



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. 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):
 - 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

29. POLI 100-499
30. PORT 121-615
31. PSYC 100-499
32. RELG 101-552
33. RUSS 121-616
34. SOCY 100-499
35. SOST 101-500
36. SPAN 109-615
37. THEA 170-565
38. WGST 111-555

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.