First-Year Colloquium (1 hour)

Required of full-time freshmen entering college for the first time and transfer students with less than 12 hours of credit. (See page 36 for details) CPSC 1105 First Year Experience for Computer Science Majors

Standard UA Little Rock Core (21 hours)

Written Communication (6)

U.S. Traditions (3)

Fine Arts (3)

Social Science (3)

History of Civilization (3)

Humanities (3)

Students may take any of the courses approved by the Core Curriculum Council in the above categories to satisfy the core requirements above.

EIT College Core (15 hours)

Mathematics (4)

Students should take MATH 1451 in this category.

Science (8)

Students should take CHEM 1402 (General Chem I) or PHYS 2321/2121 (Physics for Sci/Eng I)and (if not both of the former) one of {ERSC 1302/1102, ERSC 1304/1104, ERSC 2303/2103, BIOL 1400, BIOL 1401, ASTR 1301/1101}.

Humanities/Soc. Sci./Oral Communication/Interdisciplinary (3)

Students may take any of the courses approved by the Core Curriculum Council in the above categories to satisfy the core requirements above.

Major (69 hours)

Additional Math courses (13 hours):

MATH 1451 Calculus I (counted under EIT core. See â€œEIT College Coreâ€ section above.) I

MATH 1452 Calculus II

MATH 2310 Discrete Mathematics

MATH 3310 Algebraic Structures or MATH 3312 Linear Algebra

STAT 3352 Applied Statistics

Additional Science Course (4 hours): (See EIT science core above). After taking PHYS 2321/2121 or CHEM 1402, students should complete the year sequence in either physics or chemistry via the next course in sequence (PHYS 2322/2122 or CHEM 1403).

Additional Math/Science Elective (3 hours) A minimum of 3 additional hours of mathematics or science courses for majors must be taken in addition to the requirements listed above.

Major Requirements (40 hours):

CPSC 1175 Introduction to Computer Science Laboratory*

CPSC 1375 Programming I*

CPSC 2376 Programming II*

CPSC 2380 Data Structures and Algorithms*

CPSC 2382 Introduction to Computer Systems and Assembly Language

CPSC 3375 Database Concepts I

CPSC 3380 Operating Systems

CPSC 3383 Language Concepts

CPSC 3482 Computer Organization I

CPSC 4373 Fundamentals of Software Engineering

CPSC 4392 Capstone Project

IFSC 1310 Internet Technologies

IFSC 2200 Ethics in the Profession

RHET 3326 Technical Writing

Electives (9 hours): Upper-level Computer Science courses with advisor approval

Unrestricted General Electives (14, of which at least 8 should be UL)

Remaining hours to reach 120 minimum total hours: 45 hours of upper-level courses (3000-4000 level), or 30 hours in residence.

* Students must receive a grade of C or greater in this class.

Bachelor of Science in Computer Science (120 hours)

Suggested Curriculum

First Semester, Fall (15 hours)

RHET 1311 Composition I

MATH 1451 Calculus I

HIST 1311 History of Civilization I or HIST 1312 History of Civilization II

CPSC 1375 Programming I

CPSC 1175 Introduction to Computer Science Laboratory

CPSC/IFSC 1105 Freshman Experience

Second Semester, Spring (16 hours)

RHET 1312 Composition II

MATH 1452 Calculus II

CPSC /IFSC 1310 Internet Technologies

CPSC 2376 Programming II

SPCH 1300 Speech Communication (or other suitable EIT College Core course in this category)

Third Semester, Fall (16 hours)

MATH 2310 Discrete Mathematics

CPSC 2382 Introduction to Computer Systems and Assembly Language

CPSC 2380 Data Structures and Algorithms

PHYS 2321 Physics for Scientists and Engineers I and PHYS 2121 Physics for Scientists and Engineers I Laboratory (or Chemistry 1402)

HIST 2311 U.S. History to 1877 or HIST 2312 U.S. History since 1877 or POLS 1310 American National Government

Fourth Semester, Spring (15 hours)

Unrestricted elective (3)

CPSC 3380 Operating Systems

CPSC 3375 Database Concepts I

PHYS 2322 Physics for Scientists and Engineers II and PHYS 2122 Physics for Scientists and Engineers II Laboratory (or Chem 1403)

IFSC 2200 Ethics in the Profession

Fifth Semester, Fall (16 hours)

Fine Arts core requirement (3 hours)

CPSC 3383 Language Structure

CPSC 3482 Computer Organization I

MATH 3310 Algebraic Structures I or MATH 3312 Linear Algebra

Upper-level unrestricted elective (3 hours)

Sixth Semester, Spring (15 hours)

RHET 3326 Technical Writing

Social Sciences core requirement (3 hours)

Upper-level CPSC elective (3 hours)

Math/Science Elective (3 hours)

Humanities core requirement (3 hours)

Seventh Semester, Fall (15 hours)

CPSC 4373 Fundamentals of Software Engineering

Unrestricted Elective (2 hours)

Upper-level CPSC elective (3 hours)

STAT 3352 Applied Statistics I

Core science course with lab (4 hours)

Eighth Semester, Spring (12 hours)

Upper-level CPSC elective (3 hours)

CPSC 4392 Capstone Project

Upper-level unrestricted electives (6 hours)