UNIVERSITY OF SOUIHCAROLINA

## Program of Study

## Degree Requirements (125 hours)

1. Carolina Core ( $\mathbf{3 5}-44$ hours)
a. CMW (6 hours) - must be passed with a grade of $C$ or bigher
i. ENGL 101 - Critical Reading and Composition
ii. ENGL 102 - Rhetoric and Composition
b. ARP (8 hours) - must be passed with a grade of $C$ or higher
i. MATH 141 - Calculus I
ii. MATH 142-Calculus II
c. $\mathbf{S C I}$ (8 hours)
i. Either all of:
2. CHEM 111-General Chemistry I - must be passed with a grade of $C$ or bigher
3. CHEM 111L - General Chemistry I Laboratory - must be passed with a grade of $C$ or higher
4. CHEM 112 - General Chemistry II (not approved for CC-SCI)
5. CHEM 112L - General Chemistry II Laboratory (not approved for CC-SCI)
ii. Or all of:
6. PHYS 211 - Essentials of Physics I -must be passed with a grade of $C$ or higher
7. PHYS 211L - Essentials of Physics I Lab - must be passed with a grade of C or higher
8. PHYS 212 - Essentials of Physics II
9. PHYS 212L - Essentials of Physics II Lab
d. GFL ( $0-6$ hours): Students in the College of Engineering and Computing are required to demonstrate proficiency in one foreign language equivalent to the 121 course by 1) a score of two or better on the foreign language placement test; or 2) completion of the 109 and 110 courses in FREN, GERM, LATN, or SPAN or completion of the 121 course in another foreign language.
e. GHS (3 hours): any approved CC-GHS course
f. GSS (3 hours): any approved CC-GSS course
g. AIU (3 hours): any approved CC-AIU course

## Carolina Core Stand Alone or Overlay Eligible Requirements:

Up to two of these requirements may be met in overlay courses. At least one of these requirements must be satisfied by a course not applied elsewhere in general education. (3-9 Hours)
h. CMS (3 hours)
i. SPCH 140 - Public Communication
i. INF (0-3 hours): any approved overlay or stand-alone CC-INF course
j. $\quad \operatorname{VSR}$ ( 1 hour)
i. CSCE 390 - Professional Issues in Computer Science and Engineering -must be passed with a grade of $C$ or bigher
2. College Requirements: No college-required courses for this program.
3. Program Requirements ( 60 hours)
a. Supporting Courses ( 57 hours)
i. MATH 241 - Vector Calculus
ii. MATH 344 - Applied Linear Algebra
iii. MATH 344L - Applied Linear Algebra Lab
iv. MATH 374 - Discrete Structures -must be passed with a grade of $C$ or bigher
v. STAT 509-Statistics for Engineers
vi. ENGL 462 - Technical Writing or ENGL 463 - Business Writing
vii. Laboratory Science Elective (4 hours)

1. ANTH 161 - Human Origins: An Introduction to Biological Anthropology
2. ASTR 101 - Introduction to Astronomy
3. BIOL 101 - Biological Principles I and BIOL 101L - Biological Principles I Laboratory
4. BIOL 110 - General Biology
5. CHEM 111 - General Chemistry I and CHEM 111L - General Chemistry I Laboratory
6. CHEM 141 - Principles of Chemistry I
7. ENVR 101 - Introduction to the Environment and ENVR 101L - Introduction to the Environment Lab
8. ENVR 200 - Natural History of South Carolina
9. GEOG 201 - Landform Geography
10. GEOG 202 - Weather and Climate
11. GEOL 101 - Introduction to the Earth
12. GEOL 103 - Environment of the Earth
13. GEOL 201 - Observing the Earth
14. GEOL 215 - Coastal Environments of the Southeastern United States and GEOL 215L Coastal Environments of the Southeastern United States Lab
15. GEOL 302 - Rocks and Minerals
16. MSCI 101 - The Ocean Environment
17. MSCI 102 - The Living Ocean
18. MSCI 210 - Oceans and Society and MSCI 210L - Oceans and Society Lab
19. MSCI 215 - Coastal Environments of the Southeastern United States and MSCI 215L Coastal Environments of the Southeastern United States Lab
20. PHYS 211 - Essentials of Physics I and PHYS 211L - Essentials of Physics I Lab
viii. Liberal Arts Electives (9 hours):
21. AERO 401, 402
22. AFAM 201-580
23. ANTH 100-499
24. ARMY 401, 402
25. ARTE 101, 260
26. ARTH 105-366
27. ARTS 103-261
28. CHIN 103-550
29. CLAS 220-598
30. CPLT 150-597
31. CRJU 100-494
32. DANC 101-381
33. ECON 101-499
34. ENGL 270-499
35. FAMS 180-597
36. FREN 109-615
37. GEOG 103-595
38. GERM 109-615
39. HIST 101-692
40. ITAL 101-615
41. JAPA 121-500
42. LASP 201-451
43. LATN 109-615
44. LING 300-600
45. MART 110-341
46. MUSC 110-140
47. NAVY 401, 402
48. PHIL 101-109, 112-598
49. POLI 100-499
50. PORT 121-615
51. PSYC 100-499
52. RELG 101-552
53. RUSS 121-616
54. SOCY 100-499
55. SOST 101-500
56. SPAN 109-615
57. THEA 170-565
58. WGST 111-555
ix. Lower Division Computing (22 hours) -must be passed with a grade of C or higher
59. CSCE 145 - Algorithmic Design I
60. CSCE 146-Algorithmic Design II
61. CSCE 190 - Computing in the Modern World
62. CSCE 211 - Digital Logic Design
63. CSCE 212 - Introduction to Computer Architecture
64. CSCE 215 - UNIX/Linux Fundamentals
65. CSCE 240 - Advanced Programming Techniques
66. CSCE 247 - Software Engineering
x. Application Area (9 hours)

An application area consists of three courses (9 hours) in a single area offered by another department. This coursework must display a distinct curriculum pattern. If a defined minor exists in the discipline of the application area, then a good set of suggested courses for the application area would be a subset of the minor. Students should consult their advisor to ensure their application area courses will meet this graduation requirement.
4. Major Requirements ( $\mathbf{3 0}$ hours) - must be passed with a grade of $C$ or bigher
a. Major Courses (21 hours)
i. CSCE 311 - Operating Systems
ii. CSCE 330 - Programming Language Structures
iii. CSCE 350 - Data Structures and Algorithms
iv. CSCE 355 - Foundations of Computation
v. CSCE 416 - Introduction to Computer Networks
vi. CSCE 490 - Capstone Computing Project I
vii. CSCE 492 - Capstone Computing Project II
b. Major Electives (9 hours): Choose from CSCE 317 or other approved CSCE courses numbered 500 and higher. A list of acceptable Major Elective courses is also maintained in the department office and on its website.

## Program GPA

Program GPA requirement policies are described in the College of Engineering and Computing section of this bulletin. For the purpose of these policies, the following courses are used to determine the Program GPA for the Computer Science B.S.C.S. program: all Lower Division Computing, Computer Science Major, and Computer Science Elective courses, and CSCE 390.

## Exclusions

No Lower Division Computing, Computer Science Major, or Computer Science Elective course may be counted toward a minor or application area. All other degree-required courses and electives may be used for a minor as appropriate. CSCE 101 and CSCE 102 are not major courses and may not be used for degree.

