



OFFICE OF THE PRESIDENT

June 7, 2011

Vice Chancellor Susan Jeffords  
University of Washington, Bothell  
Box 358522

Dear Susan:

Based upon the recommendations of the Executive Council, the General Faculty Organization has recommended approval of the revised program requirements for the Bachelor of Science in Electrical Engineering degree. A copy of the change is attached.

I am writing to inform you that the Science and Technology program 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,

A handwritten signature in cursive script that reads "Phyllis".

Phyllis M. Wise  
Interim President

Enclosure

cc: Dr. Arnold S. Berger (with enclosure)  
Mr. Robert Corbett (with enclosure)  
Dr. Deborah H. Wiegand (with enclosure)  
Ms. Virjean Edwards (with enclosure BEE-20110411)



UNIVERSITY OF WASHINGTON  
**CREATING AND CHANGING UNDERGRADUATE  
 ACADEMIC PROGRAMS**

MAY 31 2011

OFFICE USE ONLY  
 Control #  
 REC-2-110411

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>

<b>College/Campus</b> Bothell	<b>Department/Unit</b> Science and Technology	<b>Date</b> April 11, 2011
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**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 Electrical 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:**  Autumn  Winter  Spring  Summer **Year: 20 11**

Contact Person: Arnold S. Berger, Ph.D.	Phone: 2-5463	Email: aberger@uwb.edu	Box: 358538
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**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).*

The proposed change, which expands the core requirements to 60 credits and reduces the elective requirement to 15 credits, represents a reorganization to ensure the Bachelor of Science in Electrical Engineering degree program is in compliance with ABET accreditation requirements. By adding a microprocessor course to the core requirements, the reorganization also ensures that students have appropriate background to complete capstone coursework and meet industry needs.

**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.

Please 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.

Please see attached.

**APPROVALS**

Chair/Program Director:



Date:

May 24, 2011

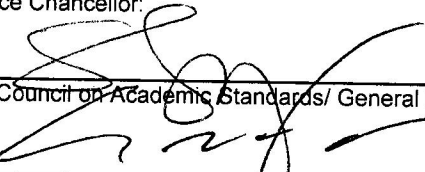
College/School/Campus Curriculum Committee:



Date:

5/18/11

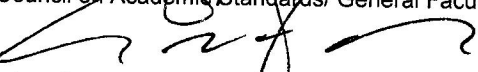
Dean/Vice Chancellor:



Date:

5/27/11

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



Date:

5/18/11

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

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

Date:

## Catalog Copy

### Core Courses ~~(35 credits):~~

- B EE 215 Fundamentals of Electrical Engineering (5)
- B EE 233 Circuit Theory (5)
- B EE 235 Continuous Time Linear Systems (5)
- B EE 271 Digital Circuits and Systems (5)
- B EE 331 Devices and Circuits I (5)
- B EE 332 Devices and Circuits II (5)
- B EE 495 Capstone Project (5)

### Electives ~~(25 credits chosen from the following list; at least 15 credits to be upper division):~~

- ~~B EE 341 Discrete Time Linear Systems (5)~~
- ~~B EE 361 Applied Electrodynamics (5)~~
- B EE 417 Digital Communication (5)
- B EE 422 Hardware and Computer Organization (5)
- ~~B EE 425 Microprocessor System Design (5)~~
- B EE 427 Introduction to Embedded Systems (5)
- B EE 433 Electronic Circuit Design (5)
- B EE 442 Digital Signal Processing (5)
- B EE 482 Semiconductor Devices (5)
- B EE 484 Sensors and Sensor Systems (5)
- B EE 490 Special Topics in Electrical Engineering (1-5, max. 10)

### Engineering Topics ~~(10 credits, 5 from list A and 5 from list B):~~

#### *List A: Business Management*

- ~~B EE/CSS 371 The Business of Technology (5)~~
- ~~CSS 350 Management Principles for Computing Professionals (5)~~
- ~~CSS 461 Software Project Management (5)~~

#### *List B: Society and Societal Impact*

- ~~CSS 211 Computers & Society (5)~~
- ~~BISSTS 307 Science, Technology & Society (5)~~
- ~~CSS 411 Computing Technology & Public Policy (5)~~
- ~~BST 445 Political Economy of Energy (5)~~

### Foundational Courses ~~(80 credits)~~

- B CUSP 124 Calculus I (5)\*
- B CUSP 125 Calculus II (5)\*
- B CUSP 126 Calculus III (5)\*
- BST 307 Differential Equations (5)
- BST 308 Linear Algebra (5)
- BST 324 Multivariate Calculus (5)
- ~~BST 390 Probability and Statistics for Engineers (5)~~
- B CUSP 142 General Chemistry 1 (5)\*
- B PHYS 121 Mechanics (5)\*
- B PHYS 122 Electromagnetism & Oscillatory Motion (5)\*

B PHYS 123 Waves (formerly B CUSP 151; 5)  
B CUSP 101 Composition (5)\*  
B CUSP 135 Research Writing (5)  
CSS 301 Technical Writing for Computing Professionals (5)  
CSS 161 Fundamentals of Computing (5)  
CSS 162 Programming Methodology (5)

\*Prerequisite course; must be completed prior to admission to degree.

## **New Catalog Copy**

### **Core Courses (60 credits):**

B EE 215 Fundamentals of Electrical Engineering (5)  
B EE 233 Circuit Theory (5)  
B EE 235 Continuous Time Linear Systems (5)  
B EE 271 Digital Circuits and Systems (5)  
B EE 331 Devices and Circuits I (5)  
B EE 332 Devices and Circuits II (5)  
B EE 341 Discrete Time Linear Systems (5)  
B EE 361 Applied Electrodynamics (5)  
B EE/CSS 371 The Business of Technology (5)  
B EE 425 Microprocessor System Design (5)  
B EE 495 Capstone Project (5)  
BST 390 Probability and Statistics for Engineers

**Electives (15 credits from the following list; a combined maximum of 10 credits of B EE 490, B EE 498, and B EE 499 may be counted toward the 15 credit requirement):**

B EE 417 Digital Communication (5)  
B EE 422 Hardware and Computer Organization (5)  
B EE 427 Introduction to Embedded Systems (5)  
B EE 433 Electronic Circuit Design (5)  
B EE 442 Digital Signal Processing (5)  
B EE 482 Semiconductor Devices (5)  
B EE 484 Sensors and Sensor Systems (5)  
B EE 490 Special Topics in Electrical Engineering (1-5, max. 10)  
B EE 498 Undergraduate Research in Electrical Engineering (2-5, max. 10)  
B EE 499 Independent Study in Electrical Engineering (2-5, max. 10)

### **Foundational Courses (75 credits)**

B CUSP 124 Calculus I (5)\*  
B CUSP 125 Calculus II (5)\*  
B CUSP 126 Calculus III (5)\*  
BST 307 Differential Equations (5)  
BST 308 Linear Algebra (5)  
BST 324 Multivariate Calculus (5)

B CUSP 142 General Chemistry 1 (5)\*  
B PHYS 121 Mechanics (5)\*  
B PHYS 122 Electromagnetism & Oscillatory Motion (5)\*  
B PHYS 123 Waves (formerly B CUSP 151; 5)  
B CUSP 101 Composition (5)\*  
B CUSP 135 Research Writing (5)  
CSS 301 Technical Writing for Computing Professionals (5)  
CSS 161 Fundamentals of Computing (5)  
CSS 162 Programming Methodology (5)

\*Prerequisite course; must be completed prior to admission to degree.