

Curricular Affairs Committee of the Faculty Senate

MEMO

To: The UVM Faculty Senate

From: Curricular Affairs Committee of the Faculty Senate, Laura Almstead, Chair

Date: May 4, 2017

Re: Items approved by the Curricular Affairs Committee that do not require a Faculty Senate vote

Proposal for Significant Revisions to the B.S. in Engineering Management

The College of Engineering and Mathematical Sciences (CEMS) submitted a proposal for significant revisions to the Bachelor of Science in Engineering Management, which is offered in cooperation with the Grossman School of Business. The overarching goals of the revisions are to address students' and advisors' concerns regarding difficulties navigating and completing requirements, provide greater flexibility for students in the major, and enable the program to better respond to changes in the discipline. The proposed changes have been endorsed by the Dean of the Grossman School of Business.

Engineering management encompasses the art and science of planning, organizing, directing, and controlling activities that have technical components. The current Engineering Management curriculum is divided into three concentrations: Civil & Environmental Engineering, Electrical Engineering, and Mechanical Engineering. CEMS Student Services reports that students in the major have expressed high levels of frustration in trying to follow the highly-structured curricula within the separate concentrations. Students encounter difficulties such as required courses that are no longer offered and/or conflict with other required courses during the prescribed semesters. Due to these issues, students in the major must go through a substitution/waiver process multiple times to fulfill their requirements. This puts an unnecessary burden on students.

In response to these concerns and in an effort to keep pace with ongoing curricular changes both in engineering and in the Grossman School of Business, the Engineering Management Undergraduate Curriculum Committee proposed a single set of requirements for the degree, thus eliminating the three concentrations. Under the proposed curriculum, Engineering Management students would still be able to follow degree tracks similar to the current concentrations, but would also be able to pursue other coursework and paths within engineering. It provides greater flexibility to students in terms of both degree requirements and scheduling, eliminates required courses that are rarely taught, and facilitates ongoing adaptation of the curriculum for an ever-evolving job market in the discipline. Since there are currently only nine Engineering Management majors and the proposed curriculum relies on existing courses that were already taken by students in the major, the program does not anticipate any effects on other departments or units with the exception of the Grossman School of Business, which supports the revisions.

Unlike the previous curriculum where students followed a prescribed set of courses with few choices, the revised curriculum allows students to take any of the four introductory engineering courses (BME 001, CE 003, EE 001, or ME 001), any of the four first-year design/experience courses, and any of the four senior design sequences (BME 187/188, CE 185/186, EE 187/188, or ME 185/186). The core sophomore engineering requirements are drawn from each of the former concentrations, and the upper-level engineering course requirements and concentration electives are replaced with 21 credits of Engineering Science coursework, both at the 100- and 200-level. Additionally, the current curriculum requires one or two Engineering Management electives and numerous BSAD courses that are no longer regularly offered. In the newly proposed curriculum, these courses are replaced with six credits of established BSAD electives. The previous BSAD 270 requirement is eliminated, as the course is no longer routinely offered, and replaced with BSAD 030, which covers similar content, although at a different level, and serves as a prerequisite for other BSAD requirements in the degree. The overall credit total for the proposed Engineering Management curriculum is 124 to 127 which falls within the range of the credit totals of the previous former concentrations.

In addition to letters of support from the Deans of CEMS and the Grossman School of Business, letters of support were provided by Mandar Dewoolkar, Ph.D., Associate Professor of Civil & Environmental Engineering and Active Director of the Interdisciplinary Engineering Programs, and Margaret Eppstein, Ph.D. Professor of Computer Science and Chair of the College of Engineering & Mathematical Sciences Curriculum Committee. Program faculty also support the curricular revisions.

In summary, the proposed structure will keep the Engineering Management curriculum current, help promote interest and retention in the major, and better prepare students to become accountable leaders and effective problem solvers.

Request to eliminate the Language Studies and Formal Linguistics Concentrations in the Linguistics major

The Director of the Linguistics program and the Chair of the Department of Romance Languages and Linguistics submitted a request to eliminate two concentrations in the Linguistics major. No courses are being removed from the curriculum as part of the change.

Currently, the Linguistics major includes four concentrations from which students are required to select one – Sociolinguistics, Psycholinguistics, Language Studies, and Formal Linguistics. The program requested to eliminate the Language Studies concentration, which requires two foreign language courses beyond the two required for a B.A. plus one course in linguistics of a foreign language, due to a lack of appropriate coursework in languages other than Spanish. Therefore, the program feels that it is misleading to students to offer this concentration as an option. The program requested to eliminate the Formal Linguistics concentration because they have made minor changes to their requirements, and all students now take a formal linguistics core course. Therefore, the program feels this concentration is no longer necessary.

The request to eliminate the two concentrations was approved by the Romance Languages and Linguistics Curriculum and Executive Committees, and the College of Arts and Sciences Curriculum Committee.