DEPARTMENT OF COMPUTER SCIENCE

John R. Placer, Chairperson, Science and Technology Building, Suite C-124

Students enrolled at East Carolina University or transferring from other institutions may be considered for admission to the Department of Computer Science provided the following departmental requirements are met. A student must have completed a minimum of 36 s.h. with a minimum cumulative 2.0 GPA and have earned at least a C in CSCI 2310 and 2311.

BS in Computer Science

Credit toward a computer science major will not be given for any CSCI course with a grade less than C being used to satisfy the requirements specified in the common core and CSCI electives. Minimum degree requirement is **126 s.h.** of credit as follows:

1. Foundations curriculum (See Section 4, Foundations Curriculum Requirements for all Baccalaureate Degree Programs), including those listed below.....42 s.h.

See cognates below for courses that fulfill science requirements.

COMM 2410. Public Speaking (3) (F,S,SS) (FC:FA) or COMM 2420. Business and Professional Communication (3) (F,S,SS) (FC:FA)

PHIL 2275. Professional Ethics (3) (WI*) (F,S,SS) (FC:HU)

2. Common core.....25 s.h.

CSCI 2310, 2311. Algorithmic Problem Solving and Programming Laboratory (4,0) (F,S) (P: MATH 1065; C for CSCI 3300. Introduction to Algorithms and Data Structures (4) (F,S) (P: CSCI 2310; C: CSCI 2427)

CSCI 3310. Advanced Data Structures and Data Abstraction (3) (F,S) (P: CSCI 2427, 3300)

CSCI 3526. Switching Theory and Computer Organization (3) (F,S) (P: CSCI 2310; CSCI 2427)

CSCI 3675. Organization of Programming Language (3) (F) (P: CSCI 3200 or 3310)

CSDI 4000. Senior Assessment (0) (F,S)

CSCI 4200. Software Engineering I (3) (WI) (F,S) (P: CSCI 3200 or 3310; CSCI major)

CSCI 4230. Software Engineering II (3) (F,S) (P: CSCI 4200 or consent of instructor)

CSCI 4602. Theory of Automata and Linguistics (3) (F) (P: CSCI major; CSCI 2427)

CSCI 4630. Operating Systems I (3) (F,S) (P: CSCI 3200 or 3300; CSCI major)

3. Cognates.....25-27 s.h.

CSCI/MATH 2427. Discrete Mathematical Structures (3) (F,S) (P: MATH 1065 or 1066)

CSCI/MATH 3584. Computational Linear Algebra (3) (F,S) (P: Calculus course)

ENGL 3880. Writing for Business and Industry (3) (WI) (F,S,SS) (P: ENGL 1200) or ITEC 3290. Technical Writing (3) (WI) (F,S,SS) (P: ENGL 1200)

MATH 2171. Calculus I (4) (F,S,SS) (FC:MA) (P: minimum grade of C in any of MATH 1083, 1085, or 2122) or MATH 2121. Calculus for the Life Sciences I (3) (F,S,SS) (FC:MA) (May not receive credit for MATH 2121 after taking MATH 2171) (P: MATH 1065 or 1077 with minimum grade of C)

MATH 2172. Calculus II (4) (F,S,SS) (FC:MA) (P: MATH 2171 with a minimum grade of C or MATH 2122 with consent of instuctor) or MATH 2122. Calculus for the Life Sciences II (3) (F,S,SS) (May not receive credit for

MATH 2122 after taking MATH 2172) (P: MATH 2121)

MATH 2228. Elementary Statistical Methods I (3) (F,S,SS) (P: MATH 1065 or equivalent) or MATH 2283. Statistics for Business (3) (F,S,SS) (P: MATH 1065 or 1066 or equivalent) or MATH 3307. Mathematical Statistics I (3) (F,S) (P: MATH 2172)

MATH 3229. Elementary Statistical Methods II (3) (F,S) (P: MATH 2228 or equivalent) or MATH 3308. Mathematical Statistics II (3) (F) (P: MATH 3307) or CSCI 5774. Programming for Research (3) (F,S) (P: General course in statistics or consent of instructor) 12 S.H. of science. (Note that 8 of these 12 units count toward foundation curriculum requirements.)

One of the following options must be selected.

Option 1 - Physics:

PHYS 1251, 1261. General Physics Laboratory (1,1) (F,S,SS) (FC:SC) (C for 1251: PHYS 1250 or 2350; C for 1261:1260 or 2360)

PHYS 2350, 2360. University Physics (4,4) (F,S,SS) (FC:SC) (P: MATH 2121 or 2171; P for PHYS 2360: PHYS 2350)

2 s.h. of science that satisfy ECU foundation requirements.

Option 2 – Chemistry:

CHEM 1150, 1151. General Chemistry and Laboratory I (3,1) (F,S,SS) (FC:SC) (P: Chemistry placement test or passing grade in CHEM 0150; P/C: MATH 1065; C for 1150: CHEM 1151; C for 1151: CHEM 1150)

CHEM 1160, 1161. General Chemistry and Laboratory II (3,1) (F,S,SS) (FC:SC) (P: CHEM 1150, 1151; C for 1160: CHEM 1161; C for 1161: CHEM 1160; RC: MATH 1083 or 1085)

4 s.h. of science that satisfy ECU foundation requirements.

Option 3 - Biology

BIOL 1100, 1101. Principles of Biology and Laboratory I (3,1) (F,S,SS) (FC:SC) (P/C: for 1101: BIOL 1100)

BIOL 1200, 1201. Principles of Biology and Laboratory II (3,1) (F,S,SS) (FC:SC) (P/C: for 1201: BIOL 1200)

4 s.h. of science that satisfy ECU foundations curriculum requirements.

4. CSCI electives above 2999 (excluding CSCI 3200 and 5774).....15 s.h.

5. Electives to complete requirements for graduation.

*Requirements for 5 above, may be met by satisfying the requirements for a minor.