

December 9, 2011

Dean Matthew O'Donnell
College of Engineering
Box 352180

Dear Matt:

Based on the recommendation of its Subcommittee on Admissions and Programs, the Faculty Council on Academic Standards has recommended approval of the revised admission and program requirements for a Bachelor of Science in Chemical Engineering degree. A copy of the changes is attached.

I am writing to inform you that the College of Engineering is authorized to specify these requirements beginning spring quarter 2012.

The new requirements should be incorporated in printed statements and in individual department websites as soon as possible. The *General Catalog* website will be updated accordingly by the Registrar's Office.

Sincerely yours,



Michael K. Young
President

Enclosure

cc: Mr. Dave Drischell (with enclosure)
Mr. Robert Corbett (with enclosure)
Dr. Deborah H. Wiegand (with enclosure)
Ms. Virjean Edwards (with enclosure CHEME-20111010)



UNIVERSITY OF WASHINGTON
**CREATING AND CHANGING UNDERGRADUATE
 ACADEMIC PROGRAMS**

OFFICE USE ONLY
 Control #
 CHE/ME-20110010

After college/school/campus review, send a signed original and 8 copies to the Curriculum Office/FCAS, Box 355850.
 For information about when and how to use this form: <http://depts.washington.edu/uwcr/1503instructions.pdf>

College/Campus Engineering/Seattle	Department/Unit Chemical Engineering	Date 10/10/2010
New Programs		
<input type="checkbox"/> Leading to a Bachelor of _____ in _____ degree. <input type="checkbox"/> Leading to a Bachelor of _____ degree with a major in _____. <input type="checkbox"/> Leading to a _____ Option within the existing major in _____. <input type="checkbox"/> Leading to a minor in _____		
Changes to Existing Programs		
<input type="checkbox"/> New Admission Requirements for the Major in _____ within the Bachelor of _____. <input checked="" type="checkbox"/> Revised Admission Requirements for the Major in <u>Chemical Engineering</u> within the Bachelor of <u>Science</u> . <input checked="" type="checkbox"/> Revised Program Requirements for the Major in <u>Chemical Engineering</u> within the Bachelor of <u>Science</u> . <input type="checkbox"/> Revised Requirements for the Option in _____ within the major in _____. <input type="checkbox"/> Revised Requirements for the Minor in _____		
Other Changes		
<input type="checkbox"/> Change name of program from _____ to _____. <input type="checkbox"/> New or Revised Continuation Policy for _____. <input type="checkbox"/> Eliminate program in _____		
Proposed Effective Date: Quarter: <input type="checkbox"/> Autumn <input type="checkbox"/> Winter <input checked="" type="checkbox"/> Spring <input type="checkbox"/> Summer Year: 20 12		

Contact Person: Dave Drischell	Phone: 3-2252	Email: rdd@uw.edu	Box: 351750
--------------------------------	---------------	-------------------	-------------

EXPLANATION OF AND RATIONALE FOR PROPOSED CHANGE
 For new program, please include any relevant supporting documentation such as student learning outcomes, projected enrollments, letters of support and departmental handouts. (Use additional pages if necessary).

1. Clarify upper-division admission Catalog language regarding in-progress prerequisites.
2. Update engineering elective degree requirements to specify the amount of CHEM E 299/499 that may count toward engineering elective requirements and to restrict the amount of seminar credit that may count toward engineering electives.

OTHER DEPARTMENTS AFFECTED
 List all departments/units/ or co-accredited programs affected by your new program or changes to your existing program and acquire the signature of the chair/director of each department/unit listed. Attach additional page(s) if necessary. *See online instructions.

Department/Unit: <u>Chemical Eng</u>	Chair/Program Director:	Date:
Department/Unit:	Chair/Program Director	Date:

CATALOG COPY
<p>Catalog Copy as currently written. Include only sections/paragraphs that would be changed if your request is approved. Please cross out or otherwise highlight any deletions.</p> <p style="text-align: center; font-size: 2em;"><i>attached</i></p>

PROPOSED CATALOG COPY
<p>Reflecting requested changes (Include exact wording as you wish it to be shown in the printed catalog. Please underline or otherwise highlight any additions. If needed, attach a separate, expanded version of the changes that might appear in department publications). Please note: all copy will be edited to reflect uniform style in the General Catalog.</p> <p style="text-align: center; font-size: 2em;"><i>attached</i></p>

APPROVALS	
Chair/Program Director: <i>Daniel Schmitt</i>	Date: 10/14/11
College/School/Campus Curriculum Committee: <i>C. M. Nally</i>	Date: 11-3-11
Dean/Vice Chancellor: <i>Sved-Kron</i>	Date: 11-7-11
Faculty Council on Academic Standards/ General Faculty Organization/Faculty Assembly Chair: <i>John Schaubelberger</i>	Date: DEC. 2, 2011
POS: TRI-CAMPUS APPROVAL (when needed)	
Faculty Council on Academic Standards/ General Faculty Organization/Faculty Assembly Chair:	Date:

Catalog Copy as currently written. Include only sections/paragraphs that would be changed if your request is approved. Please cross out or otherwise highlight any deletions.

Upper-Division Admission

The department enrolls the majority of its student through upper-division admission. Upper-division applicants have completed at least four quarters of equivalent college-level coursework and are on track to begin the department curriculum in spring quarter of their sophomore year. Application for the department is available at www.engr.washington.edu/uapp. Students not at UW must also apply for admission to the UW for spring quarter, following the admission rules found at admit.washington.edu.

Admission is for spring quarter only. The department application deadline is February 1. The UW application deadline is December 15.

Course Requirements: Minimum 55 academic credits at time of application, including the following ~~graded~~ credits: MATH 124, MATH 125, MATH 126, MATH 307 (18 credits); CHEM 142 (~~or CHEM 144~~), CHEM 152 (~~or CHEM 154~~), CHEM 162 (~~or CHEM 164~~) (15 credits); PHYS 121, PHYS 122 (10 credits); and one 5-credit English composition course, chosen from C LIT 240, ENGL 109-ENGL 110, ENGL 111, ENGL 121, ENGL 131, ENGL 197, ENGL 198, ENGL 199, or ENGL 281.

Applicants are advised to complete AMATH 301 (or CSE 142) by (or during) winter quarter of the sophomore year, and to complete PHYS 123 by (or during) spring of the sophomore year. Both courses must be completed no later than summer quarter following admission. It is expected that CHEM 237 (or CHEM 223) be completed no later than autumn quarter following admission. Applicants should take general education or elective courses to complete the minimum 55 graded credits.

Credit and Grade Requirements: 55 credits completed by application deadline, with a minimum overall 2.50 GPA and minimum 2.0 grade in all courses required for admission. Historically a substantially higher GPA in these categories is required for admission to the major. See department adviser with questions.

Factors included in the admission decision include the course record as indicated above and qualitative considerations such as difficulty of completed courses, frequency of incomplete or withdrawal grades, number of repeated courses, applicable work experience and maturity of attitude, record of honors, a demonstrated ability to take at least 12 credits per quarter, and special circumstances disclosed by the applicant.

Catalog Copy as currently written. Include only sections/paragraphs that would be changed if your request is approved. Please cross out or otherwise highlight any deletions.

Major Requirements (71 credits)

1. *Engineering Fundamentals (4 credits):* AMATH 301 or CSE 142
2. *Chemical Engineering Core Courses (48 credits):* CHEM E 310, CHEM E 325, CHEM E 326, CHEM E 330, CHEM E 340, CHEM E 435, CHEM E 436, CHEM E 437, CHEM E 465, CHEM E 480, CHEM E 485, CHEM E 486
3. *Molecular and Nanoscience Engineering (3 credits):* CHEM E 455 (highly recommended) or CHEM 461
4. *Engineering Elective Courses (16 credits)*

Unspecified Electives (5 credits)

Nanoscience and Molecular Engineering Option Major Requirements (74 credits)

1. *Engineering Fundamentals (4 credits):* AMATH 301 or CSE 142
2. *Chemical Engineering Core Courses (48 credits):* CHEM E 310, CHEM E 325, CHEM E 326, CHEM E 330, CHEM E 340, CHEM E 435, CHEM E 436, CHEM E 437, CHEM E 465, CHEM E 480, CHEM E 485, CHEM E 486
3. *Nanoscience and Molecular Engineering Courses (22 credits):* CHEM E 455, CHEM E 499 (3-6 credits), NME 220, NME 221, NME 321, NME 421; minimum two additional approved nanoscience and molecular engineering electives. See adviser for list of approved electives.

Proposed Catalog Copy: Reflecting requested changes (Include exact wording as you wish it to be shown in the printed catalog. Please underline or otherwise highlight any additions. If needed, attach a separate, expanded version of the changes that might appear in department publications).

Please note: all copy will be edited to reflect uniform style in the General Catalog.

Upper-Division Admission

The department enrolls the majority of its student through upper-division admission. Upper-division applicants have completed at least four quarters of equivalent college-level coursework and are on track to begin the department curriculum in spring quarter of their sophomore year. Application for the department is available at www.engr.washington.edu/uapp. Students not at UW must also apply for admission to the UW for spring quarter, following the admission rules found at admit.washington.edu.

Admission is for spring quarter only. The department application deadline is February 1. The UW application deadline is December 15.

Course Requirements: Minimum 55 academic credits at time of application, including the following credits: MATH 124, MATH 125, MATH 126, MATH 307 (18 credits); CHEM 142, CHEM 152, CHEM 162 (15 credits); PHYS 121, PHYS 122 (10 credits); and one 5-credit English composition course, chosen from C LIT 240, ENGL 109-ENGL 110, ENGL 111, ENGL 121, ENGL 131, ENGL 197, ENGL 198, ENGL 199, or ENGL 281.

Applicants will be considered for admission if they have completed all but two of the required courses and are currently enrolled in those courses at the time of application to the major (e.g. MATH 307 and PHYS 122). See the department academic advisor with questions.

General expectations of academic progress: To be fully prepared for major coursework and to be on track to complete the degree in a timely manner, students must have completed all admissions requirements as well as the following courses by the start of the autumn quarter following admission: organic chemistry I and II (CHEM 237/238, 223/224, or 335/336), PHYS 123, AMATH 301 (or CSE 142), MATH 308, CHEM E 310. Students unable to meet this continuation requirement will be automatically dropped from the program (appeals for readmission will be considered in the case of special circumstances). Applicants should take general education or elective credits as space allows. See the department academic advisor with questions related to your academic progress.

Credit and Grade Requirements: 55 credits completed by application deadline, with a minimum overall 2.50 GPA and minimum 2.0 grade in all courses required for admission. Historically a substantially higher GPA in these categories is required for admission to the major. See department adviser with questions.

Factors included in the admission decision include the course record as indicated above and qualitative considerations such as difficulty of completed courses, frequency of incomplete or withdrawal grades, number of repeated courses, applicable work experience and maturity of attitude, record of honors, a demonstrated ability to take at least 12 credits per quarter, and special circumstances disclosed by the applicant.

Reflecting requested changes (Include exact wording as you wish it to be shown in the printed catalog. Please underline or otherwise highlight any additions. If needed, attach a separate, expanded version of the changes that might appear in department publications).

Please note: all copy will be edited to reflect uniform style in the General Catalog.

Major Requirements (71 credits)

5. *Engineering Fundamentals (4 credits):* AMATH 301 or CSE 142
6. *Chemical Engineering Core Courses (48 credits):* CHEM E 310, CHEM E 325, CHEM E 326, CHEM E 330, CHEM E 340, CHEM E 435, CHEM E 436, CHEM E 437, CHEM E 465, CHEM E 480, CHEM E 485, CHEM E 486
7. *Molecular and Nanoscience Engineering (3 credits):* CHEM E 455 (highly recommended) or CHEM 461
8. *Engineering Elective Courses (16 credits) Restrictions:* one, one credit seminar is allowed to count toward engineering electives. A maximum of nine credits of undergraduate research (Chem E 299/499, of which no more than three credits may be Chem E 299) can count toward engineering electives.

Unspecified Electives (5 credits)

Nanoscience and Molecular Engineering Option Major Requirements (74 credits)

4. *Engineering Fundamentals (4 credits):* AMATH 301 or CSE 142
5. *Chemical Engineering Core Courses (48 credits):* CHEM E 310, CHEM E 325, CHEM E 326, CHEM E 330, CHEM E 340, CHEM E 435, CHEM E 436, CHEM E 437, CHEM E 465, CHEM E 480, CHEM E 485, CHEM E 486
6. *Nanoscience and Molecular Engineering Courses (22 credits):* CHEM E 455, CHEM E 299/499 (3-6 credits, maximum 3 cr from CHEM E 299), NME 220, NME 221, NME 321, NME 421; minimum two additional approved nanoscience and molecular engineering electives. See adviser for list of approved electives.