Program of Study

Degree Requirements (125 hours)

1. Carolina Core (35-44 hours)
   a. CMW (6 hours) — must be passed with a grade of C or higher
      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. SCI (8 hours)
      i. Either all of:
         1. CHEM 111 - General Chemistry I — must be passed with a grade of C or higher
         2. CHEM 111L - General Chemistry I Laboratory — must be passed with a grade of C or higher
         3. CHEM 112 - General Chemistry II (not approved for CC-SCI)
         4. CHEM 112L - General Chemistry II Laboratory (not approved for CC-SCI)
      ii. Or all of:
         1. PHYS 211 - Essentials of Physics I — must be passed with a grade of C or higher
         2. PHYS 211L - Essentials of Physics I Lab — must be passed with a grade of C or higher
         3. PHYS 212 - Essentials of Physics II
         4. 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. VSR (1 hour)
   i. CSCE 390 - Professional Issues in Computer Science and Engineering — must be passed with a grade of C or higher

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 higher
      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. MSC1 101 - The Ocean Environment
17. MSC1 102 - The Living Ocean
18. MSC1 210 - Oceans and Society and MSC1 210L - Oceans and Society Lab
19. MSC1 215 - Coastal Environments of the Southeastern United States and MSC1 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):
1. AERO 401, 402
2. AFAM 201-580
3. ANTH 100-499
4. ARMY 401, 402
5. ARTE 101, 260
6. ARTH 105-366
7. ARTS 103-261
8. CHIN 103-550
9. CLAS 220-598
10. CPLT 150-597
11. CRJU 100-494
12. DANC 101-381
13. ECON 101-499
14. ENGL 270-499
15. FAMS 180-597
16. FREN 109-615
17. GEOG 103-595
18. GERM 109-615
19. HIST 101-692
20. ITAL 101-615
21. JAPA 121-500
22. LASP 201-451
23. LATN 109-615
24. LING 300-600
25. MART 110-341
26. MUSC 110-140
27. NAVY 401, 402
28. PHIL 101-109, 112-598
ix. **Lower Division Computing** (22 hours) *must be passed with a grade of C or higher*
   1. CSCE 145 - Algorithmic Design I
   2. CSCE 146 - Algorithmic Design II
   3. CSCE 190 - Computing in the Modern World
   4. CSCE 211 - Digital Logic Design
   5. CSCE 212 - Introduction to Computer Architecture
   6. CSCE 215 - UNIX/Linux Fundamentals
   7. CSCE 240 - Advanced Programming Techniques
   8. 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 (30 hours) —must be passed with a grade of C or higher**
   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.