

# CS Major Transition Requirements

*Modified Requirements for the Classes of 2008-2011*

**Computer Science Courses: Introductory Courses:** ECES 120 or (150 and 151). CS 121,122,228.

**Software:** CS 229 or EECE 493,495.

**Systems: Option 1:** CS 317. EECE 235. EECE 237 or 238. EECE 326. EECE 429.

**Option 2:** CS 311 (Intro. to Computer Systems, a new course) and EECE 429.

**Algorithms & Theory:** CS 471,472, CS 670.

**Senior Design Project:** CS 561,562,563.

**CS Electives:**  $\geq 27$  *additional* credit hours from the list below (24 for students taking Systems Option 1), *including*  $\geq 1$  of CS 403 (Org. Programming Langs.), CS 454 (Network Syst. Prog.), and (CS xor EECE) 592 (Database Design).

**Approved CS electives:** CS 403, 454, 541, 595, 597. All 600-level CS course *except* 670,671,672. CS xor EECE 592. AEEM 313, 360, and 480. ECES 323, 362 (discontinued courses). EECE 593, 617, 636, 642, 683, 685. (Also included are courses, taken before Autumn Quarter 2007, that were listed as CS electives in 2006-07 — except that  $\leq 2$  non-\*ed courses may count here. [See also note 2]. EECE 326 counts as a CS Elective for students taking Systems Option 2.)

**Mathematics & Natural Science: Math:** MATH 251,252,256,253,257, 361, and 410. MATH 351 or 276.

**General Physics:** PHYS 201,211,202,212,203,213

**Math/Natural Science Electives:**  $\geq 9$  *additional* credit hours from among the following: Math 254, 273, 352, 362, 363; all 500-level MATH courses; and all courses in BIOL, CHEM, GEOL, and PHYS that satisfy requirements for majors in those departments. (Also counted is any course which was listed as a CS science elective at the time the student took it or when the student entered the CS major [see also note 2].)

**English & Social Science: Freshman English:** ENGL 101-103 (or 101,102,289)

**BoK (Gen.Ed.):**  $\geq 33$  (reduced from 39) *additional* credit hours in courses carrying BoK credit in areas other than EC, NS, and QR. These courses *must include* PHIL 341, ENGL 492, and  $\geq 1$  of PHIL 243,345,386. COMM 171 is strongly encouraged but not required. See also <http://www.eng.uc.edu/currentstudents/curriculuminfo/gened/> for distribution restrictions on these BoK courses. [Also see note 2 below.] The UC schedule of classes available lists BoK electives in each area.

**Professional Development:** PD 120 and 502 plus CO-OP 120 after each co-op quarter.

**Credit hours required to graduate:**  $\geq 192$  (reduced from 201). Courses taken to complete these requirements must all satisfy some requirement above or meet General Elective criteria for the major (see CoE web site).

**Tracks:** *The new CS major has substantially fewer required courses than the major in 2006-07. The intention is for students to use the opportunity to develop strengths in areas matching their interests: perhaps subareas of CS, perhaps areas in which CS skills can be applied, or perhaps core CS and Mathematics topics expected for graduate school. To this end, the CS Department plans to assemble several sequences of focused elective courses, called "tracks," as guides to help students choose electives (CS electives, Math/Natural Science electives, BoK electives, and even general electives) to focus their studies on particular goals. So far, one track, Computational Science, has been designed. Students in the class of 2011 should start following the track in Autumn 2008. Students in earlier classes can follow the track but may have to take a few extra courses.*

- Notes:**
1. All requirements with department CS or EECE above may be replaced by courses with the *same number and title* in department ECES. But any replacements for courses listed above as ECES must be approved by the Associate Head.
  2. No student may use any one course to satisfy more than one of the above requirements (except, of course, that all courses to satisfy any requirements above count toward the 192 credits needed to graduate). A student may get credit for only one of cross-listed courses, such as CS 592 and EECE 592. (Courses count as cross-listed if they have the same number and title [but different departments] or if they are normally given in the same room at the same time.)
  3. Note that many elective courses may have prerequisites, and those prerequisites might not count toward the major except as General Electives. Students interested in particular advanced courses should try to take prerequisites for those courses early.
  4. Starting Autumn Quarter 2008, 561 (Senior Design) will have an added prerequisite: CS 229 or EECE 493,5.
  5. CS 323 (Functional and Logic Programming) and 362 (Pre-Junior Seminar) will not be offered in the future. (For students who have already taken them, both are counted above as CS electives.) Effective immediately, 323 will no longer be a prerequisite for CS 403 (Organization of Programming Languages).
  6. **Caveat:** In case there are inconsistencies between this document and the document maintained by the College office, the documents maintained by the College office are *by definition* correct.
  7. Students in the classes of 2008-2011 have the *option* of switching to these transitional requirements; those wishing to switch should send an email note to Mark.Bowers@UC.Edu, with c.c.'s to John.Schlipf@UC.Edu and Teresa.Hamad@uc.edu, stating their desire to switch. Those not switching may need to consult with their advisors about replacements for courses no longer offered.