DEGREE WORKSHEET FOR:

BS Data Science and Statistics
Degree Requirements – 120 credits

YEAR 1 - FALL (14 credits)		YEAR 1 - SPRING (16 credits)	
MATH 131 Calculus I (LAX1*)	4 credits	MATH 132 Calculus II (LAX1*)	*4 credits*
STAT 160 Intro to Data Science & Statistics[a]	3 credits	MATH 228 Discrete Mathematics OR CS 209 Computer and Data Ethics	*3 credits*
MATH 102 Success in Math Sciences (suggested elective)	1 credit	CS 120 Computer Programming	3 credits
ENG 122 College Composition [b] (LAW1*)	3 credits	SCI 291 Scientific Writing OR ENG 227 Technical Writing	3 credits
Liberal Arts Curriculum [b] (choose one LAA1, LAA2, LAA3, or LAA4 that is also a LAMS and/or LAIS*)	3 credits	Liberal Arts Curriculum [b] (choose one LAB1, LAB2 or LAB3 that is also a LAMS and/or LAIS*)	3 credits
YEAR 2 - FALL (14 credits)		YEAR 2 - SPRING (15 credits)	
MATH 233 Calculus III	4 credits	CS 209 Computer and Data Ethics OR MATH 228 Discrete Mathematics	3 credits
STAT 211 Computational Tools for Data Analysis	3 credits	STAT 330 Regression Analysis OR STAT 311 Data Preparation and Analysis	3 credits
CS 160 Structured Programming	3 credits	STAT 411 Fundamentals of Data Science OR MATH 221 Elementary Linear Algebra	3 credits
LAC Natural and Physical Sciences with Lab (LASL)	4 credits	Liberal Arts Curriculum [b] (LAH1)	3 credits
		University Wide Elective	3 credits
YEAR 3 - FALL (15 credits)		YEAR 3 - SPRING (16 credits)	
MATH 350 Probability Theory	3 credits	STAT 311 Data Preparation and Analysis OR STAT 330 Regression Analysis	3 credits
STAT 320 Design and Analysis of Experiments OR Major Elective[d]	3 credits	MATH 221 Elementary Linear Algebra OR STAT 411 Fundamentals of Data Science	3 credits
Liberal Arts Curriculum[b] (LAA1, LAA2, LAA3, or LAA4*)	3 credits	Liberal Arts Curriculum [b] (LAB1, LAB2 or LAB3)	3 credits
LAC Natural and Physical Sciences without Lab (LAS1*)	3 credits	University Wide Elective	4 credits
University Wide Elective	3 credits	University Wide Elective	3 credits
YEAR 4 - FALL (15 credits)		YEAR 4 - SPRING (15 credits)	
Major Elective[d] OR STAT 320 Design and Analysis of Experiments	3 credits	Major Elective[d]	3 credits
STAT 490 Statistics Capstone	3 credits	Major Elective[d]	3 credits
University Wide Elective	3 credits	University Wide Elective	3 credits
University Wide Elective	3 credits	University Wide Elective	3 credits
University Wide Elective	3 credits	University Wide Elective	3 credits

*See the Liberal Arts Curriculum webpage for more information

This four-year plan is a recommended schedule to complete your bachelor's degree in 4 years. Every UNC student must meet the following requirements in order to graduate with a bachelor's degree: earn a minimum of 120 semester credit hours; possess a minimum of a 2.00 cumulative grade point average; have at least 31 credit hours in courses designated as Liberal Arts Curriculum; meet all degree requirements in the student's major field of study. Each major and/or emphasis may have additional requirements necessary for graduation. **Students must consult with their major advisor to receive information on any additional graduation requirements.**

Admission Requirement – No separate admission requirement.
Minor Required – No Minor required.
Contact Information –Mathematical Sciences Ross Hall Room 2239, 970-351-2820
School Web Page: http://www.unco.edu/nhs/mathematical-sciences/
Notes – see page 2.

BS Statistics (cont.)

Notes

1   [a] STAT 150 or STAT 250 can substitute for STAT 160

2   [b] Liberal Arts Curriculum courses can be taken any semester. It is strongly suggested that they be evenly distributed over the entire 4 years of study rather than concentrated in the first 2 years. NOTE: You need to complete 31 Liberal Arts Curriculum credits total. Math 131 and Math 132 are required in the program and also satisfy the 3 credit Liberal Arts Curriculum Mathematics requirement. Most students will take ENG 122 for their first composition class unless they have placed out of the introductory composition requirement. Students need to take 6 credits total of composition courses, 7 credits of natural and physical sciences credits, and 15 credits from Arts & Humanities, History, Social & Behavioral Sciences, U.S. Multicultural, and International Studies. Of these 15 credits, one must be designated as a Multicultural Studies [MS] class, and one must be designated as an International Studies [IS] class.

3   [c] You need to complete 25-31 credits of University-wide Electives.

4   [d] You need to complete 9 additional credits from the major electives. Choose from: CS 216, CS 301, CS 395, CS 454, CS 456; MATH 335, 431, 437; STAT 440, 495, or 497.
Electives should be chosen based on interest in Statistics versus Data Science.
*For students more interested in Data Science, we recommend CS 216 & CS 454
*For students more interested in Statistics, we recommend MATH 351 & STAT 440.
* For students interested in attending graduate school in Statistics, we also recommend Math 431.

5   Courses in **bold** are Mathematical Sciences Core courses.