



University of Washington Office of the President, Box 351230

June 18, 2004

Dean Denice D. Denton
College of Engineering
Box 352180

Dear Denice:

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 all Bachelor of Science degrees offered by the College of Engineering. A copy of the change is attached.

I am writing to inform you that the College of Engineering is authorized to specify these requirements beginning autumn quarter 2004.

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,

Lee L. Huntsman
President

Enclosure

cc: Mr. W. W. Washburn (with enclosure)
Mr. Robert Corbett (with enclosure)
Dr. Deborah H. Wiegand (with enclosure) EN6R-051264



ENGR-051204

Creating & Changing Undergraduate Academic Programs*

After college/school review, send signed original and 8 copies to: FCAS, Box 351271

College: ENGINEERING Department or Unit: All Academic Degree Programs Date: May 12, 2004

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 **ALL BACHELOR DEGREE MAJORS** in the COLLEGE OF ENGINEERING

- 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/year) **Autumn 2004**

Contact Person	Phone Number	Email
Frank Ashby	6-0996	ashby@engr.washington.edu

Explanation of and Rationale for Proposed Change: (Please use additional pages if necessary. For new programs, please include any relevant supporting documentation such as student learning outcomes, projected enrollments, letters of support, and departmental handouts.)

Reducing the minimum credits required for mathematics courses from 24 to 18 for all engineering degrees, gives more flexibility to the engineering programs – with the understanding that many programs will continue to require additional mathematics and statistics courses.

The overall changes will provide a clearer statement of the College of Engineering’s core requirements, provides an approved and public baseline of core requirements to reduce confusion and uncertainty during future proposed degree program changes, and will be inclusive of all engineering undergraduate degree programs as they currently exist.

* For information about when and how to use this form please go to <http://www.washington.edu/faculty/facsenate/councils/fcas/1503/>.

Creating & Changing Undergraduate Academic Programs

2. Catalog Copy

A. 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.*)

Graduation Requirements

To graduate, students must meet or exceed the requirements of the University, the College, and their particular program or department. College requirements are listed in this section, and program or departmental requirements are given in the specific section that describes that program or department.

All departments of the College have continuation policies that specify a minimum rate of progress as well as minimum academic-performance levels. These policies may be more restrictive than those generally applied by the University and may change with time. Information on current policy is available at the departmental offices.

Selecting courses that fulfill graduation requirements is the responsibility of each student. Students are urged to check carefully the course and credit requirements of the program in which they are enrolled.

The College requires a minimum number of credits within certain areas of study and some specific courses within certain areas. All programs require the following:

General-Education Requirements: 85 Credits

•—Areas of Knowledge: 49 Credits

~~Visual, Literary, & Performing Arts and Individuals & Societies: 24 credits minimum. Some programs within the College require 30 credits. Visual, Literary, & Performing Arts (VLPA) includes courses in literature, art, music, and drama which stress the essential qualities of individual forms of expression. First- and second-quarter language courses may not be counted toward the VLPA requirement. Individuals & Societies includes courses in history, economics, psychology, and sociology which stress the social nature of mankind, and the development and analysis of societies and social institutions. Courses that count toward these requirements are identified as VLPA or I&S in the General Catalog and in the quarterly Time Schedule. A minimum of 10 credits is required in each area.~~

~~Natural World: 20-25 credits. Most departments within the College require chemistry (10 credits): CHEM 142, 152 (some departments do not require CHEM 152); and physics (15 credits): PHYS 121, 122, 123. Please consult an adviser in the Engineering Advising Center (356 Loew) or the departmental adviser.~~

•—Mathematics: 24 Credits

~~Specifically required are MATH 124, 125, 126, 307, and 308. The remaining 3 credits are specified or recommended by the department or program.~~

•—Written and Oral Communication: 12 Credits

~~One 5-credit English composition course from the approved University list: T C 231, Introduction to Technical Writing (3 credits), and T C 333, Advanced Technical Writing and Oral Presentations (4 credits, or department-approved alternative).~~

•—Engineering Departmental Course of Study: 95 Credits

~~Major departments or specific programs require at least 95 credits in their curricula. These course sequences were developed to culminate in a major, meaningful design experience.~~

B. 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.*)

Creating & Changing Undergraduate Academic Programs

ENGINEERING CORE UNDERGRADUATE DEGREE PROGRAM REQUIREMENTS

To graduate, students must meet or exceed the requirements of the University, the College, and their particular program or department. College requirements are listed in this section, and program or departmental requirements are given in the specific section that describes that program or department.

All departments of the College have continuation policies that specify a minimum rate of progress as well as minimum academic-performance levels. These policies may be more restrictive than those generally applied by the University and may change with time. Information on current policy is available at the departmental offices.

Selecting courses that fulfill graduation requirements is the responsibility of each student. Students are urged to check carefully the course and credit requirements of the program in which they are enrolled.

The College requires a minimum number of credits within certain areas of study and some specific courses within certain areas. All programs require the following:

WRITTEN AND ORAL COMMUNICATION: 12 CREDITS MINIMUM.

One 5-credit English composition course from the approved University list and T C 231, Introduction to Technical Writing (3 credits) are required. For the remaining 4 credits, T C 333, Advanced Technical Writing and Oral Presentations or a department-approved alternative including writing-intensive "W" courses must be taken.

AREAS OF KNOWLEDGE: 66 CREDITS MINIMUM.

- Natural World (NW) 42 Credits minimum

Mathematics: 18 Credits minimum.

All engineering degrees require the calculus series (MATH 124, 125, 126 or equivalent) and additional advanced mathematics courses. See department for specifics on additional required or recommended courses.

Natural Sciences: 20 Credits minimum. All engineering degrees require PHYS 121 and PHYS 122. CHEM 142 and PHYS 123 are highly recommended and in general are required by most of the engineering degrees. See department for specifics on additional required or recommended science courses.

Engineering Fundamentals: 4 Credits minimum.


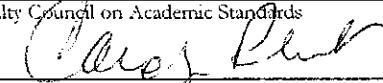
No minimum credits required other than 4 credits of programming. CSE 142 or department approved alternative required by all degrees. See department for specifics on additional required or recommended engineering fundamental courses.

- Visual, Literary, & Performing Arts (VLPA) and Individuals & Societies (I&S): 24 credits minimum. Some degrees within the College require 30 credits. A minimum of 10 credits is required in each area. First- and second-quarter language courses may not be counted toward the VLPA requirement. Courses that count toward these requirements are identified as VLPA or I&S in the General Catalog and in the quarterly Time Schedule.

Remaining degree and graduation requirements are specific to each engineering program. See department for specifics on major courses and other requirements.

NOTE: Paper Science and Engineering and Technical Communication undergraduate degrees are not included in these core engineering requirements.

3. Signatures (required)

Chair/Program Director n/a	Date	Dean <i>Chen-Ching Liu</i> 	Date 5-20-04
College Committee <i>Vipin Kumar</i> Vipin Kumar	Date 5/20/04	Faculty Council on Academic Standards 	Date 5/28/04