

DOCUMENTS OF THE GENERAL FACULTY

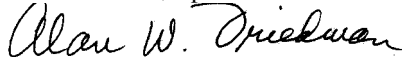
**PROPOSAL TO CREATE AN INTEGRATED BACHELOR OF SCIENCE IN BIOMEDICAL
ENGINEERING AND MASTER OF SCIENCE IN ENGINEERING DEGREE PROGRAM IN THE
COCKRELL SCHOOL OF ENGINEERING CHAPTER IN THE *UNDERGRADUATE CATALOG 2018-
2020***

Dean Sharon L. Wood in the Cockrell School of Engineering has filed with the Secretary of the Faculty Council the following proposal to create an integrated Bachelor of Science in Biomedical Engineering and Master of Science in Engineering degree program in the Cockrell School of Engineering chapter in the *Undergraduate Catalog, 2018-2020*. The Biomedical Engineering faculty approved the proposal on April 27, 2017; the Degrees and Courses Committee approved it on May 24, 2017, and the Dean and the College faculty approved it on September 18, 2017. The Secretary has classified this proposal as legislation of exclusive interest to one college or school.

The Committee on Undergraduate Degree Program Review recommended approval of the proposal on March 7, 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 of this legislation resides with the Provost on behalf of the President with notification to UT System.

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 27, 2018.



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

PROPOSAL TO CREATE AN INTEGRATED BACHELOR OF SCIENCE IN BIOMEDICAL ENGINEERING AND A MASTER OF SCIENCE IN ENGINEERING DEGREE PROGRAM IN THE COCKRELL SCHOOL OF ENGINEERING CHAPTER IN THE UNDERGRADUATE CATALOG 2018-2020

TYPE OF CHANGE: Academic Change
 Degree Program Change (THECB form required)

PROPOSED CLASSIFICATION: Exclusive 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
- Is this program being deleted? Yes No
- Does the program offer courses that will be taught off campus? Yes No
- Will courses in this program be delivered electronically? Yes No

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

The integrated degree program proposed to be added to the 2018-20 catalog integrates two existing authorized degrees with biomedical engineering, the Bachelor of Science in Biomedical Engineering (BSBME) and Master of Science in Engineering (MSE), to allow students to complete the degrees within a shortened time period.

3. THIS PROPOSAL INVOLVES: (Please check all that apply)

- | | | |
|--|--|---|
| <input type="checkbox"/> Courses in other colleges | <input type="checkbox"/> Courses in proposer's college that are frequently taken by students in other colleges | <input type="checkbox"/> Flags |
| <input type="checkbox"/> Course in the core curriculum | <input type="checkbox"/> Change in course sequencing for an existing program | <input type="checkbox"/> Courses that have to be added to the inventory |
| <input type="checkbox"/> Change in admission requirements (external or internal) | <input type="checkbox"/> 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 No
If yes, then how would you do so?
- 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.

- e. 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:

- f. Will this proposal change the number of hours required for degree completion? No 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: Yes; we are replacing a required three-hour upper division natural science elective with a four- hour math course, for a net increase of one credit hour.

3. COLLEGE/SCHOOL APPROVAL PROCESS

Department approval date:	April 27, 2017	Biomedical Engineering Faculty
College approval date:	May 24, 2017	CSE Degrees and Courses Committee
Dean approval date:	September 18, 2017	CSE Faculty; Sharon L. Wood, Dean

PROPOSED NEW CATALOG TEXT:

BACHELOR OF SCIENCE IN BIOMEDICAL ENGINEERING

Integrated Bachelor of Science in Biomedical Engineering and Master of Science in Engineering Program

The integrated degree program results in simultaneously awarding a Bachelor of Science in Biomedical Engineering (BSBME) and a Master's of Science in Engineering (MSE) degree offered by the graduate program in biomedical engineering. The objective of the Integrated BSBME/MSE Program is to enable prepared undergraduates in Biomedical Engineering to earn two degrees in a shortened time period. By applying AP and Credit by Exam courses, having students take recommended summer courses, and allowing seniors to enroll in graduate-level engineering courses reserved for graduate credit, the program enables graduates to complete both degree requirements five years.

Admissions. Current undergraduate biomedical engineering (BME) students may begin the application process to the Integrated BSBME/MSE Program option in the first term of their third year. Admission includes the two steps outlined below. Undergraduate students not in the biomedical engineering major are not eligible to apply. It is expected that all students selected for the program in Step 1 and who have been successful in their first graduate-level coursework will be selected for admission in Step 2. Successful completion of coursework will be evaluated and determined by the department's Domestic Graduate Admission Committee and the Graduate Advisor.

Step 1. Students go through the first step in application for admission to the Integrated BSBME/MSE Program in the first term of the third year. The Step 1 application is internal through the department and includes a resume, statement of purpose, and letters of recommendation. Qualified applicants will be selected based on the applicant's progress to degree completion, grade point average, and other qualifications included in the application materials. Selected students will be notified early in the second term of the third year of their admission status for the integrated program, allowing them to meet with an Academic Advisor to plan graduate coursework in the first term of their fourth year.

Step 2. Students go through the second step in the application after the first term of their fourth year. The Step 2 application is formal through the Graduate and International Admission Center (GIAC) and includes a resume, statement of purpose, letters of recommendation, and a TOEFL score (if required). Qualified applicants will be selected based on success in graduate-level engineering courses in the first term of their fourth year, grade point average, and other qualifications included in the application materials. Graduate Record Exam (GRE) test scores are not required for admission to the integrated program, however students interested in continuing on to a doctoral program are strongly encouraged to take the GRE.

If students in their fourth year are taking graduate courses and would be on track to complete the integrated program but did not apply in their third year through Step 1, they may also choose to apply in Step 2 and formally apply through GIAC. These students will be evaluated for admission on the same criteria.

Degree Requirements. In order for integrated program students to complete both the BSBME and MSE degrees in five years, the department waives six semester credit hours (SCH) of technical area electives in lieu of six SCH of graduate engineering coursework reserved for graduate credit taken in the fourth year. This reduces the total BSBME degree requirements for integrated program students from 133 to 127 SCH. The remaining required six SCH of technical area electives required for the BSBME degree must be taken in engineering (see Technical Area Options section below).

Students in the integrated program complete twelve SCH of graduate coursework in their fourth year and eighteen SCH of graduate coursework in their fifth year to complete a total of thirty SCH of graduate coursework for the MSE degree as described in the Graduate Catalog. Students have the option of choosing the coursework or thesis options for the MSE degree as described in the Graduate Catalog. Which courses the students take will be determined with the Graduate Advisor and Academic Advisor to ensure compliance with degree requirements and meet the students' career goals.

Students unable to successfully complete the integrated program, or who wish to terminate pursuit of the MSE for any reason, may obtain a BSBME degree by satisfying all of the requirements for the standalone degree. Two of the graduate courses (six SCH) taken in the fourth year may count toward the twelve SCH of technical area electives required to complete the entire 133 SCH requirements. An undergraduate student leaving the integrated program will be on a trajectory to graduate with the regular BSBME degree in the same timeframe prior to admission to the integrated program.

Graduates of the integrated program will receive the BSBME and MSE degrees simultaneously after successfully completing the 127 SCH for the BSBME and thirty SCH for the MSE, a total of 157 SCH. It is expected that students in this program will graduate with both degrees in a total of five years to completion.

Advising. Once admitted, students will be advised each semester by the Graduate Advisor and an Academic Advisor to complete coursework required for the BSBME degree in their fourth year, and completion of the coursework required for the MSE degree in their fourth and fifth years.

Information regarding the integrated program requirements and policies may be obtained from the BME Academic Advising Office in BME 3.308.