



# UNIVERSITY OF WASHINGTON

OFFICE OF THE PRESIDENT

October 23, 2006

*Mark A. Emmert, President*

Dean Matthew O'Donnell  
College of Engineering  
Box 352180

Dear Matthew:

Based on the recommendation of its Subcommittee on Admissions and Programs, the Faculty Council on Academic Standards has recommended approval of the revised requirements for a Bachelor of Science degree in Computer Engineering. 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 2006.

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,

Mark A. Emmert  
President

Enclosure

cc: Crystal Eney (with enclosure)  
Mr. Robert Corbett (with enclosure)  
Dr. Deborah H. Wiegand (with enclosure)  
Todd Mildon, J.D. (with enclosure CSE-20060518)



# Creating & Changing Undergraduate Academic Programs

College: Engineering Department or Unit: Computer Science & Engineering Date: 5/18/2006

### 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 Computer Engineering *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/year*) Autumn/2006

Contact Person	Phone Number	Email
Crystal Eney	206-685 7571	ceney@cs.washington.edu

**1. 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.*)

We would like to add CSE 303 to the core requirements for Computer Engineering. After the revisions several years ago to the CSE 142/143 introductory programming courses, those courses now teach programming at a higher level, using Java, which is more appropriate for beginning programmers. However, more sophisticated programmers also need to know lower-level programming skills, including C programming, need to know how to control their operating system and programming tools, and need to know how to work in groups. This course provides an introduction to these topics, and allows later courses in our majors to assume this background. This course also exposes students to a number of areas where computer systems interact with society, including privacy and security, software reliability, intellectual property, and electronic voting.

With the addition of CSE 303 to the core requirements, we want to reduce the number of required CSE senior electives in order to minimize the overall impact on the students progress through the program.

We also wish to include CSE 466 as one of the allowable CSE elective courses for the Computer Engineering software specialization track to provide in-depth understanding of embedded software systems from low-level device drivers to applications and their user interfaces and to give students extensive programming experience using modern embedded systems development platforms and tools. Embedded systems are becoming ever more commonplace and the software developed for these systems has very different properties and concerns than desktop application software.

\* 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.)*

*Major Requirements (96-98 credits)*

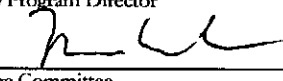
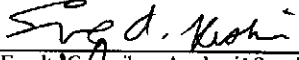


1. *Required Courses (44 credits):* CSE 142, CSE 143, CSE 321, CSE 322, CSE 326, CSE 341, CSE 370, CSE 378, CSE 451, CSE 461; E E 215
2. *Hardware Specialization (27 credits):* E E 233; CSE 466, CSE 467; and 9 credits from courses on the approved senior elective course list in the CS&E Handbook.
3. *Software Specialization (25-27 credits):* CSE 403; two from CSE 401, CSE 421, CSE 444, CSE 471; and 10 credits from courses on the approved senior elective course list in the CS&E Handbook.
4. Transfer students must earn a minimum of 24 graded credits toward the major at the UW.

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.)*

*Major Requirements (96-98 credits)*

5. *Required Courses (47 credits):* CSE 142, CSE 143, CSE 303, CSE 321, CSE 322, CSE 326, CSE 341, CSE 370, CSE 378, CSE 451, CSE 461; E E 215
6. *Hardware Specialization (24 credits):* E E 233; CSE 466, CSE 467; and 6 credits from courses on the approved senior elective course list in the CS&E Handbook.
7. *Software Specialization (22-24 credits):* CSE 403; two from CSE 401, CSE 421, CSE 444, CSE 466, CSE 471; and 7 credits from courses on the approved senior elective course list in the CS&E Handbook.
8. Transfer students must earn a minimum of 24 graded credits toward the major at the UW.

### 3. Signatures (required)

Chair/Program Director 	Date	Dean 	Date 6-7-06
College Committee 	Date 6/6/06	Faculty Council on Academic Standards 	Date 10-13-06