First Year Computer Science Sequence

The standard introductory CS course sequence consists of CSCI 141 (Computer Science I) and CSCI 142 (Computer Science II). CS I introduces problem solving, programming, and basic data structures (using Python); CS II extends all of these concepts while introducing students to object-oriented programming (using Java).

Students who take the AP Computer Science A exam and score either “4” or “5” will be invited to take CSCI 140 (Computer Science for AP Students). Students with these scores who decline to take CSCI 140 and who opt to start with CSCI 141 instead will receive 4 semester units of Free Elective or General Education Elective credit under the course number CSCI 105. (So there is no confusion, this course number is used solely for the purpose of transferring in Advanced Placement credits for the AP Computer Science A exam. This course number does not represent a course that students sign up for.)

If Computer Science majors take and successfully complete CSCI 140, the Department of Computer Science will authorize a substitution for them. The credit and grade earned in CSCI 140 will cover CSCI 142 on the student's worksheet. In addition, the Department of Computer Science will authorize a second substitution for them and use the credit associated with CSCI 105 to cover CSCI 141 on the student's worksheet. Note, the Department of Computer Science does not automatically make these substitutions for students majoring in other programs. The home departments for students majoring in something other than Computer Science can, however, authorize the same substitutions for their students.

In the past, we offered a CS placement exam and made it available to students who did not take the AP Computer Science A exam, but who believed they had the necessary background to succeed in CSCI 140. Due to high demand for our introductory courses, we have not offered a placement exam since 2013-2014 and we have no plans currently to offer a placement exam for the current academic year.

Transfer students who show evidence of past programming work and a course in data structures will often be given transfer credit for CSCI 141 and invited to take CSCI 242 (Computer Science for Transfer Students). When Computer Science majors successfully complete CSCI 242, the Department of Computer Science will authorize a substitution and use the credit and grade from CSCI 242 to cover CSCI 142 on the student's worksheet. Note again, the Department of Computer Science does not automatically make this substitution for students majoring in other programs. The home departments for students majoring in something other than Computer Science can, however, authorize the same substitution for their students.

Students who fail or withdraw from CSCI 140 or CSCI 242 in the fall will take CSCI 142 in the spring. (If demand is sufficient and resources are available, one section of CSCI 242 may be offered in the spring.) If a Computer Science major failed CSCI 140 or CSCI 242 and then successfully completes CSCI 142 (assuming that CSCI 140 or CSCI 242 are not offered in the following term), the Department of Computer Science will sign an RIT
Repeat of Grade form and support the use of the grade in CSCI 142 to replace the failing grade obtained in either CSCI 140 or CSCI 242. The Department of Computer Science does not automatically sign an RIT Repeat of Grade form for students majoring in other programs. The home departments for students majoring in something other than Computer Science can, however, complete an RIT Repeat of Grade form in a similar fashion for their students (subject to their own local policies).

Some students may pass CSCI 140 or CSCI 242 (for example, by earning a “D” grade), but decide to take CSCI 142 in the hope of earning a better grade (again, assuming that CSCI 140 or CSCI 242 are not offered in the following term). For Computer Science majors for which this becomes true, the Department of Computer Science will sign an RIT Repeat of Grade form and support the use of the grade in CSCI 142 to replace the lower grade obtained in either CSCI 140 or CSCI 242. For those Computer Science majors who take CSCI 142, but who earn the same grade or a grade lower than the one they earned in CSCI 140 or CSCI 242, they are not required to file a Repeat of Grade form. The student may continue taking additional Computer Science courses, although both grades (the one from CSCI 140 or CSCI 242 as well as the grade in CSCI 142) remain on the student’s record and both are used to determine their cumulative GPA. The Department of Computer Science does not automatically sign an RIT Repeat of Grade form for students majoring in something other than Computer Science can, however, complete an RIT Repeat of Grade form in a similar fashion for their students (subject to their own local policies).

Beginning with academic year 2016-2017 (2161), Computer Science has added a minimum grade requirement to the prerequisites for several Computer Science courses. There continues to be no formal prerequisite for CSCI 141 (Computer Science I). The prerequisite for CSCI 142 (Computer Science II) now requires students to successfully complete CSCI 141 with a grade of “C-“ or better. The prerequisite for CSCI 243 (The Mechanics of Programming) now requires students to successfully complete either (1) CSCI 142 with a grade of “C-“ or better; (2) CSCI 140 with a grade of “C-“ or better, or (3) CSCI 242 with a grade of “C-“ or better. The student information system (SIS) has been set up to enforce these prerequisite changes.

For students who began taking Computer Science courses prior to the academic year 2016-2017, we recognize that when these students started taking Computer Science courses, this additional grade prerequisite was not in place. We strongly encourage students who completed CSCI 141, 142, 140, and/or 242, prior to 2161, with grades of “D” to repeat the appropriate course(s). If students to which this applies do wish to continue taking the next course in sequence, the department will work with them to manually override SIS. Students should keep in mind, however, that we cannot guarantee seats in selected courses nor can we guarantee that all students requesting specific sections can be placed on waiting lists for those sections if those sections are full. Students who earned “D” grades in the affected courses prior to 2016-2017 should contact the Manager of Student Services in Computer Science for further assistance.