

PURDUE UNIVERSITY
REQUEST FOR ADDITION, DELETION,
OR REVISION OF A COURSE

SCHOOL DOCUMENT NO. 59-00

GRADUATE COUNCIL DOCUMENT NO. 02-4c
Spring 2002

DEPARTMENT MECHANICAL ENGINEERING

DATE SUBMITTED 11/09/01

DATE EFFECTIVE FALL 2001

INSTRUCTIONS: Please check the items below which describe the purpose of this request.

PURPOSE

- | | |
|---|---|
| <input checked="" type="checkbox"/> 1. Deletion of a course | <input type="checkbox"/> 8. Change in semesters offered |
| <input checked="" type="checkbox"/> 2. New course with supporting documents | <input type="checkbox"/> 9. Change in course credit/type |
| <input type="checkbox"/> 3. Add existing course offered at another campus | <input type="checkbox"/> 10. Change in course attributes |
| <input type="checkbox"/> 4. Change in course number at same level | <input type="checkbox"/> 11. Change in instructional hours |
| <input type="checkbox"/> 5. Downgrading of course level | <input type="checkbox"/> 12. Change in prerequisites |
| <input type="checkbox"/> 6. Upgrading of course level | <input type="checkbox"/> 13. Change in description of course content |
| <input type="checkbox"/> 7. Change in course title | <input type="checkbox"/> 14. Transfer of course from one dept. to another |

EXISTING:

PROPOSED:

SEMESTERS OFFERED

Subject Abbreviation _____ Subject Abbreviation ME
Course Number _____ Course Number 677

Check All That Apply.

Summer Fall Ag Winter Spring

Proposed Title NONLINEAR FEEDBACK CONTROLLER DESIGN
Variable Title Yes No

Abbreviated Title NONLIN FEEDBK CONT DES
Abbreviated title will be entered by the Office of the Registrar if omitted. (22 CHARACTERS ONLY)

CROSS LISTED COURSES

CREDIT TYPE

COURSE ATTRIBUTES: Check All That Apply.

- Fixed Credit: Cr. Hrs. 3
- Variable Credit Range:
Minimum Cr. Hrs. _____
(Check One) To Or
Maximum Cr. Hrs. _____
- Equivalent Credit: Yes No
- Thesis Credit: Yes No

- Pass/Not Pass Only
 - Repeatable for Credit
 - Available for Credit by Examination
 - Designator Required
 - Special Fees
 - Approval Required for Enrollment
- Department _____
Instructor _____

Instructional Type	Class Hours	FTE	Instructional Type	Class Hours	FTE	Instructional Type	Class Hours	FTE	CAMPUS(ES) INVOLVED
Primary	3		Auto-tutorial			Thesis			Calumet <input type="checkbox"/>
Secondary			Ind. Study			Observation			Fort Wayne <input type="checkbox"/>
Laboratory			Clinic			Mats Based			Indianapolis <input type="checkbox"/>
Lab. Prep.			Experiential						North Central <input type="checkbox"/>
									West Lafayette <input checked="" type="checkbox"/>
									Off Campus <input type="checkbox"/>

COURSE DESCRIPTION (PREREQUISITES INCLUDED):

ME 677 NONLINEAR FEEDBACK CONTROLLER DESIGN
Sem. 2, Class 3, Cr. 3 (Offered in Alternate Years)
Prerequisite: ME 675 or equivalent.
Control design and analysis of nonlinear feedback systems. Topics covered include the design of linear/nonlinear feedback controllers, Describing Function (DF) techniques for design, Popov and Generalized Circle Criterion for closed loop stability, functional analysis and Volterra series approaches, introduction to existing nonlinear controller design tools. Professor Franchek.

Calumet Undergrad Curriculum Committee	Date	Calumet Department Head	Date	Calumet School Dean	Date
Fort Wayne Department Head	Date	Fort Wayne School Dean	Date	Fort Wayne Chancellor <i>C.D. Sutton</i>	Date
Indianapolis Department Head	Date	Indianapolis School Dean	Date	Appr. for Faculty <i>C.D. Sutton, Chair</i>	#958 1/25/02
North Central Department Head	Date	North Central Vice Chancellor	Date	Undergrad Curriculum Committee	Date
West Lafayette Department Head	Date	West Lafayette School Dean	Date	APPROVED 4/18/02	
Graduate Area Committee Convener	Date	Graduate Dean	Date	Date Approved by Graduate Council	
				<i>Debra O'Hea 6/3/02</i>	
				Graduate Council Secretary	
				West Lafayette Registrar	

