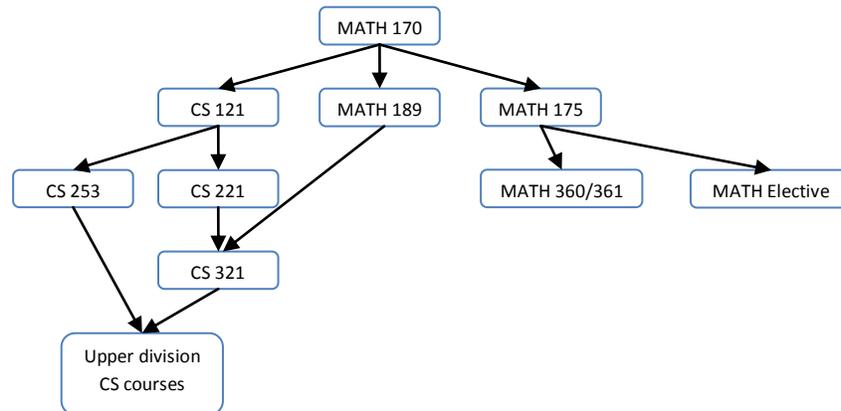# Getting Started in Computer Science

If you are just beginning your study of computer science, the most important thing to worry about is making sure you have a sufficient mathematics background. The following diagram shows the prerequisite structure for the math and introductory computer science courses required for the degree.

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                              MATH 170

          CS 121        MATH 189        MATH 175

    CS 253    CS 221                 MATH 360/361    MATH Elective

              CS 321

        Upper division
         CS courses
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COMPSCI 121-221, Computer Science I and II, forms the foundation for the program. MATH 170-175, Calculus I and II, covers many of the mathematical topics and techniques used in computer science courses. MATH 189, Discrete Mathematics, is also required and is a prerequisite for COMPSCI 321, Data Structures. COMPSCI 321 and COMPSCI 253, Intro to Systems Programming, are prerequisites for most of the upper division Computer Science courses. Beyond MATH 189, you will need to take MATH 360/361 (Engineering Statistics/Probability & Statistics I), and an additional math elective.

Note that MATH 147 (Pre-calculus) is the prerequisite for MATH 170, which is a prerequisite for COMPSCI 121 and MATH 189. However, if you have a high enough ACT/SAT math score or can pass the appropriate placement exam, you will not need to take MATH 147. It is not required for the degree.

On the other hand, if your math background is insufficient, you may not be ready for MATH 147. You may need to start in MATH 108 (Intermediate Algebra) or even MATH 025 (Elementary Algebra). Your starting point will be determined by your ACT/SAT math score or your placement exam score.

COMPSCI 121 is currently taught using the programming language Java. Students don't need any prior programming knowledge.

You will also need to take a year of either chemistry (CHEM 111-112) or physics (PHYS 211-212). You may want or need to wait a year for this, depending on your math background and other courses. You should fill out your schedule with English Composition and Disciplinary Lens electives courses.

If you are a transfer student, an advisor will evaluate your background to help determine where you should start.