DOCUMENTS OF THE GENERAL FACULTY

PROPOSAL TO CREATE AN INTEGRATED BACHELOR OF SCIENCE IN MECHANICAL 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 Mechanical Engineering and Master of Science in Engineering degree program in the Cockrell School of Engineering chapter in the *Undergraduate Catalog*, 2018-2020. The Mechanical Engineering faculty approved the proposal on May 18, 2017; the Degrees and Courses Committee approved it on August 31, 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

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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 20, 2018.

PROPOSAL TO CREATE AN INTEGRATED BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING AND 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)							
PR(POSED CLASSIF	CATION:	⊠ Exclusive	General	☐ Major		
		DICKENS, DI ACSCOC APP gree program? being deleted? m offer courses	RECTOR OF AC	CREDITATION A IRED. off campus?			
	EACH INDIVIDUA Integrated Bachelor (MSE) program. The existing authorized d	XPLAIN CHANGE TO DEGREE PROGRAM AND GIVE A DETAILED RATIONALE FOR ACH INDIVIDUAL CHANGE: tegrated Bachelor of Science in Mechanical Engineering (BSME) and Master of Science in Engineering (ISE) program. The integrated degree program proposed to be added to the 2018-20 catalog integrates two isting authorized degrees with mechanical engineering, the BSME and MSE, to allow students to implete the degrees within a shortened time period.					
3.	THIS PROPOSAL Courses in oth Course in the curriculum Change in adr requirements internal)	core	Courses in pro are frequently other colleges Change in cou an existing pro Requirements catalog langua	poser's college that taken by students it rise sequencing for ogram not explicit in the ge (e.g., lists of crses maintained by	Courses added to	that have to be the inventory	
	If yes, then how b. Do you anticipal If yes, how man c. Do you anticipal taking classes in If yes, please inc d. Do you anticipal courses in other	sal impact other would you do stee a net change it y more (or fewe the a net increase your college? dicate the number a net increase colleges? dicate the numbers a sanswered with	colleges/schools? o? n the number of students do you e (or decrease) in the er of students and/or (or decrease) in the er of students and/or h yes, please answe	xpect? number of student class seats involve number of student class seats involve r the following qu	is from outside of Yes ed. is from your colles Yes ed.	No ⊠ your college No ⊠ ge taking No ⊠	

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: May 18, 2017 Mechanical Engineering Faculty
College approval date: august 31, 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 MECHANICAL ENGINEERING

<u>Integrated Bachelor of Science in Mechanical Engineering and Master of Science in Engineering Program</u>

The integrated degree program results in simultaneously awarding a Bachelor of Science in Mechanical Engineering (BSME) and a Master of Science in Engineering (MSE) degree offered by the Department of Mechanical Engineering. The objective of the Integrated BSME/MSE Program is to enable prepared undergraduates in Mechanical 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 By allowing seniors to enroll in graduate-level engineering courses reserved for graduate credit, the program enables graduates to complete both degree requirements within five years.

Admissions. Current undergraduate mechanical engineering (ME) students may begin the application process to the Integrated BSME/MSE Program option in the first term of their third year. Admission includes the two steps outlined below. Undergraduate students not in the mechanical 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 BSME/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.

<u>Step 2.</u> Students go through the second step in the application in the second term of their fourth year. The Step 2 application is formal through the Graduate and International Admission Center (GIAC). Admission to the integrated program will be based on a review of the applicant's undergraduate record and GPA, GRE scores, performance in graduate coursework, letters of recommendation, personal statement, TOEFL score (if required), and research experience.

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 BSME 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 BSME degree requirements for integrated program students from 126 to 120 SCH.

Students in the integrated program complete twelve SCH of graduate coursework in their fourth year and eighteen to twenty-four SCH of graduate coursework in their fifth year to complete a total of thirty to thirty-six SCH of graduate coursework for the MSE degree as described in the Graduate Catalog. Students have the option of choosing the coursework, report, or thesis option for the MSE degree as described in the Graduate Catalog. The selected degree option determines the number of hours required to graduate with the MSE degree. 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 BSME degree by satisfying all of the requirements for the standalone degree. Six SCH of the graduate courses taken in the fourth year may count toward the twelve SCH of CGEs required to complete the entire 126 SCH requirements. An undergraduate student leaving the integrated program will be on a trajectory to graduate with the regular BSME degree in the same timeframe prior to admission to the integrated program.

Graduates of the integrated program will receive the BSME and MSE degrees simultaneously after successfully completing the 120 SCH for the BSME and thirty to thirty-six SCH for the MSE, a total of 150-156 SCH. Ideally 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 BSME degree in their fourth year, and completion of the coursework required for the MSE degree in their fourth and fifth years.

<u>Information regarding the integrated program requirements and policies may be obtained from the ME Academic Advising Office in ETC 5.224.</u>