

Getting Started in Computer Science

A Guide to Intro Sequence Courses in Computer Science

This document provides guidance on choosing your first CS course(s) at CC. If you need further information, please contact any faculty member in the Department of Mathematics and Computer Science. We'd be happy to talk to you!

The intro sequence is composed of four courses, each building on the previous course, and most students will take them in the following order:

1. CP115 (Computational Thinking)
2. CP116 (Advanced Python) – this also serves as our Introduction to Data Science
3. CP122 (CS1)
4. CP222 (CS2)

Advanced Placement

If you have any experience programming, you should skip to **CP116** (you will need to e-mail the professor for a consent code). Exceptional cases, such as professional experience, may be eligible for further placement with consent of the instructor.

If you scored a 4 or 5 on the **AP Computer Science Principles** test, you should start with **CP116** or **CP122** but are still required to take CP116 even if you start with CP122.

If you scored a 4 or 5 on the **AP Computer Science A** test, you should start with **CP116** or **CP222** (you will not get credit for the AP course and CP122) but are still required to take CP116 even if you start with CP222.

Note: CP116 will be required for CP274, CP275, and CP307 so taking it as a first-year student when there are seats reserved is highly recommended.

Math Courses

CP courses are only part of a complete Computer Science education! When choosing how to fulfill the math requirement of the major, consider some of the applications of the approved math course list:

- MA 117 Elementary Prob/Stat OR MA 217 Introduction to Prob/Stat
Useful for software design, data science, AI, human-computer interactions. **This will be required for some upper-level CS electives, the Data Science Emphasis and the Data Science Minor.**
- MA 120 Applied Linear Algebra
Useful for data science, AI, networks, high performance computing. **This will be required for some upper-level CS electives, the Data Science Emphasis and the Data Science Minor.**

- MA126 Calc 1, MA129 Calc 2
Useful for AI, data science, robotics
- MA201 Discrete Mathematics
Useful for networks, high performance computing, analysis of algorithms
- MA251 Number Theory
Useful for theoretical computer science, cryptography