



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 option in Nanoscience and Molecular Engineering within the Bachelor of Science in Materials Science and Engineering degree and the revised program requirements for the Bachelor of Science in Materials Science and Engineering degree. A copy of the changes is attached.

I am writing to inform you that the Department of Materials Science and 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. Stanley Choi (with enclosure)
Mr. Robert Corbett (with enclosure)
Ms. Virjean Edwards (with enclosure)



UNIVERSITY OF WASHINGTON

CREATING AND CHANGING UNDERGRADUATE
ACADEMIC PROGRAMS

MAY 13 2013

OFFICE USE ONLY

Control #

MSE-20130501

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

College of Engineering

Department/Unit

Materials Science and Engineering

Date 5/1/2013

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 _____.
- X ☐ Revised Program Requirements for the Major in Materials Science and Engineering within the Bachelor of Science in Materials Science and Engineering.
- X ☐ Revised Requirements for the Option in Nanoscience and Molecular Engineering within the major in Materials Science and Engineering.
- ☐ 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: 2013**

Contact Person: Stanley Choi

Phone: 6-6581

Email: stanchoi@uw.edu

Box: 352120

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).

Due to the elimination of HCDE 333, the Department of Materials Science and Engineering (MSE) will be integrating the additional writing credits through the MSE junior laboratory sequence (MSE 311-312-313). The laboratories (MSE 311-312-313) will each be increased from 2 to 3 credits. In addition, MSE 399, a new 1-credit seminar, is being added to the curriculum in order to introduce MSE majors to different MSE research projects available in MSE faculty laboratories.

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.

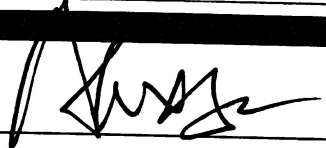
PROPOSED CATALOG COPY

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.

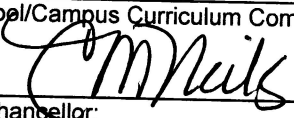
APPROVALS

Chair/Program Director:



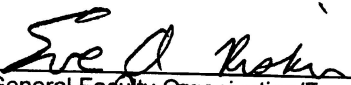
Date: 5/2/13

College/School/Campus Curriculum Committee:



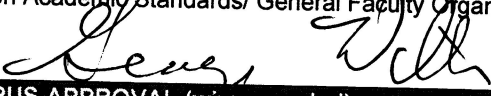
Date: 5/7/13

Dean/Vice Chancellor:



Date: 5/9/13

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:

Graduation Requirements

Minimum 180 credits to include:

General Education Requirements (~~91-96 credits~~)

1. Written and Oral Communications: ~~12 credits, to include~~ one 5-credit English composition course from the University list; HCDE 231; ~~HCDE 333 (or department-approved alternative)~~
2. Visual, Literary, & Performing Arts (VLPA), and Individuals & Societies (I&S) (24 credits): A minimum of 10 credits is required in each area.
3. Natural World (55-60 credits):
 - a. Mathematics (24-25 credits): MATH 124, MATH 125, MATH 126, MATH 307, MATH 308 (or MATH 318); one from MATH 309, MATH 324, IND E 315, or STAT 390
 - b. Science (31-35 credits): CHEM 142 (or CHEM 144), CHEM 152 (or CHEM 154); PHYS 121, PHYS 122, PHYS 123; two additional natural science courses from the department's approved list

Major Requirements (~~89 credits~~)

1. Engineering Fundamentals (24 credits): CSE 142 or AMATH 301, MSE 170, A A 210, CEE 220; two of the following: E E 215, M E 123, A A 260 or CHEM E 325, IND E 250, CHEM E 220
2. Materials Science and Engineering Core (~~49 credits~~): MSE 310, MSE 311, MSE 312, MSE 313, MSE 321, MSE 322, MSE 331, MSE 333, MSE 342, MSE 351, MSE 352, MSE 362, MSE 431, MSE 442, MSE 491, MSE 492, MSE 499
3. Technical Electives (16 credits): See department advising office for list of acceptable courses.
4. Grade Requirement: Minimum 2.00 departmental cumulative GPA

Major Requirements for Nanoscience and Molecular Engineering Option (~~93 credits~~)

1. Engineering Fundamentals (24 credits): CSE 142 or AMATH 301, MSE 170, A A 210, CEE 220; two of the following: E E 215, M E 123, A A 260 or CHEM E 325, IND E 250, CHEM E 220
2. Materials Sciences and Engineering Core (~~49 credits~~): MSE 310, MSE 311, MSE 312, MSE 313, MSE 321, MSE 322, MSE 331, MSE 333, MSE 342, MSE 351, MSE 352, MSE 362, MSE 431, MSE 442, MSE 491, MSE 492, MSE 499. The senior project (MSE 499) must be in an NME area.
3. Nanoscience and Molecular Engineering Courses (20 credits): NME 220, NME 221, NME 321, NME 421; additional approved nanoscience and molecular engineering electives to reach 20 credits. See adviser for list of approved electives.
4. Grade Requirements: Minimum 2.00 departmental cumulative GPA

Proposed Catalog Copy:

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

Graduation Requirements

Minimum 180 credits to include:

General Education Requirements (87-92 credits)

4. 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~~ ✖
5. Visual, Literary, & Performing Arts (VLPA), and Individuals & Societies (I&S) (24 credits): A minimum of 10 credits is required in each area.
6. Natural World (55-60 credits):
 - a. Mathematics (24-25 credits): MATH 124, MATH 125, MATH 126, MATH 307, MATH 308 (or MATH 318); one from MATH 309, MATH 324, IND E 315, or STAT 390
 - b. Science (31-35 credits): CHEM 142 (or CHEM 144), CHEM 152 (or CHEM 154); PHYS 121, PHYS 122, PHYS 123; two additional natural science courses from the department's approved list

Major Requirements (93 credits)

5. Engineering Fundamentals (24 credits): CSE 142 or AMATH 301, MSE 170, A A 210, CEE 220; two of the following: E E 215, M E 123, A A 260 or CHEM E 325, IND E 250, CHEM E 220
6. Materials Science and Engineering Core (53 credits): MSE 310, MSE 311, MSE 312, MSE 313, MSE 321, MSE 322, MSE 331, MSE 333, MSE 342, MSE 351, MSE 352, MSE 362, MSE 399, MSE 431, MSE 442, MSE 491, MSE 492, MSE 499
7. Technical Electives (16 credits): See department advising office for list of acceptable courses.
8. Grade Requirement: Minimum 2.00 departmental cumulative GPA

Major Requirements for Nanoscience and Molecular Engineering Option (97 credits)

5. Engineering Fundamentals (24 credits): CSE 142 or AMATH 301, MSE 170, A A 210, CEE 220; two of the following: E E 215, M E 123, A A 260 or CHEM E 325, IND E 250, CHEM E 220
6. Materials Sciences and Engineering Core (53 credits): MSE 310, MSE 311, MSE 312, MSE 313, MSE 321, MSE 322, MSE 331, MSE 333, MSE 342, MSE 351, MSE 352, MSE 362, MSE 399, MSE 431, MSE 442, MSE 491, MSE 492, MSE 499. The senior project (MSE 499) must be in an NME area.
7. Nanoscience and Molecular Engineering Courses (20 credits): NME 220, NME 221, NME 321, NME 421; additional approved nanoscience and molecular engineering electives to reach 20 credits. See adviser for list of approved electives.
8. Grade Requirements: Minimum 2.00 departmental cumulative GPA

Jennifer A. Payne

From: Stanley Choi <stancoi@uw.edu>
Sent: Thursday, May 23, 2013 10:33 AM
To: K. Wetterhahn
Cc: Jennifer A. Payne
Subject: Re: Written and Oral Communications catalog copy

Dear Jennifer:

That is fine with MSE.

Best,

Stanley

Stanley Choi | Academic Counselor, Undergraduate Programs
Materials Science & Engineering | University of Washington
302 Roberts Hall | Box 352120 | Seattle, WA 98195-2120
tel: 206.616.6581 | fax: 206.543.3100 | e-mail: stancoi@uw.edu

On Thu, May 23, 2013 at 10:24 AM, Karen Wetterhahn <karenlw@uw.edu> wrote:

Hello Jennifer,

I am forwarding this message to Stanley since he works with our undergraduate MSE program. I work mainly with the graduate programs in MSE.

Thanks,

Karen

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

Box: 355850