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

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<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
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<tr>
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<td>Credits Required for Major</td>
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<td>Minimum GPA 2.0 for Major</td>
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<td>Minimum Residency 50% of Major Courses</td>
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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:
CSCI 300  Co-Op Ed Experience in CSCI  12
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

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<th>Code</th>
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<tbody>
<tr>
<td></td>
<td>Mathematics</td>
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<td>Calculus I or Honors Calculus - Choose 1 of the following: 4-5</td>
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MATH 161  Calculus 1  1
MATH 163H  Honors Calculus 1  3
MATH 235  Survey of Statistics  3
MATH 304  Matrix Algebra & Applications  4
Directed Math Elective - Choose 3 hours from:  3
MATH 211  Calculus 2  4
MATH 236  Elements of Statistics 2  4
PHIL 312  Mathematical Logic  4

NATURAL/PHYSICAL SCIENCES

undefined - Choose 6 hours from:  6
BIOL 100  General Biology  3
BIOL 211  Concepts of Zoology  3
BIOL 221  Concepts of Botany  3
CHEM 111  Introductory Chemistry 1  3
CHEM 112  Introductory Chemistry 2  3
ESCI 221  Physical Geology  3
ESCI 222  Historical Geology  3
ESCI 241  Meteorology  3
ESCI 245  Environmental Meteorology  3
ESCI 261  Introduction to Oceanography  3
PHYS 131  Physics 1 with Algebra  4
PHYS 231  Physics 1 with Calculus  4
PHYS 132  Physics 2 with Algebra  4
PHYS 232  Physics 2 with Calculus  4
At least 6 credits of Natural/Physical Science courses. If selecting Physics choose 131 OR 231, 132 OR 232.

Total Hours 20-21