PROPOSED CHANGES TO DEGREE PROGRAMS IN THE 
UNDERGRADUATE CATALOG 2014-2016

Type of Change

___ Nonacademic Change
X Academic Change
___ Degree Program Change

1. NAME OF DEGREE PROGRAM: B.A. Computer Science

2. IF THE ANSWER TO ANY OF THE FOLLOWING QUESTIONS IS YES, THE COLLEGE MUST CONSULT NEAL ARMSTRONG WHO WILL DETERMINE WHETHER SACS-COC APPROVAL IS NEEDED.
   • Is this a new degree program? Yes or no? No.
   • Does the program offer courses that will be taught off campus? Yes or no? No.
   • Will courses in this program be delivered electronically? Yes or no? No.

3. EXPLAIN CHANGE TO DEGREE PROGRAM:

1. Delete 336 or 336H, 337 or 337H, 341 or 341H or 357 or 357H. Add 331 or 331H.
2. Add 3 additional hours each from 3 lists of approved coursework in theory, programming, and systems.
3. Remove M 408D and add M 408N to the mathematics requirements.
4. Add M 340L or SSC 329C to the mathematics requirements.
5. Delete C S 313K and replace with C S 311 or 311H.

3a. Indicate pages in the undergraduate catalog where changes will be made.

4. GIVE A DETAILED RATIONALE FOR CHANGE. INDIVIDUAL CHANGES SHOULD BE LISTED SEPARATELY.

1. The CS faculty are reducing the number of courses that students are required to take in order to create more opportunities to select electives. Toward this end, the faculty would like to replace CS 313K (or CS 313H), CS 336 (or CS 336H), CS 337 (or CS 337H), and the requirement to take either CS 341 (or CS 341H) or CS 357 (or CS 357H), with two courses -- CS 311 (or CS 311H) and CS 331 (or CS 331H) – which have been designed to teach the fundamental concepts of computer theory.

2. The CS faculty are reducing the number of courses that students are required to take in order to create more opportunities to select electives. Still, the faculty want to insure that CS graduates have a solid foundation in the core areas of programming, systems and theory. By requiring students to take one additional course in these areas, beyond the set of required, core courses, students will obtain the necessary background while still having some flexibility to choose.

3-4. The CS faculty would like to change the math requirements for students majoring in computer science. Linear algebra and probability are now considerably more important to the study and practice of computer science than is calculus II. This is reflected in recent trends in computer science, including, for example, the
processing of big datasets, the development of probabilistic algorithms, and the growth of visualization, simulation and animation.

5. The Computer Science faculty would like to drop CS 313K (and CS 313H) and not teach it again. The course has been changed to CS 311 (and CS 311H) with a significant change in course content in response to developments in theoretical computer science.

5. SCOPE OF PROPOSED CHANGE

5a. Does this proposal impact other colleges/schools? If yes, then how? No.

If yes, impacted schools must be contacted and their response(s) included:
Person communicated with:
Date of communication:
Response:

5b. Does this proposal involve changes to the core curriculum or other basic education requirements (42-hour core, signature courses, flags)? If yes, explain: No.

If yes, undergraduate studies must be informed of the proposed changes and their response included:
Person communicated with:
Date of communication:
Response:

5c. Will this proposal change the number of hours required for degree completion? If yes, explain: No.

6. COLLEGE/SCHOOL APPROVAL PROCESS
Department approval date: May 9, 2012
College approval date:
Dean approval date:

Include proposed catalog copy below. The proposed text should be based on the text of the current catalog available at http://www.utexas.edu/faculty/council/pages/catalog_chgs/catcopy.html. Strike through and replace only the specific language to be changed. For questions on completing this section, please contact Anita Ahmadi, fc@austin.utexas.edu, 471-5936 or Brenda Schumann, brenda.schumann@austin.utexas.edu, 475-7654.

Computer Science
An undergraduate may not enroll in any computer science course more than once without written consent of an undergraduate adviser in computer science. No student may enroll in any computer science course more than twice. No student may take more than three upper-division computer science courses in a semester without written consent of an undergraduate adviser in computer science.
Major: Computer Science 312 or 312H, 314 or 314H, 429 or 429H, 336 or 336H, 337 or 337H, 439 or 439H,
341 or 341H or 357 or 357H, and at least twelve additional semester hours of approved upper-division coursework in computer science.

The following courses in Computer Science:

a. Theory: Computer Science 311 or 311H, 331 or 331H, and three additional hours from an approved list available in the department.

b. Programming: Computer Science 312 or 312H, 314 or 314H, and three additional hours from an approved list available in the department.

c. Systems: Computer Science 429 or 429H, 439 or 439H, and three additional hours from an approved list available in the department.

d. Twelve additional hours of upper-division courses in Computer Science.

Computer Science 370 may be counted toward the degree only once.

Minor for computer science majors: Mathematics 408C or 408N, 408D; Mathematics 340L or Statistics and Scientific Computation 329C; and Statistics and Scientific Computation 321.

Students must earn a grade of at least C− in each mathematics and science course required for the degree, and a grade point average in these courses of at least 2.00.

With the exception of Computer Science 311 or 311H, 312 or 312H, 313K, and 314 or 314H, all computer science courses that may be counted toward a degree in computer science are restricted to students who have been admitted to the computer science major or have the consent of the undergraduate faculty adviser.