Computer Science (B.A.) or (B.S.)

Major Requirements

Admission Requirements

The person wishing to major in Computer Science should meet the undergraduate admissions requirements of Mississippi College. *Degree Requirements* The B.A. or B.S. in Computer Science requires completion of 46 hours in computer science, 15 hours of mathematics, at least twelve hours of science, and the university core curriculum. The following are required computer science, mathematics, and science courses for the B.A. or B.S. Degree in Computer Science:

Computer Science	Course Credit
CSC 115 Foundations of Computer Science	3
CSC 116 Introduction to Programming and Problem Solving	4
CSC 216 Data Structures	4
CSC 220 C/C++ Language Programming	3
CSC 309 Discrete Structures	3
CSC 314 Computer Organization	3
CSC 330 Social & Ethical Issues in Computing	3
CSC 402 Advanced Data Structures	3
CSC 404 Programming Language Structures	3
CSC 416 Software Engineering	3
CSC 422 Operating Systems	3
CSC 485 Senior Seminar	1
Total	36

Electives in Computer Science:

Three hours from:

CSC 319 Computer-Human Interaction
CSC 423 Computer Networking
CSC 425 Advanced Data Base Systems
CSC 433 Selected Topics
CSC 440 Introduction to Artificial Intelligence
CSC 450 Computer Graphics
CSC 460 Automata Theory and Formal Languages.

Six hours from CSC courses, exclusive of CSC 114 with no more than 3 hours in specialized language courses.

Mathematics	Course Credit
MAT 121 Calculus with Analytic Geometry I	3
MAT 122 Calculus with Analytic Geometry II	3
MAT 207 Elementary Statistics or MAT 353 Introduction to Mathematical Probability & statistics.	3
Total	9

Electives in Mathematics: Three hours of mathematics from the following courses:

MAT 213 Applied Linear Algebra, MAT 221 Calculus with Analytic Geometry III, MAT 352 Introduction to Differential Equations, MAT 381 Introduction to Numerical Methods, MAT 455

Graph Theory or MAT 481 Numerical Analysis.

Science Other required courses Twelve hours of sciences from the following: An eight hour sequence to be chosen from the following: BIO 111-112 Biology I & II, or CHE 101-102 General Inorganic Chemistry I & II, or PHY 101-102 General Physics, or PHY 201-202 Fundamentals of Physics and four additional hours of Biology, Chemistry, of Physics.

Computer Science Minor Requirements Students electing to minor in computer science must complete 18 semester hours of work in computer science, including: CSC 116 Introduction to Programming and Problem Solving, CSC 216 Data Structures, CSC 314 Computer Organization. CSC 114 Introduction to Computer Science and CSC 387, 388, 389 and 380 Internship may not be taken as a part of the minor.

Honor Courses By invitation of the Honors Council; see Honors Program section of Undergraduate Catalog.