



OFFICE OF THE PRESIDENT

March 11, 2011

Dean Matthew O'Donnell
College of Engineering
Box 352180

Dear Matt:

Based on the recommendation of its Subcommittee on Admissions and Programs, the Faculty Council on Academic Standards has recommended approval of the option in Mechatronics within the Bachelor of Science in Mechanical Engineering degree. 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 winter 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, reading "Phyllis".

Phyllis M. Wise
Interim President

Enclosure

cc: Dr. Joseph Garbini (with enclosure)
Ms. Margo Segimoto (with enclosure)
Mr. Robert Corbett (with enclosure)
Dr. Deborah H. Wiegand (with enclosure)
Ms. Virjean Edwards (with enclosure ME-20100601)



UNIVERSITY OF WASHINGTON

CREATING AND CHANGING UNDERGRADUATE ACADEMIC PROGRAMS

OFFICE USE ONLY
Control # <u>ME-20100601</u>

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	Department/Unit Mechanical	Date 6/1/2010
New Programs <input type="checkbox"/> Leading to a Bachelor of _____ in _____ degree. <input type="checkbox"/> Leading to a Bachelor of _____ degree with a major in _____ <input checked="" type="checkbox"/> Leading to a <u>Mechatronics</u> Option within the existing major in <u>BS in Mechanical Engr.</u> <input type="checkbox"/> Leading to a minor in _____		
Changes to Existing Programs <input type="checkbox"/> New Admission Requirements for the Major in _____ within the Bachelor of _____ <input type="checkbox"/> Revised Admission Requirements for the Major in _____ within the Bachelor of _____ <input type="checkbox"/> Revised Program Requirements for the Major in _____ within the Bachelor of _____ <input checked="" type="checkbox"/> Revised Requirements for the Option in <u>Mechatronics</u> within the major in <u>Mechanical Engineering</u> <input type="checkbox"/> Revised Requirements for the Minor in _____		
Other Changes <input type="checkbox"/> Change name of program from _____ to _____ <input type="checkbox"/> New or Revised Continuation Policy for _____ <input type="checkbox"/> Eliminate program in _____		
Proposed Effective Date: Quarter: <input type="checkbox"/> Autumn <input checked="" type="checkbox"/> Winter <input type="checkbox"/> Spring <input type="checkbox"/> Summer Year: 20 11		

Contact Person: <u>Garbini</u>	Phone: <u>55490</u>	Email: <u>garbini@u.washington.edu</u>	Box: <u>352600</u>
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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).

During the past 15 years the Department of Mechanical Engineering has guided senior-level students, interesting in Mechatronics, through a sequence of ME courses, culminating in a capstone design course in that discipline. Approximately, 300 students have participated in the Mechatronics concentration.

We propose to make Mechatronics an Option within Mechanical Engineering, allowing students to receive transcript recognition for a successful completion.

As shown on the attached page, the Option in Mechatronics overlaps 80% of the credits in Mechanical Engineering. Students participating in the Mechatronics Option will meet all requirements of a BSME degree.

Interested Mechanical Engineering students will apply for admission to the Mechatronics Option at the end of the spring quarter of their junior year. Admission will be arbitrated by the ME Undergraduate Education Committee. The target enrollment for the Mechatronics Options is 25 students.

During their senior year, students will begin the sequence of Mechatronics classes in autumn quarter, and complete their Mechatronics capstone design projects in spring quarter.

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.

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.

APPROVALS

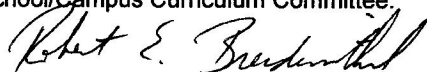
Chair/Program Director:



Date:

10/28/10

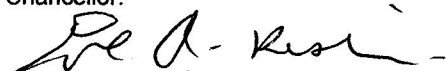
College/School/Campus Curriculum Committee:



Date:

11/2/10

Dean/Vice Chancellor:



Date:

11-3-10

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

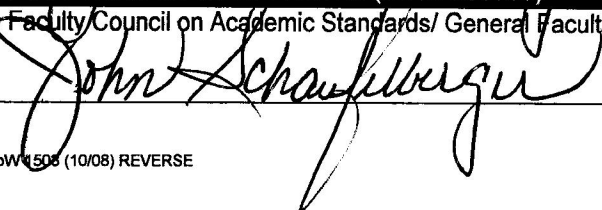


Date:

12/10/2010

POST TRI-CAMPUS APPROVAL (when needed)

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



Date:

1/21/2011

Current:

Major Requirements (95 credits)

1. *Engineering Fundamentals (31 credits):* A A 210; AMATH 301; CEE 220; E E 215; IND E 315 (or MATH 390); M E 123; M E 230; MSE 170
2. *Mechanical Engineering Core Courses (45 credits):* M E 323, M E 331, M E 333, M E 354, M E 355, M E 356, M E 373, M E 374, M E 395, M E 495
3. *Mechanical Engineering ~~Option~~ Courses (19 credits)*

Proposed

Mechatronics: A BSME Option, recommended to students interested in analysis and design of systems containing mechanical, electrical and computational elements.

Major Requirements (95 credits)

1. *Engineering Fundamentals (31 credits):* A A 210; AMATH 301; CEE 220; E E 215; IND E 315 (or MATH 390); M E 123; M E 230; MSE 170
 2. *Mechanical Engineering Core Courses (45 credits):* M E 323, M E 331, M E 333, M E 354, M E 355, M E 356, M E 373, M E 374, M E 395, M E 495
 3. *Mechanical Engineering Concentration Courses (19 credits)*
 4. *Minimum grade of 2.0 in courses applied to the major.*
- Mechatronics Option Requirements (95-97 credits)**

1. *Engineering Fundamentals (31 credits):* A A 210; AMATH 301; CEE 220; E E 215; IND E 315 (or MATH 390); M E 123; M E 230; MSE 170
2. *Mechanical Engineering Core Courses (45 credits):* M E 323, M E 331, M E 333, M E 354, M E 355, M E 356, M E 373, M E 374, M E 395, M E 495
3. **Mechatronics Option (19-21 credits)**
 1. **Core (13 credits):** M E 471, M E 473, M E 477, M E 498.
 2. **Electives (6-8 credits):** Two of M E 469, M E 470, M E 478, M E 480, PHYS 334 and PHYS 335.

4. *Minimum grade of 2.0 in courses applied to the major.*

Seattle: New Option in Mechatronics within the Bachelor of Science in Mechanical Engineering degree (ME-20100601)

Tri-Campus Review Comments:

PAUL YAGER

There isn't enough information in the material included to tell what's new in the proposal, and how it might overlap with other mechatronics-like work in other departments (like EE and CS&E).

JOSEPH GARBINI (Department response via Tri-Campus Review posting)

No new curriculum, organization, or courses are proposed.

Mechanical Engineering is proposing to maintain, with no changes, the senior-level mechatronics program that it has offered to ME students for the past 15 years.

The proposed Option WILL allow ME mechatronics students to receive transcript recognition for their participation.

Clearly, the mechatronics degree Option would be available to ME students only. As always, the existing senior-level ME courses that make up the mechatronics offering are open to students from other departments.

UNIVERSITY CAMPUSES UNDERGRADUATE PROGRAM REVIEW PROCEDURES**

CHECKLIST

Title of Proposal: Option in Mechatronics within the Bachelor of Science in
Mechanical Engineering degree

Proposed by (unit name): Mechanical Engineering

Originating Campus:

 X UW, Seattle

 UW, Bothell

 UW, Tacoma

I. Phase I. Developed Proposal Review (to be completed by Originating Campus' Academic Program Review body)

A. Review Completed by: (list name of program review body)

Chaired by:

12/10/10 Date proposal received by originating campus's review body

12/10/10 Date proposal sent to University Registrar

12/14/10 Date proposal posted & email sent to standard notification list

01/21/11 Date of originating campus's curriculum body approval

(Note: this date must be 15 business days or more following date of posting)

B. 2 Number of comments received. Attach the comments and a summary of the consideration and responses thereof : (1-2 paragraphs)

II. Phase II. Final Proposal Review (to be completed by FCTCP)

A. Review Completed by:

 X FCTCP subcommittee

 FCTCP full council

Chaired by: Janet Primono (sub-committee Chair); William Erdly (FCTCP Chair)

3/8/11 Date request for review received from University Registrar

Note: This was e-mailed originally on 1/27/11; however, the message was not acknowledged or reviewed by the FCTCP chair as the e-mail was misplaced. Upon the 3/8/11 notification that the file had not yet been reviewed, the file was located and the process expedited. The Chair expresses his apologies for the delay.

3/9/11 Date of FCTCP report

B. Review

YES NO

- ☒ Was notice of proposal posted on UW Website for 15 business days?
- ☒ Was notice of proposal sent to standard mailing list 15 business days in advance of academic program review?
- ☒ Were comments received by academic program review body?
- ☒ Was response to comments appropriate? (explain, if necessary)
- ☒ Was final proposal reviewed by FCTCP within 14 days of receipt? (see note above.)
- ☒ Was there adherence to the University Campuses Undergraduate Program Review Process? (explain, if necessary)

C. Recommendation

- ☒ Forward for final approval
- ☐ Forward to Provost because of University issues (Explain)
- ☐ Return to campus council because of insufficient review (Explain).

**Endorsed by Faculty Senate Executive Committee, 1/10/05, modified 1/31/06; These procedures apply to new undergraduate degrees, majors, minors (and certificates) and substantive changes to same