## DOCUMENTS OF THE GENERAL FACULTY

## PROPOSED CHANGES TO THE BACHELOR OF SCIENCE IN COMPUTER SCIENCE DEGREE PROGRAM IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG 2018-2020

Dean Linda A. Hicke in the College of Natural Sciences has filed with the Secretary of the Faculty Council the following proposal to change the Bachelor of Science in Computer Science degree program in the College of Natural Sciences chapter in the Undergraduate Catalog, 2018-2020. On May 10, 2017, the Dean's Scholars Committee approved the proposal; and on September 28, 2017, the Course and Curriculum Committee and Associate Dean David Vanden Bout, on behalf of Dean Hicke, approved it. The Secretary has classified this proposal as legislation of general interest to more than one college or school.

The Committee on Undergraduate Degree Program Review recommended approval of the proposal on February 2, 2018, and forwarded it to the Office of the General Faculty. The Faculty Council has the authority to approve this legislation on behalf of the General Faculty. The authority to grant final approval on this legislation resides with the Provost on behalf of the President.

If no objection is filed with the Office of the General Faculty by the date specified below, the legislation will be held to have been approved by the Faculty Council. If an objection is filed within the prescribed period, the legislation will be presented to the Faculty Council at its next meeting. The objection, with reasons, must be signed by a member of the Faculty Council.

To be counted, a protest must be received in the Office of the General Faculty by March 15, 2018.
Alan W. Drieluan
Alan W. Friedman, Secretary of the General Faculty and Faculty Council
The University of Texas at Austin
Arthur J. Thaman and Wilhelmina Doré Thaman Professor of English and Comparative Literature

Distributed through the Faculty Council Wiki site https://wikis.utexas.edu/display/facultycouncil/Wiki+Home on March 1, 2018.

# PROPOSED CHANGES TO THE BACHELOR OF SCIENCE IN COMPUTER SCIENCE DEGREE PROGRAM IN THE COLLEGE OF NATURAL SCIENCES CHAPTER IN THE UNDERGRADUATE CATALOG 2018-2020 

## Type of Change

Academic Change
Degree Program Change (THECB form required)
Proposed classification $\quad \square$ Exclusive $\quad$ General $\quad \square$ Major

1. IF THE ANSWER TO ANY OF THE FOLLOWING QUESTIONS IS YES, THE COLLEGE MUST CONSULT LINDA DICKENS, DIRECTOR OF ACCREDITATION AND ASSESSMENT, TO DETERMINE IF SACSCOC APPROVAL IS REQUIRED.

- Is this a new degree program?
- Is this program being deleted?
- Does the program offer courses that will be taught off campus?
- Will courses in this program be delivered electronically?
Yes $\square$ No $\boxtimes$
Yes $\square$ No $\boxtimes$
Yes $\square$ No $\boxtimes$
Yes $\square$ No $\boxtimes$

2. EXPLAIN CHANGE TO DEGREE PROGRAM AND GIVE A DETAILED RATIONALE FOR EACH INDIVIDUAL CHANGE:

Option III, Computer Science Honors
Change six hours from Fine Arts or Liberal Arts to 6 hours from Fine Arts and Liberal Arts.
Reason: In practice, the Dean's Scholars Program allows students to take six hours from a single college or a mixture of six hours from both colleges. The change will synch catalog copy to advising practice and eliminate the need for petitions.

Option V, Teaching (senior grades)
Change M 362K (Probability I) and SDS 321 (Introduction to Probability and Statistics) to M 362K or SDS 321.

Reason: The courses are in a duplicate relationship in the course inventory. This change is to make a correction.

## Special Requirements

While standardizing language regarding requirements to graduate with Dean's Scholars degree options, it was discovered that this option did not include the program requirements.
Reason: This information was omitted in error from previous catalogs. The Dean's Scholars steering committee voted to establish standard language for all of its options.
3. THIS PROPOSAL INVOLVES (Please check all that apply)
$\boxtimes$ Courses in other colleges $\quad \square$
Courses in proposer's college that are frequently taken by students in other colleges
$\square$ Course in the core curriculumChange in admission requirements (external or internal)

Change in course sequencing for an existing programRequirements not explicit in the catalog language (e.g., lists of acceptable courses maintained by department office)
4. SCOPE OF PROPOSED CHANGE
a. Does this proposal impact other colleges/schools?

If yes, then how would you do so?
The original legislation stated that Dean's Scholars must choose six hours from either the College of Liberal Arts (COLA) or the College of Fine Arts (COFA). In practice, students are allowed to count six hours from one of the colleges, or a mixture from the colleges. This change will eliminate the need for petitions in situations where students choose to take a mixture of COLA and COFA coursework. In a constant state, the Dean's Scholars Program has approximately 200 majors.

There is no way to predict how this change will impact the College of Fine Arts and the College of Liberal Arts. Specific courses are not prescribed and the change is to match catalog language to current advising practice. Making an estimate, perhaps ten seats per year distributed across all courses in both colleges may be impacted. Because the number of seats across both colleges is estimated to be so small, the College of Fine Arts and the College of Liberal Arts were not formally consulted for permission to make this change.
b. Do you anticipate a net change in the number of students in your college?

Yes $\square$ No $\boxtimes$ If yes, how many more (or fewer) students do you expect?
c. Do you anticipate a net increase (or decrease) in the number of students from outside of your college taking classes in your college? $\quad$ Yes $\square$ No $\boxtimes$ If yes, please indicate the number of students and/or class seats involved.
d. Do you anticipate a net increase (or decrease) in the number of students from your college taking courses in other colleges?

Yes $\square$ No $\boxtimes$
If yes, please indicate the number of students and/or class seats involved.
If $4 \mathrm{a}, \mathrm{b}, \mathrm{c}$, or d was answered with yes, please answer the following questions. If the proposal has potential budgetary impacts for another college/school, such as requiring new sections or a nonnegligible increase in the number of seats offered, at least one contact must be at the college-level.

How many students do you expect to be impacted?
Impacted schools must be contacted and their response(s) included:
Person communicated with:
Date of communication:
Response:
e. Does this proposal involve changes to the core curriculum or other basic education requirements (42hour core, signature courses, flags)? If yes, explain:
If yes, undergraduate studies must be informed of the proposed changes and their response included:

Person communicated with:
Date of communication:
Response:
f. Will this proposal change the number of hours required for degree completion?

Note: THECB Semester Credit Hour Change Form required, download from URL: http://www.thecb.state.tx.us/reports/DocFetch.cfm?DocID=2419\&format=doc If yes, explain:

## 5. COLLEGE/SCHOOL APPROVAL PROCESS

Dean's Scholars approval date: May 10, 2017
College approval date: April 20, 2017
September 28, 2017
Dean approval date:
September 28, 2017

Dean's Scholars Steering Committee<br>Course and Curriculum Committee<br>David Vanden Bout, Associate Dean for Undergraduate Education

## PROPOSED NEW CATALOG TEXT:

## BACHELOR OF SCIENCE IN COMPUTER SCIENCE

\{no change\}

## Prescribed Work Common to All Options

\{no change\}
Additional Prescribed Work for Each Option
Option I: Computer Science
\{no change\}
Option II: Turing Scholars Honors
\{no change\}

## Option III: Computer Science Honors

6. Breadth requirement: An honors mathematics course; Computer Science 311 H and 314 H ; one of the following two-semester sequences: Biology 315 H and 325 H , Chemistry 301 H and 302 H , Physics 301, 101L, 316, and 116L; and either an additional three hours chosen from these courses or Physics 315 and 115 L . Credit earned by examination may not be counted toward this requirement.
7. At least six semester hours of upper-division coursework in mathematics
8. Computer Science $429 \mathrm{H}, 331 \mathrm{H}, 439 \mathrm{H}$, and twelve [12] additional hours of upper-division coursework in computer science
9. A section of Undergraduate Studies 302 or 303 that is approved by the departmental honors adviser
10. A section of Rhetoric and Writing 309S that is restricted to students in the Dean's Scholars Honors Program
11. Computer Science 379 H and a three-semester-hour upper-division research course approved by the departmental honors adviser
12. Twenty-five [25] additional semester hours of coursework approved by the departmental honors adviser
13. Six semester hours of coursework [im] from the College of Liberal Arts [ fr ] and the College of Fine Arts
14. Enough additional coursework to make a total of 120 semester hours

## Option IV: Integrated Program

\{no change \}

## Option V: Teaching (Senior grades)

6. History 329 U or Philosophy 329 U
7. Mathematics 408C and 408D, or 408N, 408S, and 408M , either 340L or 341 or Statistics and Data Sciences 329C
8. One of the following sequences of coursework:
a. Biology 311C and 311D
b. Chemistry 301 or 301 H , and 302 or 302 H
c. Physics 303 K and $103 \mathrm{M}, 301$ and 101 L , or 317 K and 117 M ; and 303 L and $103 \mathrm{~N}, 316$ and 116 L , or 317 L and 117 N
9. The following courses in computer science:
a. Theory: Computer Science 311 or $311 \mathrm{H}, 331$ or 331 H , and three additional hours from an approved list available in the department
b. Programming: Computer Science 312, 314 or 314 H , and three additional hours from an approved list available in the department
c. Systems: Computer Science 429 or $429 \mathrm{H}, 439$ or 439 H , and three additional hours from an approved list available in the department
10. The requirements of one of the following certification areas:
a. For computer science certification:
i. Mathematics 362 K [and] or Statistics and Data Sciences 321
ii. An additional sequence chosen from the following:
i. Biology 325 and 337 (Topic 2: Research Methods: UTeach)
ii. At least three hours of upper-division coursework in chemistry approved by the undergraduate adviser, and Chemistry 368 (Topic 1: Research Methods: UTeach)
iii. Physics 315 and 341 (Topic 7: Research Methods: UTeach)
iii. Fifteen [15] additional hours of approved computer science upper-division coursework
b. For computer science and mathematics certification:
i. Mathematics 315C, 333L, 362K, either 360M or 375D, and Statistics and Data Sciences 321
ii. Twelve [12] additional hours of approved computer science upper-division coursework.
iii. Biology 337 (Topic 2: Research Methods: UTeach), or Chemistry 368 (Topic 1: Research Methods: UTeach), or Physics 341 (Topic 7: Research Methods: UTeach)
11. Eighteen [18] semester hours of professional development coursework consisting of:
a. Curriculum and Instruction 651S
b. Curriculum and Instruction 365C or UTeach-Natural Sciences 350
c. Curriculum and Instruction 365D or UTeach-Natural Sciences 355
d. Curriculum and Instruction 365E or UTeach-Natural Sciences 360
e. UTeach-Natural Sciences 101, 110, and 170
12. Enough additional coursework to make a total of 127 semester hours

## Special Requirements

Students in all Options must fulfill both the University's general requirements for graduation and the college requirements. They must also 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 . More information about grades and the grade point average is given in General Information.

To graduate under Option III, students must remain in good standing in the Dean's Scholars Honors Program, must submit an honors thesis approved by the departmental honors adviser, and present their research in an approved public forum, such as the college's annual Undergraduate Research Forum. More information about the Undergraduate Research Forum is available at https://cns.utexas.edu.

To graduate and be recommended for certification students who follow the teaching option must have a University grade point average of at least 2.50 . They must earn a grade of at least $C$ - in the supporting course in requirement 6 , and in each of the professional development courses listed in requirement 11 and must pass the final teaching portfolio review. For information about the portfolio review and additional teacher certification requirements, students should consult the UTeach-Natural Sciences academic adviser.

Enrollment in Computer Science 312,311 or 311 H , and 314 or 314 H is restricted to computer science entrylevel majors. All other 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.

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.

