



UNIVERSITY *of* WASHINGTON

Michael K. Young  
President

June 11, 2013

Interim Dean Judith Ramey  
College of Engineering  
Box 352180

Dear Judy:

Based on the recommendation of its Subcommittee on Admissions and Programs, the Faculty Council on Academic Standards has recommended approval of the revised program requirements for a Bachelor of Science in Chemical Engineering degree and the revised program requirements for the option in Nanoscience and Molecular Engineering within the 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 autumn quarter 2013.

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,

A handwritten signature in black ink, appearing to read "Michael K. Young".

Michael K. Young  
President

Enclosure

cc: Mr. Dave Drischell (with enclosure)  
Mr. Robert Corbett (with enclosure)  
Ms. Virjean Edwards (with enclosure)



UNIVERSITY OF WASHINGTON

# CREATING AND CHANGING UNDERGRADUATE ACADEMIC PROGRAMS

MAY 24 2013



After college/school/campus review, send a signed original and 1 copy 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 Engr/Seattle	Department/Unit Chemical Engr	Date 5/17/13
-----------------------------	-------------------------------	--------------

**New Programs**

- ☐ Leading to a Bachelor of \_\_\_\_\_ in \_\_\_\_\_ degree.
- ☐ Leading to a Bachelor of \_\_\_\_\_ degree with a major in \_\_\_\_\_.
- ☐ Leading to a \_\_\_\_\_ Option within the existing major in \_\_\_\_\_.
- ☐ Leading to a minor in \_\_\_\_\_.

**Changes to Existing Programs**

- ☐ New Admission Requirements for the Major in \_\_\_\_\_ within the Bachelor of \_\_\_\_\_.
- ☐ Revised Admission Requirements for the Major in \_\_\_\_\_ within the Bachelor of \_\_\_\_\_.
- ☒ Revised Program Requirements for the Major in CHEM E within the Bachelor of Science.
- ☒ Revised Requirements for the Option in NME within the major in CHEM E.
- ☐ Revised Requirements for the Minor in \_\_\_\_\_.

**Other Changes**

- ☐ Change name of program from \_\_\_\_\_ to \_\_\_\_\_.
- ☐ Change delivery method or location of program.
- ☐ New or Revised Continuation Policy for \_\_\_\_\_.
- ☐ New Honors Requirements for \_\_\_\_\_.
- ☐ Eliminate program in \_\_\_\_\_.

Proposed Effective Date: **Quarter:** ☒ Autumn ☐ Winter ☐ Spring ☐ Summer **Year: 20 13**

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).*

Correct math error from previous 1503. Small change to wording in "Student Outcomes and Opportunities" section.

**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:	Chair/Program Director:	Date:
Department/Unit:	Chair/Program Director	Date:

**CATALOG COPY**

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.

See attached

**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.

See attached

**APPROVALS**

Chair/Program Director:

Date:

5/16/13

College/School/Campus Curriculum Committee:

Date:

5/21/13

Dean/Vice Chancellor:

Date:

5/22/13

Faculty Council on Academic Standards/ General Faculty Organization/Faculty Assembly Chair:

Date:

5/31/13

**POST TRI-CAMPUS APPROVAL (when needed)**

Faculty Council on Academic Standards/ General Faculty Organization/Faculty Assembly Chair:

Date:

**\_\_\_Catalog Copy as Currently Written:\_\_\_**

**General Education Requirements (101 credits)**

1. *Written and Oral Communications (8 credits)*: one 5-credit English composition course from the University list; HCDE 231. Additional writing credits are built into the major core courses.
2. *Visual, Literary, & Performing Arts (VLPA) and Individuals & Societies (I&S) (24 credits)*: A minimum of 10 credits required in each area
3. *Natural World (65 credits)*
  - a. Physics (15 credits): PHYS 121, PHYS 122, PHYS 123
  - b. Mathematics (24 credits): MATH 124, MATH 125, MATH 126, MATH 307, MATH 308, and MATH 309 (or MATH 390 or IND E 315)
  - c. Chemistry (26 credits): CHEM 142, CHEM 152, CHEM 162, CHEM 237, CHEM 238, CHEM 455

**Major Requirements (74 credits)**

1. *Engineering Fundamentals (4 credits)*: AMATH 301 or CSE 142
2. *Chemical Engineering Core Courses (51 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 457, CHEM E 465, CHEM E 480, CHEM E 485, CHEM E 486
3. *Molecular and Nanoscience Engineering (3 credits)*: CHEM E 455
4. *Engineering Elective Courses (16 credits)*: Only one, 1-credit seminar is allowed to count toward engineering electives. A maximum of 9 credits of undergraduate research (CHEM E 299, CHEM E 499, of which no more than 3 credits may be CHEM 299) may count toward engineering electives.

*Unspecified Electives (5 credits)*

**Nanoscience and Molecular Engineering Option Major Requirements (77 credits)**

1. *Engineering Fundamentals (4 credits)*: AMATH 301 or CSE 142
2. *Chemical Engineering Core Courses (51 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 457, CHEM E 465, CHEM E 480, CHEM E 485, CHEM E 486
3. *Nanoscience and Molecular Engineering Courses (22 credits)*: CHEM E 299, CHEM E 455, CHEM E 499 (3-6 credits, maximum 3 credits 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.

*Unspecified Electives (2 credits)*



## Proposed Catalog Copy

*Note: the University-required 4 additional writing credits will be met by major core courses.*

### General Education Requirements (97 credits)

1. *Written and Oral Communications (8 credits)*: one 5-credit English composition course from the University list; HCDE 231. ~~Additional writing credits are built into the major-core courses.~~
2. *Visual, Literary, & Performing Arts (VLPA) and Individuals & Societies (I&S) (24 credits)*: A minimum of 10 credits required in each area
3. *Natural World (65 credits)*
  - a. Physics (15 credits): PHYS 121, PHYS 122, PHYS 123
  - b. Mathematics (24 credits): MATH 124, MATH 125, MATH 126, MATH 307, MATH 308, and MATH 309 (or MATH 390 or IND E 315)
  - c. Chemistry (26 credits): CHEM 142, CHEM 152, CHEM 162, CHEM 237, CHEM 238, CHEM 455

### Major Requirements (74 credits)

1. *Engineering Fundamentals (4 credits)*: AMATH 301 or CSE 142
2. *Chemical Engineering Core Courses (51 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 457, CHEM E 465, CHEM E 480, CHEM E 485, CHEM E 486
3. *Molecular and Nanoscience Engineering (3 credits)*: CHEM E 455
4. *Engineering Elective Courses (16 credits)*: Only one, 1-credit seminar is allowed to count toward engineering electives. A maximum of 9 credits of undergraduate research (CHEM E 299, CHEM E 499, of which no more than 3 credits may be CHEM 299) may count toward engineering electives.

### Unspecified Electives (9 credits)

### Nanoscience and Molecular Engineering Option Major Requirements (77 credits)

1. *Engineering Fundamentals (4 credits)*: AMATH 301 or CSE 142
2. *Chemical Engineering Core Courses (51 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 457, CHEM E 465, CHEM E 480, CHEM E 485, CHEM E 486
3. *Nanoscience and Molecular Engineering Courses (22 credits)*: CHEM E 299, CHEM E 455, CHEM E 499 (3-6 credits, maximum 3 credits 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.

### Unspecified Electives (6 credits)

*Under "Student Outcomes and Opportunities"*

*Bullet number 5, current catalog copy:*

*Department Scholarships:* The department awards 20-25 full-tuition scholarships per year. Application deadline is April 1.

Bullet number 5, proposed catalog copy:

*Department Scholarships:* The department awards 20-25 full-tuition scholarships per year. See department website for application procedures.

## Jennifer A. Payne

---

**From:** Dave Drischell <rdd@uw.edu>  
**Sent:** Thursday, May 23, 2013 10:25 AM  
**To:** Jennifer A. Payne; K. Wetterhahn  
**Subject:** RE: Written and Oral Communications catalog copy

That's fine with CHEME

---

**From:** Jennifer A. Payne [<mailto:jap2@uw.edu>]  
**Sent:** Thursday, May 23, 2013 10:21 AM  
**To:** Dave Drischell; K. Wetterhahn  
**Subject:** Written and Oral Communications catalog copy

Dave and Karen,

Asst. Registrar Tina Miller has asked me to let you know that to prevent issues with DARS and the written and oral communication requirements we need the catalog copy to say the following:

Written and Oral Communications: (8 credits): one 5-credit English Composition course from the University list; HCDE 231. Note: the University-required 4 additional writing credits will be met by major core courses.

Jennifer

\*\*\*\*\*

Jennifer Payne, M.Ed.  
University Curriculum Procedures Analyst  
Office of the Registrar  
University of Washington  
<http://depts.washington.edu/registra/curriculum/>  
Phone: 206-543-5938  
Email: [uwcr@uw.edu](mailto:uwcr@uw.edu)  
Box: 355850