	3
	DS 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
	<b>Credits:</b>			<b>15</b>	<b>Credits:</b>	