

Advanced Placement Credit

Supplemental to the college's general policies of Advanced Placement and Credit (see chapter 6), the department of mathematics and computer science may grant additional placement (based on advising by faculty). The department does not grant placement for computer programming alone but for mastery of concepts and techniques of computer science.

Computer Science Major

(11 ½ units)

- 1) Nine and ½ departmental units:
 - a) Five units of core courses: Computer Science 121, 125, 131, 204, 211, 301, and 381 taken three times.
 - b) Four and one-half additional units in computer science with the following restrictions: no more than an additional ½ unit of Computer Science 381; no more than 1 unit of Computer Science 161 or 261, or Physics 220; and no more than 1 unit of internship or Computer Science 170, 270, 390, or 395.
- 2) Two supporting units:
 - a) Mathematics 110; and
 - b) either Mathematics 160 or 200.
- 3) Students planning to attend graduate school in computer science should consult with an advisor for additional study that should be done.
- 4) Writing/communication requirement: at least 5 units designated by the college as W, at least 2 units from inside the mathematics/computer science department, and at least 2 units from outside the department. Transfer students should consult with a departmental advisor about potential credit for courses taken elsewhere. Computer science courses that qualify include 131, 204, 341, 381, and other courses as designated by the instructor.

Computer scientists need to know both how to write for other professionals in the field and how to report their work to others not necessarily trained in the discipline.

Professional writing for computer scientists usually consists of program design documents or code description.

Many of the department's courses focus on such writing. Explaining our work to nonprofessionals often requires significantly different skills. While some departmental courses emphasize this type of writing, often the best training for this writing is in courses in other disciplines. Consequently, computer science majors are required to take writing courses both inside and outside the department.

- 5) Computer Science majors are expected to take Computer Science 381 each semester in which they are in residence during their junior and senior years.

Computer Science Minor

(6 units)

- 1) Six departmental units:
 - a) Three units of core courses: Computer Science 121, 125, 131, 204, and 381.
 - b) Three additional units in computer science with the following restrictions: no more than an additional ½ unit of Computer Science 381; no more than 1 unit of Computer Science 161 or 261, or Physics 220; and not Computer Science 170, 270, 390, or 395.