To: Faculty of the Schools of Engineering  
From: Faculty of the School of Chemical Engineering  
Subject: Curriculum Change  

The faculty of the School of Chemical Engineering has approved the following change and submits it for your approval.

**New requirements:** The change indicated below adds a required Biology course to the curriculum. This change will not affect the total credit hours required for graduation (131). To make room for this course, one engineering elective has been removed. These requirements will affect Chemical Engineering majors entering freshman engineering in the fall of 2003.

**Reasons:** The likelihood that chemical engineers will encounter biotechnology in the workplace has risen to the point that biology should be considered a core science for chemical engineers. This curriculum change recognizes this shift with the addition of a biology course designed to provide the necessary background.

**JUNIOR YEAR**

<table>
<thead>
<tr>
<th>Present</th>
<th>Proposed</th>
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<tbody>
<tr>
<td><strong>Fifth Semester</strong></td>
<td><strong>Fifth Semester</strong></td>
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<tr>
<td>(3) CHE 306 Staged Separations</td>
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<td>(3) CHE 377 Momentum Transfer</td>
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<td>(3) CHM 370 Physical Chemistry</td>
<td>(3) CHM 370 Physical Chemistry</td>
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<td>(2) CHM 376 Physical Chem Lab</td>
<td>(2) CHM 376 Physical Chem Lab</td>
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<tr>
<td>(6) ELECTIVES</td>
<td>(3) BIOL 295E (or equivalent)</td>
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<td>17</td>
<td>(3) ELECTIVE</td>
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**Footnotes:**

Present  
a  ChE prefers that students take the CHM 123/124 sequence. Students who have taken CHM 115/116 will also be accepted into the School of Chemical Engineering.

b  The MA 165/166 (4 cr. each) sequence is preferred; however, the MA161/162 (5 cr. each) sequence may be taken. If MA 161 and/or 162 is taken, these courses will be accepted as only 4 credit hours each toward meeting the graduation requirements for ChE.

c  C Programming is preferred by ChE; however, FORTRAN will be accepted. If CS 158 or ENGR 115 (both 3 cr. each) are taken, the extra credit may be used toward meeting the "free" or "technical" elective requirements.

d  A general education elective is suggested in this semester.

Proposed  
a  ChE prefers that students take the CHM 123/124 sequence. Students who have taken CHM 115/116 will also be accepted into the School of Chemical Engineering.

b  The MA 165/166 (4 cr. each) sequence is preferred; however, the MA161/162 (5 cr. each) sequence may be taken. If MA 161 and/or 162 is taken, these courses will be accepted as only 4 credit hours each toward meeting the graduation requirements for ChE.

c  C Programming is preferred by ChE; however, FORTRAN will be accepted. If CS 154, CS 158 or ENGR 117 (3 cr. each) are taken, the extra credit may be used toward meeting the "free" elective requirements.
A general education elective is suggested in this semester.

Present
†The 36 credit hours of elective courses are to be selected by the student in consultation with his or her undergraduate counselor to best fulfill the objectives of the individual student’s program (see options on page 37). Broadly speaking, the elective program consists of 3 credit hours of technical electives, 12 credit hours of engineering electives, 18 credit hours of general education electives, and 3 credit hours of unrestricted electives. The specifics of this program are outlined on planning sheets provided by the undergraduate office to all students entering the school.

Proposed
†The 36 credit hours of elective courses are to be selected by the student in consultation with his or her undergraduate counselor to best fulfill the objectives of the individual student’s program (see options on page 37). Broadly speaking, the elective program consists of 3 credit hours of technical electives, 9 credit hours of engineering electives, 18 credit hours of general education electives, and 3 credit hours of unrestricted electives. The specifics of this program are outlined on planning sheets provided by the undergraduate office to all students entering the school.

G. V. Reklaitis, Head  
School of Chemical Engineering  
Date: 8/1/02

APPROVED FOR THE FACULTY  
OF THE SCHOOLS OF ENGINEERING  
BY THE COMMITTEE ON  
FACULTY RELATIONS

CFR Minutes  #990  
Date  3/11/03  
Chairman CFR  Michael Jatowski