

San Diego State University
Department of Computer Science
B.S. COMPUTER SCIENCE
4-YEAR PLAN

Advisors: Dr. John Carroll GMCS 537 594-7242
Alan Riggins GMCS 534 594-6809
EMAIL: advising@cs.sdsu.edu

All courses below are 3 units unless otherwise indicated. Courses need not always be taken in the order given. Please consult with an undergraduate CS advisor to plan your specific schedule. It is particularly important *not* to delay your CS and Math courses in order to finish your Gen Ed. Although the following four year plan fits within the traditional fall-spring semester pattern, it is quite demanding. You may wish to spread your work out by taking summer session courses. Only certain courses are offered in these sessions, so check with the relevant schedule. Electives are offered only in certain semesters. See www.cs.sdsu.edu/undergrad/schedule.html for a tentative two-year schedule.

Unit totals: Preparation for the major, 26 units; major, 37 units; general education, science sequence, and electives, 57 units. Some variation is possible. You need 120 units to graduate.

1st Year

Fall (16 units)

CS 107
Math 150* (4 units)
Gen Ed I2 (Composition)
Gen Ed II.B or II.C
Gen Ed II.B or II.C

Spring (16 units)

CS 108
Math 151 (4 units)
Gen Ed II (Oral Communication)
Gen Ed II.B or II.C
Gen Ed II.B or II.C

* This course satisfies the Gen Ed requirement for II.A.4.

2nd Year

Fall (16-17 units)

CS 237
Math 245
Stat 250
Science sequence with lab, part I^{§†}
Gen Ed I3 (Intermediate composition
and critical thinking)

Spring (16-17 units)

CS 310 or CS 320
Math 254
Science sequence with lab, part 2^{§†}
Gen Ed II.B or II.C
Gen Ed II.B or II.C

[†]The science sequence may be Physics 195/195L and 196/196L (8 units total) or Chem 200 and 201 (10 units total) or Biol 203/203L and 204/204L (8 units total). Note that Biol 203 has Chem 200 as a prerequisite. This sequence meets the Gen Ed requirement for II.A.1 and II.A.3 and, in the case of biology (with Chem 200), II.A.2. also.

[§]Students taking either Biol 203/203L and 204/204L and Chem 200 (total 13 units) or Chem 200 and 201 and a lower division life science course (total at least 12 units) need not take an additional science course as part of the CS requirements. These are the only two exceptions to the two additional science courses in the statement of CS requirements in the SDSU catalog. Also see remarks below in the discussion of the additional two science course requirement about substituting for requirement Gen Ed IV.A.

3rd Year

Fall (18 units)

CS 310 or CS 320
CS 370
Upper div. Math[†]
Science course[§]
American Institutions
Elective

Spring (15 units)

CS 530 or CS 570
CS 560 or CS upper div. elective*
Science course[§] or elective
Gen Ed IV.B or IV.C
American Institutions

*Computer science electives are not offered every year. You may want to take a CS elective in your 3rd year, and delay a CS course, the science course or a GE course.

[†]Select from Math 541, 579 or Stat 350A, 550, or 551A.

[§]See discussion below about the additional science courses required for the B.S. in computer science.

4th Year

Fall (16 units)

CS 570 or CS 560
CS 560 or upper div. elective
CS upper div. elective
Gen Ed IV.B or IV.C
CS 490 (1 unit)
Elective

Spring (15 units)

CS 440
CS upper div. elective
CS upper div. elective
Elective or Gen Ed IV.B or IV.C
Elective (if needed to make
a total of 120 units.)

Two additional science courses requirement:

You may select from a large list of courses, many of which also satisfy Gen Ed requirements. The following are acceptable courses:

- (a) Courses for science majors taken in the Biology department or any of the physical science departments. (These may satisfy Gen Ed requirements II.A.1 or II.A.2.)
- (b) Anthro 101, Astro 201, Biol 100, Biol 101, Biol 130, Geol Sci 104, Ocean 100. These satisfy Gen Ed II.A.1 or II.A.2.
- (c) Astro 301, Astro 310, Biol 307, Biol 315, Biol 318, Biol 319, Biol 320, Biol 324, Biol 325, Biol 330, Biol 336, Biol 339, Biol 362, Biol 454, Chem 300, Chem 308, Geol Sci 301, Geol Sci 302, Geol Sci 304, Geol Sci 305, Physics 301, Physics 305 (These satisfy Gen Ed requirement IV.A.)
- (d) Certain other courses with the approval of the undergraduate advisor, including Astro 101, Chem 100 (but not with Chem 200/201), Geography 101, Geography 103, Geol Sci 100, Physics 180A (but not with Physics 195/196).

If you satisfy the science requirements of the computer science B.S. degree without satisfying Gen Ed IV.A (such as with the biology or chemistry sequence, or by taking an extra lower division science elective), then you need not satisfy Gen Ed IV.A. In this case you must substitute an additional course from areas IV.B or IV.C.