SPECIAL REPORT

of the

ACADEMIC MATTERS COUNCIL

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REVISION OF THE

CHEMICAL ENGINEERING MAJOR

Presented at the

748th Regular Meeting of the Faculty Senate

April 30, 2015

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The Chemical Engineering Department is proposing to revise the curriculum for its undergraduate major by removing one required third-year course (CHEM-ENG 361) and adding a required second-year course (CHEM-ENG 231). Both courses cover mathematical models for chemical engineering systems. The purpose of the revision is to introduce the material earlier in the curriculum so that students are better prepared for upper-division courses. There is no net change in the number of credits required for the major.

At its meeting on April 15, 2015, the Academic Matters Council voted unanimously to recommend Faculty Senate approval of the Revision of the Chemical Engineering Major. It was submitted as proposal #1753 in the Course and Curriculum Management System.

MOVED: That the Faculty Senate approve the Revision of the Revision of the Chemical Engineering Major, as presented in Sen. Doc. No. 15-047.
Please describe your proposal.

We are proposing to remove CHEM-ENG 361 as a degree requirement, and add CHEM-ENG 231 as a degree requirement. These are similar mathematical modeling courses, but we changed the level of the material and the semester in which it is required to target sophomores and better prepare them for the mathematical rigor of our junior year CHEM-ENG courses. There is no net change in number of credits required for the degree.

Please describe the existing program requirements, listing all required courses and available electives, as well as any additional requirements, and continuation or admissions policies.

The degree flowcharts can be viewed in proposal #1753 in the Course and Curriculum Management System.

Please describe the requirements that you are proposing, listing course requirements, elective options, as well as any additional requirements, and continuation or admissions policies.

We are removing one requirement (CHEM-ENG 361) and adding another (CHEM-ENG 231). The courses are similar but 231 will appear earlier in the curriculum (sophomore year) as compared to 361 (junior year). A course addition proposal for CHEM-ENG 231 has been submitted in parallel with this proposal.

Please provide the rationale for these revisions.

We wanted our students to have earlier mathematical preparation.

Academic Requirements Review

Requirements not available at this time.

Resources:

If this proposal requires no additional resources, say so and briefly explain why. If this proposal requires additional resources, explain how they will be paid for. For proposals involving instruction, indicate how many new enrollments are expected and whether the courses have room to accommodate them.

This is really just a "replacement" of one 3-credit course with another 3-credit course, placed one year earlier in the curriculum. The number and content of the course will change, but the title remains the same.