

CNS BS IN COMPUTER SCIENCE

PROPOSED CHANGES TO THE BS IN COMPUTER SCIENCE IN THE COLLEGE OF NATURAL SCIENCES SECTION IN THE UNDERGRADUATE CATALOG 2018-2020

Type of Change1 [X] Academic Change [] Degree Program Change (THECB2 form required)

Proposed classification3 [] Exclusive [X] General [] 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? Yes [] No [X]
Is this program being deleted? Yes [] No [X]
Does the program offer courses that will be taught off campus? Yes [] No [X]
Will courses in this program be delivered electronically? Yes [] No [X]

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

Option III, Computer Science Honors

Change 6 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 6 hours from a single college or a mixture of 6 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)

- [X] Courses in other colleges [] Courses in proposer's college that are frequently taken by students in other colleges [] Flags
[] Course in the core curriculum [] Change in course sequencing for an existing program [] Courses that have to be added to the inventory
[] Change in admission requirements (external or internal) [] Requirements 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? Yes [X] No []
If yes, then how would you do so?

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The original legislation stated that Dean's Scholars must choose 6 hours from either the College of Liberal Arts (COLA) or the College of Fine Arts (COFA). In practice, students are allowed to count 6 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 10 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 No
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? Yes No
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 No
If yes, please indicate the number of students and/or class seats involved.

If 4 a, b, 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 non-negligible 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 (42-hour 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 Approved by whom: Dean's Scholars Steering Committee

College approval date: April 20, 2017 Approved by whom: Course and Curriculum Committee
 Sept 28, 2017

Dean approval date: Sept 28, 2017 Approved by whom: David Vanden Bout, Associate Dean for Undergraduate Education

PROPOSED NEW CATALOG TEXT:

BACHELOR OF SCIENCE IN COMPUTER SCIENCE

[no change]

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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 311H and 314H; one of the following two-semester sequences: Biology 315H and 325H, Chemistry 301H and 302H, Physics 301, 101L, 316, and 116L; and either an additional three hours chosen from these courses or Physics 315 and 115L. 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 429H, 331H, 439H, and 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 379H and a three-semester-hour upper-division research course approved by the departmental honors adviser
12. 25 additional semester hours of coursework approved by the departmental honors adviser
13. Six semester hours of coursework ~~in~~ from the College of Liberal Arts ~~or~~ 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 329U or Philosophy 329U
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 301H, and 302 or 302H
 - c. Physics 303K and 103M, 301 and 101L, or 317K and 117M; and 303L and 103N, 316 and 116L, or 317L and 117N
9. 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, 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
10. The requirements of one of the following certification areas:
 - a. For computer science certification:
 - i. Mathematics 362K ~~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*)

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- iii. 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. 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. 18 semester hours of professional development coursework consisting of:
 - . Curriculum and Instruction 651S
 - a. Curriculum and Instruction 365C or UTeach-Natural Sciences 350
 - b. Curriculum and Instruction 365D or UTeach-Natural Sciences 355
 - c. Curriculum and Instruction 365E or UTeach-Natural Sciences 360
 - d. 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 311H, and 314 or 314H is restricted to computer science entry-level 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.

1 See <https://facultycouncil.utexas.edu/degree-program-changes> for detailed explanations.

2 Submit required Texas Higher Education Coordinating Board forms to the provost's office.

3 **EXCLUSIVE:** of *exclusive* application and of primary interest only to a single college or school ("no protest" period is *seven calendar days*); **GENERAL:** of *general* interest to more than one college or school (but not for submission to the General Faculty) ("no protest" period is *fourteen calendar days*); **MAJOR:** major legislation must be submitted to the General Faculty for adoption ("no protest" period is *fourteen calendar days*).