CS1, AP, and CS 1110 Placement Test Info

Which CS 1 should a student take?

**Summary** If you have never programmed before, take CS 1110, 1112, 1113, or 1120. If you have programmed a little, take CS 1111 (or 1110 or 1113 if you can't get into 1111). If you have programmed a fair amount, you can probably get transfer credit or test out of CS 111x. More details follow.

**CS 1110** - A basic introductory course that focuses on learning the basics of programming and computational thinking. No prerequisite required. Language: Python. Requires a lecture section and one of twelve labs. Final course size will be around 530 students. For more information, see [http://cs1110.cs.virginia.edu](http://cs1110.cs.virginia.edu)

**CS 1111** - Only students with some programming experience may take this course. This programming experience can be in any language. CS 1111 has the same assignments and tests as CS 1110, but does not require lab and moves slightly faster through some material since students are expected to have some exposure to basic concepts. Language: Python.

**CS 1112** - Only students with no programming experience may take this course. Offered as a lecture + lab combination that meets three times a week. Language: Python. Students must submit a permission of instructor request through SIS to request a seat in the course.

**CS 1113** - CS1 special topics and can vary from semester to semester. In the past we have offered a version focused on a mathematical approach to computing and a version emphasizing uses of computing in engineering disciplines.

**CS 1120** - A course designed as an introductory course for the BACS, it now counts the same for all majors and schools.

**Note** - You can only receive credit for 1 CS 111X or 1120 course.

**Advanced Placement**


For Computer Science - 4 or 5 gives credit for CS 1110

For CS Principles - 4 or 5 gives credit for CS 1000T and the student is encouraged to take the CS 1110 Placement Test

**International Baccalaureate**


For Computer Science
Placement Tests

CS 1110 Placement Test

The placement test allows a student to take a course that requires a CS 1 course as a prerequisite, but it does not grant course credit.

Placement tests are only available as follows:
One week prior to the beginning of the semester (fall and spring), through the first seven business days of the semester; then again seven business days prior to course registration for the following semester. Typically, this is around the middle of October in the fall semester, and around the last week of March/first week of April in the spring semester.

Students who wish to take the placement test can pick it up after 8:30 AM and no later than 3:00 PM, Monday through Friday, from the CS office in Rice Hall 527. They must complete and return the exam within 90 minutes. Students cannot use books, notes, computers, or help from other people while taking the exam. **A student can only take the exam once, and students who have enrolled in CS 1110 are not allowed to take the placement exam beyond Wednesday of second week of the semester.** The exam will be graded within a few days, and the results will be emailed to the student.

Students who pass do not receive credit, and if CS 1110 was required as part of a degree program may be required to take some other course at UVA in lieu of CS111X (this is true, for example, of the CS degree offered by SEAS); however, it does meet prerequisites. Students may use any of the following languages on the test: Java, Python, C++, C, Javascript, or C#

The placement test is made up of several multiple-choice, short answer, and coding questions. Students interested in taking the test need to be familiar with:

- variables (creation and manipulation)
- functions/methods (creation and usage)
- how to read and interpret code
- if / else statements
- various loop constructs (for, while)
- string manipulation
- input and output
- arrays / lists