TO: The Faculty of the College of Engineering

FROM: The Faculty of the School of Industrial Engineering

RE: Change to Undergraduate-Level Course IE 37000 Prerequisites

From: IE 37000 – Manufacturing Processes I

Term Offered: Summer, Fall, Spring, Lecture 3, Cr. 3

Prerequisites:

IE/ME; and NUCL 27300 or AAE 20400 or ME 32300

Description:

Principal manufacturing processes; metal cutting, grinding and metal forming operations, machine tools, and tools and tooling. Nontraditional machining and welding. Introduction

to computer-aided manufacturing and computer-aided graphics and design, N/C programming, robots, and flexible manufacturing systems. Classroom and laboratory demonstrations included. Not open to students with credit in ME 36300. Typically

offered Summer Fall Spring.

To: IE 37000 – Manufacturing I

Term Offered: Summer, Fall, Spring; Lecture 3, Cr. 3

Prerequisites:

IE/ME/AAE; and ME 27000 or AAE 20300

Corequisites:

NUCL 27300 or AAE 20400 or ME 32300

Description:

Principal manufacturing processes; metal cutting, grinding and metal forming operations,

machine tools, and tools and tooling. Nontraditional machining and welding. Introduction

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offered Summer Fall Spring.

Alu Dedull 4/24/18

**Reason:** Adding AAE to list of approved majors.

Abhijit Deshmukh Professor and Head

School of Industrial Engineering

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Abhijit Deshmukh Professor and Head School of Industrial Engineering

## **PURDUE UNIVERSITY**

Office of the Registrar FORM 40 REV. 5/11

## REQUEST FOR ADDITION, EXPIRATION, OR REVISION OF AN UNDERGRADUATE COURSE (10000-40000 LEVEL)

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PARTMENT Industrial Engineering **EFFECTIVE SESSION Fall 2018** INSTRUCTIONS: Please check the items below which describe the purpose of this request. New course with supporting documents 7. Change in course attributes (department head signature only) 8. Change in instructional hours 2. Add existing course offered at another campus 3. Expiration of a course 9. Change in course description 10. Change in course requisites 4. Change in course number 11. 5 Change in course title Change in semesters offered (department head signature only) 6. Change in course credit/type Transfer from one department to another PROPOSED: EXISTING: TERMS OFFERED Check All That Apply: Subject Abbreviation Subject Abbreviation IE X Fall Summer ★ Spring Course Number Course Number 37000 CAMPUS(ES) INVOLVED Calumet N. Central Long Title Manufacturing Processes I Cont Ed Tech Statewide Ft. Wayne Short Title Mfg Processes I W. Lafayette Indianapolis Abbreviated title will be entered by the Office of the Registrar if omitted. (30 CHARACTERS ONLY) COURSE ATTRIBUTES: Check All That Apply 1.Fixed Credit: Cr. Hrs. 1. Pass/Not Pass Only 3.000 6. Registration Approval Type 2.Variable Credit Range: 2. Satisfactory/Unsatisfactory Only Department Instructor Minimum Cr. Hrs 3. Repeatable (Check One) Or 7 Variable Title Maximum Repeatable Credit: 8. Honors Maximum Cr. Hrs. 4. Credit by Examination 9. Full Time Privilege 3.Equivalent Credit: Yes No 5. Fees: Coop Lab Rate Request 10. Off Campus Experience Include comment to explain fee ScheduleType Minutes Meetings Per % of Credit Weeks Cross-Listed Courses Week Allocated Per Mtg Offered cture Recitation Presentation Laboratory Lab Prep Studio Distance Clinic Experiential Research Ind. Study Pract/Observ COURSE DESCRIPTION (INCLUDE REQUISITES/RESTRICTIONS): Principal manufacturing processes; metal cutting, grinding and metal forming operations, machine tools, and tools and tooling. Nontraditional machining and welding. Introduction to computer-aided manufacturing and computer-aided graphics and design, N/C programming, robots, and flexible manufacturing systems. Classroom and laboratory demonstrations included. Not open to students with credit in ME 36300. Typically offered Summer Fall Spring. Restrictions: Must be enrolled in one of the following majors: Industrial Engineering, Mechanical Engineering, Aero and Astro Engineering ÷ Prerequisites \*COURSE LEARNING OUTCOMES: a. Identify engineering materials and their physical properties; b. Select metal forming process and tolls for certain shape change; c. Design metal machining processes and machining tools for certain shape changes; d. Test mechanical properties of materials; e. Select nontraditional machining processes for certain products, f. Design the microfabrication processes for an integrated circuit. Calumet Department Head Date Calumet School Dean Date Fort Wayne Department Head Date Fort Wayne School Dean dianapolis Department Head Date Indianapolis School Dean Date North Central Faculty Senate Chair Date Vice Chancellor for Academic Affairs Date West Lafayette Department Head West Lafayette College/School Dean Date Date West Lafayette Registrar Date