DATA SCIENCE, BACHELOR OF SCIENCE

Code	Title	Hours
General Education/Requirements Area		
I. Communication		
English		
ENGL U101	Composition I	3
ENGL U102	Composition II	3
Speech		
SPCH U201	Foundations in Oral Communication	3
II. Mathematics, Logic & Natural Sciences		
Mathematics		
MATH U141	Calculus I	4
or MATH U142	Calculus II	
Natural Science (w/Lab)		
CHEM U111/ U111L	General Chemistry	4
CHEM U112/ U112L	General Chemistry and Qualitative Analysis	4
Additional Natural Science		3-4
Any second natural science course wtih laboratory or BIOL U206, U240, U260, U270		
III. Information Technology		
CSCI U138	Introduction to Computer Technology	3
or CSCI U150	Introduction to Computer Science	
IV. Fine Arts, Humanities & History		
Fine Arts		
AFAM U204	African American Culture	3
or ARTH U101	Introduction to Art	
or ARTH U105	History of Western Art: Prehistory - Middle Ages	
or ARTH U106	History of Western Art: Renaissance - Modern	
or MUSC U110	Introduction to Music	
or MUSC U140	History of American Popular Music	
or THEA U161	Introduction to Theatre Art	
or THEA U170	Fundamentals in Acting	
History		
HIST U101	Introduction to World History I	3
or HIST U102	Introduction to World History II	
or HIST U105	History of the United States to 1877	
or HIST U106	History of the United States from 1865	
V. Foreign Language & Culture		
ASLG U101	American Sign Language I	3-4
or CHIN U101	Introductory Chinese I	
or FREN U101	Introductory French I	
or GERM U101	Introductory German I	
or SPAN U101	Introductory Spanish I	
VI. Social & Behavioral Sciences		
AFAM U201	Introduction to African American Studies	3
or ANTH U102	Understanding Other Cultures	
or ECON U221	Principles of Macroeconomics	
or ECON U222	Principles of Microeconomics	
or GEOG U101	The Upstate	
or GEOG U103	Introduction to Geography	
or POLI U101	American National Government	
or POLI U200		
or POLI U299		
or PSYC U101	Introduction to Psychology	
or SOCY U101	Introduction to Sociology	
or WGST U101	Introduction to Women's & Gender Studies	
VII. General Education Electives		
6 Cedits from any General Educatiion course or courses		
General Education Electives		6

Code	Title	Hours
Major Requirements [1]		**45**
Data Science		
ENGL U346	Technical Writing	3
CSCI U200	Computer Science I	3
CSCI U236	Python Programming	3
CSCI U300	Computer Science II	3
CSCI U321	Computer Science III	3
CSCI U520	Database System Design	3
CSCI U525	Knowledge Discovery and Data Mining	3
CSCI U580	Introduction to Artificial Intelligence	3
MATH U315	Statistical Methods I	3
MATH U344	Linear Algebra I	3
STAT U516	Statistical Methods II	3
DATA U200	Introduction to Data Science with R	3
DATA U510	Data Science I	3
DATA U520	Data Science II	3
DATA U599	Senior Seminar in Data Science	3

Code	Title	Hours
Upper Level Electives or Minor [1,2]		**9-18**

Code	Title	Hours
Supporting Courses [1]		**9-10**
MATH U174	Elements of Discrete Mathematics	3
Two approved 200-level or higher courses from MATH/STAT/CSCI/ BADM/ECON		6-7

Code	Title	Hours
Electives		**1-12**

Code	Title	Hours
Total Hours 120		

[1] A minimum grade of C is required in each course indicated.

[2] Upper-Level Electives include 200 level or higher MATH/STAT/CSCI/ Natural and Physical Science courses and any course accepted by the University as meeting the requirements of a cognate.