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

DEPARTMENT: MECHANICAL ENGINEERING
DATE SUBMITTED: 11/09/01

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

PURPOSE

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

EXISTING:

Subject Abbreviation: ME
Course Number: 677

PROPOSED:

Proposed Title: NONLINEAR FEEDBACK CONTROLLER DESIGN

Semesters Offered:
- Summer
- Fall
- Winter
- Spring

Semester Offered: Spring 2003

Semesters Approved:
- Summer
- Fall
- Winter
- Spring

CROSS LISTED COURSES

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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.

Course design and analysis of nonlinear feedback systems. Topics 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.

CAMPUS(ES) INVOLVED:

Calumet
Fort Wayne
Indianapolis
North Central
West Lafayette
Off Campus

APPROVED: 4/18/02

Date Approved by Graduate Council

OFFICE OF THE REGISTRAR