UNIVERSITY OF WASHINGTON

OFFICE OF THE PRESIDENT

June 14, 2012

Dean Matthew O'Donnell
College of Engineering
Box 352180

Dean Paul G. Ramsey
School of Medicine
Box 356350

Dear Matt and Paul:

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 the Bachelor of Science in Bioengineering degree. A copy of the change is attached.

I am writing to inform you that the Department of Bioengineering is authorized to specify these requirements beginning autumn quarter 2011.

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: Ms. Rika Kurose (with enclosure)
Mr. Robert Corbett (with enclosure)
Dr. Deborah H. Wiegand (with enclosure)
Ms. Virjean Edwards (with enclosure BIOEN-20110415)

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MAY 3 1 2011

UNIVERSITY OF WASHINGTON

CREATING AND CHANGING UNDERGRADUATE ACADEMIC PROGRAMS

OFFICE USE ONLY
Control #: BIOEN-20110415

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/Medicine	**Department/Unit** Bioengineering	**Date** 4/15/2011

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 Bioengineering within the Bachelor of Science.
- ☐ Revised Requirements for the Option in _____within the major in _____.
- ☐ Revised Requirements for the Minor in _____.

Other Changes

- ☐ Change name of program from _____ to _____.
- ☐ New or Revised Continuation Policy for _____.
- ☐ Eliminate program in _____

Proposed Effective Date: **Quarter:** ☒ Autumn ☐ Winter ☐ Spring ☐ Summer **Year: 20 11**

Contact Person: Laura Wright	Phone: 3-8958	Email: lew3@uw.edu	Box: 355061

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*).

We seek to eliminate the HCDE 231 graduation requirement from our B.S. Bioengineering major. Below, we present our rationale for requesting a negation of the HCDE 231 graduation requirement.

The topics covered in HCDE 231 are extremely important to an engineering undergraduate education. As such, we have incorporated these topics into our revised undergraduate curriculum, currently being implemented as of winter 2011.

Currently, our students are generally not able to take it early enough in their undergraduate career to utilize the useful learned skills in subsequent courses. Given the current necessity to reduce the number of offered HCDE 231 course sections, we anticipate this problem will increase.

Our students would benefit from learning these important technical communication skills (presented below) in the context of their field of study and practicing these concepts in the discipline of bioengineering.

Finally, comparing the topics covered in HCDE 231 and our BIOEN courses, there is substantial overlap (Table 1). We propose that this overlap is significant enough to warrant an examination of the HCDE 231 requirement for BIOEN undergraduates.

HCDE 231	BIOEN
Ethics (1.5 lecture discussion plus presentation on contemporary engineering ethical problem)	Ethics (identification of ethical issues in BIOEN, discussion, case studies, tools for designing solutions to ethical problems) (BIOEN 215)
Teamwork (establishing roles, writing a group report)	Teamwork (establishing teamwork guidelines and roles, writing a group report, oral group presentation, peer evaluations of group work performance) (BIOEN 215)
Elevator speeches	Elevators speeches (BIOEN 401, applied to projects in 405)
Working with info from sources (supporting claims with evidence); citations/plagiarism	Working with info from sources (supporting claims with evidence); citations/plagiarism (BIOEN 215)
Oral presentations, including discussion of guidelines and self and peer evaluations	Oral presentations, including discussion of guidelines/tips and peer evaluations (BIOEN 215)
Revision strategies	Revision strategies (BIOEN 401, 402)
Library research	Library research (tools learned in BIOEN 215, applied in BIOEN 315, revisited and implemented in BIOEN 401)
Analyzing speeches	Oral presentation skills (BIOEN 215 and 401), analysis and constructive critique of peer presentations (BIOEN 402/403)
Writing process (prewriting, organization, coherence, sentence revision)	Fulfilled by English composition requirement (BIOEN 215)
Technical instructions	Multiple lab reports (technical writing) (BIOEN 317, 327, 337)
Communication foundations: context, purpose, audience	Communication foundations: context, purpose, audience (BIOEN 401)

Table 1. Comparison of topics covered in HCDE 231 and BIOEN undergraduate curriculum.

OTHER DEPARTMENTS AFFECTED

List all departments/units/ or co-accredited programs affected by your new program or changes to your existing

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: 5/10/11
College/School/Campus Curriculum Committee: Engineering: Robert E. Beaudoin 5/17/11 medicine:	Date: 5/27/11
Dean/Vice Chancellor: Engineering: 5/18/11 medicine:	Date: 5/27/11
Faculty Council on Academic Standards/ General Faculty Organization/Faculty Assembly Chair:	Date: JUN 13, 2012

POST TRI-CAMPUS APPROVAL (when needed)

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

UoW 1503 (10/08)

Current Catalog Copy

General Education Requirements ~~(108 credits)~~:

1. *Areas of Knowledge:* 24 total credits in Visual, Literary, & Performing Arts (VLPA) and Individuals & Societies (I&S), with at least 10 credits in each area.
2. *Written and Oral Communication ~~(8 credits)~~:* 5 credits of English composition, from the approved University list~~; HCDE 231~~. Additional writing credits are built into the major core courses.
3. *Mathematics (24 credits):* MATH 124, MATH 125, MATH 126; either MATH 307 or AMATH 351; either MATH 308 or AMATH 352; STAT 390 or IND E 315.
4. *Natural Science (44 credits):* CHEM 142, CHEM 152, CHEM 162 (or CHEM 144, CHEM 154, CHEM 164) and CHEM 223 (or CHEM 237); PHYS 121, PHYS 122; BIOL 180, BIOL 200, BIOL 220.
5. *General Electives (8 credits)*

Proposed Catalog Copy

General Education Requirements (105 credits):

1. *Areas of Knowledge:* 24 total credits in Visual, Literary, & Performing Arts (VLPA) and Individuals & Societies (I&S), with at least 10 credits in each area.
2. *Written and Oral Communication (5 credits):* 5 credits of English composition, from the approved University list. Additional writing credits are built into the major core courses.
3. *Mathematics (24 credits):* MATH 124, MATH 125, MATH 126; either MATH 307 or AMATH 351; either MATH 308 or AMATH 352; STAT 390 or IND E 315.
4. *Natural Science (44 credits):* CHEM 142, CHEM 152, CHEM 162 (or CHEM 144, CHEM 154, CHEM 164) and CHEM 223 (or CHEM 237); PHYS 121, PHYS 122; BIOL 180, BIOL 200, BIOL 220.
5. *General Electives (8 credits)*