

COMPUTER SCIENCE, B.S.

MU's Computer Science program consists of two components, which explore topics such as computer graphics, artificial intelligence, networks, software engineering, databases, human-computer interaction, game programming and parallel processing. All Computer Science majors start with the core component to gain skills that are considered fundamental to the study of computer science. This includes grounding in various aspects of programming, computer architecture, discrete mathematical structures, computational models and data structures. The second component is an elective section in which students select courses based on personal interest and career goals from various advanced topics in computer science. This allows students to tailor their coursework to their own needs, while ensuring that every student receives the same fundamental background in the canonical areas of computer science.

Major in Computer Science, BS

Code	Title	Hours
Credits Required for Major		
true		
Minimum GPA 2.0 for Major		
true		
Minimum Residency 50% of Major Courses		
true		
CSCI 140	Discrete Structures	4
CSCI 161	Introduction to Programming 1	4
CSCI 162	Introduction to Programming 2	4
CSCI 330	Programming Languages	4
CSCI 340	Computational Models	4
CSCI 362	Data Structures	4
CSCI 366	Database Systems	4
CSCI 370	Computer Architecture	4
CSCI 380	Operating Systems	4
CSCI 420	Software Engineering	4
Electives - Choose 12 hours from:		12
CSCI 300	Co-Op Ed Experience in CSCI	
Any CSCI 375-499 course(s)		
Note: This requirement may not be satisfied with CSCI 380 or CSCI 420.		
Up to 4 credits of Co-op (CSCI 300, 400, 500) are allowed. CSCI 406 Topics courses may be selected if it is 4 credits.		
Total Hours		52

Req Related for Computer Science, BS

Code	Title	Hours
MATHEMATICS		
Calculus I or Honors Calculus - Choose 1 of the following:		4-5
MATH 161	Calculus 1	

MATH 163H	Honors Calculus 1	
MATH 235	Survey of Statistics	3
MATH 304	Matrix Algebra & Applications	4
Directed Math Elective - Choose 3 hours from:		3
MATH 211	Calculus 2	
MATH 236	Elements of Statistics 2	
PHIL 312	Mathematical Logic	
NATURAL/PHYSICAL SCIENCES		
undefined - Choose 6 hours from:		6
BIOL 100	General Biology	
BIOL 211	Concepts of Zoology	
BIOL 221	Concepts of Botany	
CHEM 111	Introductory Chemistry 1	
CHEM 112	Introductory Chemistry 2	
ESCI 221	Physical Geology	
ESCI 222	Historical Geology	
ESCI 241	Meteorology	
ESCI 245	Environmental Meteorology	
ESCI 261	Introduction to Oceanography	
PHYS 131	Physics 1 with Algebra	
PHYS 231	Physics 1 with Calculus	
PHYS 132	Physics 2 with Algebra	
PHYS 232	Physics 2 with Calculus	
At least 6 credits of Natural/Physical Science courses. If selecting Physics choose 131 OR 231, 132 OR 232.		
Total Hours		20-21