UNIVERSITY OF South Carolina

This course plan is a recommended sequence for this major. Courses designated as critical (!) may have a deadline for completion and/or affect time to graduation. Please see the Program Notes section for details regarding "critical courses" for this particular Program of Study.

Critical	Course Subject and Title	Credit Hours	Min. Grade[1]	Major GPA[2]	Code	Prerequisites	Notes
Semester One (15-17 Credit Hours)							
!	ENGL 101 Critical Reading and Composition	3	C		CC-CMW		
	MATH 122 Calculus for Bus. Admin. & Social Sci. *or* MATH 141 Calculus 1[3]	3-4	C		CC-ARP	C or better in MATH 111/111I/ or MATH 115 *(MATH 122);* MATH 112, 115, 116 *(MATH 141); or* Math placement test score	
	STAT 201 Elementary Statistics[4] *or* STAT 205 Elem. Stat. for Biological & Life Sci. *or* STAT 206 Elem. Statistics for Business	3	C		PR	C or higher in MATH 122 or 141; *or* MATH 111 *and* any statistics course	
	Foreign language[5] *or* other Carolina Core Req.[6]	3-4			CC-GFL		
	UNIV 101 The Student in the University *or* Carolina Core Requirement[6]	3			PR/CC		
Semester Two (16 Credit Hours)							
!	ENGL 102 Rhetoric and Composition	3	C		CC-CMW CC-INF	C or better in ENGL 101	
	MATH 170 Finite Mathematics	3	C		CC-ARP	MATH 111, 111I, or 122 or placement through Algebra Math Placement Test	
	STAT 301 Statistical Methods for Data Analytics *or* STAT 516 Statistical Methods II *(offered spring & summer only)*	3	C		MR	C or better in STAT 201, 205, 206, PSYC 220 or SOCY 392 *(STAT 301);* STAT 515, 509, 512 or equivalent *(STAT 516)*	
	Carolina Core SCI Requirement[6]	4			CC-SCI		
	Foreign language[5] *or* other Carolina Core Req.[6]	3			CC-GFL		
Semester Three (15 Credit Hours)							
	STAT 530 Applied Multivariate Stat. & Data Mining *or* STAT/CSCE 587 Big Data Analytics	3	C		MR	C or better in STAT 301, 515, 205, 509, 512, ECON 436, MGSC 291, *or* PSYC 221 *(STAT 530);* STAT 509, 513, *or* 515 *(STAT/CSCE 587)*	
	CSCE 106 Scientific Applications Programming	3	C		CR	C or better in MATH 122 *or* 141	
	MATH 328 Math. Concepts for Data Analytics	3	C		CR	C or better in MATH 122 or MATH 141 & in MATH 170; Pre or Coreq: C or better in STAT 301 *or* 516	
	Minor Course[7]	3			PR		
	Foreign language[5] *or* Carolina Core Requirement[6]	3			CR/CC		
Semester Four (16 Credit Hours)							
	Carolina Core SCI Requirement[6]	4	C		CC-SCI		
	CSCE 567 Visualization Tools	3	C		MR	CSCE 145 *or* 106 *or* 207	
	ITEC 101 Thriving in the Tech Age *or* PHIL 325 Engineering Ethics or any CC-VSR[8]	3	C		CC-VSR		
	Minor Course[7]	3	C		PR		
	History[9]	3			CR		
Semester Five (15 Credit Hours)							
	Data Analytics Major Elective[10]	3	C		MR		
	ENGL 363 Introduction to Professional Writing *or* ENGL 462 Technical Writing *or* ENGL 463 Business Writing[11]	3	C		CR	ENGL 101 & 102	
	Minor Course[7]	3	C		PR		
	Carolina Core Requirement[6]	3			CC		
	Social Science	3			CR		
Semester Six (15 Credit Hours)							
	STAT 542 Computing for Data Science	3	C		MR CC-INT	C or better in STAT 301, 509, *or* 515 *or* equivalent	
	Data Analytics Major Elective[10]	3	C		MR		
	Minor Course[7]	3	C		PR		
	Carolina Core Requirement[6] *or* Approved Elective[12]	3			CC/PR		
	Carolina Core Requirement[6] *or* Approved Elective[12]	3			CC/PR		
Semester Seven (15 Credit Hours)							
	Data Analytics Major Elective[10]	3	C		MR		
	Minor Course[7]	3	C		PR		
	Approved Elective[12]	3			PR		
	Approved Elective[12]	3			PR		
	Approved Elective[12]	3			PR		
Semester Eight (12-13 Credit Hours)							
	Data Analytics Major Elective[10]	3	C		MR		
	Minor Course[7]	3	C		PR		
	Approved Elective[12]	3			PR		
	Approved Elective[12]	3			PR		
	Approved Elective[12] *(only if needed to meet hours to graduate)*	0-1			PR		

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Graduation Requirements Summary

Minimum Total Hours	Minimum Major Requirements Hours	College & Program Requirements Hours	Carolina Core Hours	Minimum Institutional GPA
120	24	51-64	32-45	2.000

1. Regardless of individual course grades, students must maintain a minimum 2.000 cumulative GPA.
2. Some colleges require a minimum GPA for major courses. Courses indicated in this column are included in the major GPA for this program of study.
3. Students who place into MATH 111/111I/115 will be required to take it before proceeding to MATH 122 or 141. MATH 141 is required for some minors or second majors, such as Physics. A student who is undecided between majoring in Data Analytics and one of Data Science, Computer Science, Mathematics, or Statistics should take MATH 141.
4. This requirement can be met in a variety of ways, please consult with your advisor. STAT 206 is the default recommendation. STAT 205 requires enrollment in a minor or second major such as Biology, Environmental Science, Marine Science and other biological or health science related fields. STAT 205 is specifically required for some second majors. STAT 206 is specifically required for some second majors. PSYC 220 is required for a student majoring in Psychology (after taking PSYC 101). SOCY 392 is required for students getting a second major in Sociology should take SOCY 392. Some second majors require STAT 509 or STAT 515. A student who is undecided between majoring in Data Analytics and one of Data Science, Computer Science, Mathematics, or Statistics should take STAT 515 or STAT 509 if they meet the prerequisite.
5. Students in the College of Arts and Sciences are required to demonstrate proficiency in one foreign language equivalent to the 122 course through course credit or the corresponding foreign language placement score.
6. The Carolina Core provides the common core of knowledge, skill and academic experience for all Carolina undergraduate students.
7. **Minor:** Students in the Data Analytics B.S. must complete a minor of at least 18 hours. In lieu of a minor, an additional major may be added to a student's program of study. A second major within the College of Arts and Sciences must include all major courses as well as any prescribed courses noted (*) in the bulletin. Regulations on an additional degree for a second major in another college can be found under Degree/Certificate Conferral and Graduation Policies in the Undergraduate Academic Regulations. Prescribed courses noted in the bulletin may be shared with Carolina Core, College Requirements, and Program Requirements in the primary program. The minor or second major may not be from fields closely aligned to data science theory, and the following programs are excluded: Actuarial Mathematics and Statistics Minor; Computer Engineering, B.S.E.; Computer Information Systems, B.S.; Computer Science, B.S.C.S.; Data Science, B.S.; Data Science minor; Mathematics, B.S.; Mathematics minor; Statistics, B.S.; Statistics minor. Courses applied toward Carolina Core requirements cannot be counted toward the minor. No course may satisfy both major and minor requirements.
8. **Ethics in Data Analysis:** If ITEC 101 or PHIL 325 were not taken to fulfill the Carolina Core VSR requirement with a grade of C or better, then one of the following must be taken in place of an elective: CYBR 390, 392; ISCI 315, 415; ITEC 101; PHIL 323, 325.
9. The College of Arts and Sciences requires one U.S. History and one non-U.S. History course, both of which must be chosen from the approved Carolina Core GHS courses. Whichever is not fulfilled through the Carolina Core GHS requirement must be fulfilled through this college requirement.
10. **Data Analytics Major Electives (12 hours):** Select four courses from the following list, or from STAT 530, or CSCE/STAT 587 that was not taken as a major course. Some of these courses have prerequisites not required in the program but may be taken as electives, as part of some minors, or to satisfy other requirements: ANTH 323; BIOL 588; STAT 588; CRJU 512, 582; CSCE 556, 585; EPID 410; GEOG 345, 363, 551, 563, 564; ISCI 310, 560; MATH 529, 572; POLI 475; SOCY 391, 562; STAT 506, 540, 541. Courses that require prerequisite courses in that subject area: ANTH 550; ECON 336, 436, 594; ISCI 301; ITEC 370; SOCY 561. Courses that may require a Minor in Business Administration and/or MGSC 291: MGMT 425; MGSC 390, 391, 394; MKTG 448, 470.
11. A student who has passed MGMT 250 with a grade of C or higher may use another 3-hour Fine Arts/Humanities Course to satisfy this requirement.
12. No courses of a remedial, developmental, skill-acquiring, or vocational nature may apply as credit toward degrees in the College of Arts and Sciences. The College of Arts and Sciences allows the use of the Pass-Fail option on elective courses. Further clarification on inapplicable courses can be obtained from the College of Arts and Sciences.

Program Notes:
- Courses identified as "critical" must be completed in the student's first 60 semester hours of work in order for these courses to be credited toward graduation.
- All undergraduate students must take a 3-credit course or its equivalent with a passing grade that covers the founding documents. This course may fulfill any requirement in the program of study. Courses that meet this requirement are listed in the academic bulletin.
- To be retained in the program, a student must obtain a grade of C or higher in at most two attempts in all mathematics, computer science, and statistics courses required for graduation.
- The last 30 credit hours toward your degree must be earned in residence at the University of South Carolina-Columbia.

University Requirements: Bachelor's degree-seeking students must meet Carolina Core (general education) requirements. For more information regarding these requirements, please visit the Carolina Core page on the University website.

Codes:			
CC	Carolina Core	**CC-INF**	Carolina Core – Information Literacy
CC-AIU	Carolina Core-Aesthetic and Interpretive Understanding	**CC-INT**	Carolina Core – Integrative Course
CC-ARP	Carolina Core-Analytical Reasoning and Problem-Solving	**CC-SCI**	Carolina Core – Scientific Literacy
CC-CMS	Carolina Core-Effective, Engaged, and Persuasive Communication: Spoken Component	**CC-VSR**	Carolina Core – Values, Ethics, and Social Responsibility
CC-CMW	Effective, Engaged, and Persuasive Communication: Written Component	**CR**	College Requirement
CC-GFL	Carolina Core-Global Citizenship and Multicultural Understanding: Foreign Language	**MR**	Major Requirement
CC-GHS	Carolina Core – Historical Thinking	**PR**	Program Requirement
CC-GSS	Carolina Core – Social Sciences		

Disclaimer: Major maps are only a suggested or recommended sequence of courses required in a program of study. Please contact your academic advisor for assistance in the application of specific coursework to a program of study and course selection and planning for upcoming semesters.