**TO:** The Faculty of the College of Engineering

**FROM:** The School of Chemical Engineering

**RE:** Change in requisites and term offered to existing CHE 45000 Design and Analysis of Processing Systems

The Faculty of the School of Chemical Engineering has approved the following changes to an existing course. This action is now submitted to the Engineering Faculty with a recommendation for approval.

**FROM:** CHE 45000 Design and Analysis of Processing Systems
Sem.2, Cr. 4

Prerequisites: CHE 30600 Minimum Grade of C-, CHE 37800 Minimum Grade of C-
Co-requisites: CHE 43500 Minimum Grade of D-
Description: Use of process and product synthesis methods and concepts; detailed design of unit operation equipment, the economics of chemical plants and flow sheet optimization methods. Synthesize, develop, and evaluate a preliminary design of a chemical process that meets market requirements for a specific product. Analysis of design alternatives using case studies and optimization methods.

**TO:** CHE 45000 Design and Analysis of Processing Systems
Sem.1 and 2, Cr. 4

Prerequisites: CHE 30600 Minimum Grade of C-, CHE 37800 Minimum Grade of C- ,
CHE 42000 Minimum Grade of a D-, CHE 45600 Minimum Grade of a D-
Co-requisites: CHE 43500 Minimum Grade of D-
Description: Use of process and product synthesis methods and concepts; detailed design of unit operation equipment, the economics of chemical plants and flow sheet optimization methods. Synthesize, develop, and evaluate a preliminary design of a chemical process that meets market requirements for a specific product. Analysis of design alternatives using case studies and optimization methods.

**REASON:** The Faculty of the School of Chemical Engineering agreed to now offer CHE 45000 both fall and spring semesters to accommodate the growing needs of our students. To keep the original intent of CHE 45000 as the capstone for the ChE curriculum, the other two senior level courses (CHE 42000 & CHE 45600) which students can currently take after completing CHE 45000, now must be completed prior to enrolling in CHE 45000.

Approved for the faculty of the Schools of Engineering by the Engineering Curriculum Committee
ECC Minutes #6 Date 11-15-16
Chairman ECC

David S. Corti

David Corti, Executive Officer

For Sangtae Kim, Jay and Cynthia Ihlenfeld Head
School of Chemical Engineering

Office of the Registrar
FORM 40 REV. 5/11

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

DEPARTMENT: School of Chemical Engineering (1283) EFFECTIVE SESSION: Fall 2017

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

- ☐ 1. New course with supporting documents
- ☐ 2. Add existing course offered at another campus
- ☐ 3. Expiration of a course
- ☐ 4. Change in course number
- ☐ 5. Change in course title
- ☐ 6. Change in course credit/type
- ☐ 7. Change in course attributes (department head signature only)
- ☐ 8. Change in instructional hours
- ☐ 9. Change in course description
- ☑ 10. Change in course requisites
- ☑ 11. Change in semesters offered (department head signature only)
- ☐ 12. Transfer from one department to another

| PROPOSED: | | EXISTING: | |
|---|---|---|---|
| Subject Abbreviation | | Subject Abbreviation | CHE |
| Course Number | | Course Number | 45000 |
| Long Title | Design and Analysis of Processing Systems | | |
| Short Title | | | |

Abbreviated title will be entered by the Office of the Registrar if omitted. (30 CHARACTERS ONLY)

TERMS OFFERED
Check All That Apply:
☐ Summer ☑ Fall ☑ Spring

CAMPUS(ES) INVOLVED
- ☐ Calumet
- ☐ Cont Ed
- ☐ Ft. Wayne
- ☐ Indianapolis
- ☐ N. Central
- ☐ Tech Statewide
- ☑ W. Lafayette

CREDIT TYPE
1. Fixed Credit: Cr. Hrs.
2. Variable Credit Range:
Minimum Cr. Hrs
(Check One) To ☐ Or ☐
Maximum Cr. Hrs
3. Equivalent Credit: Yes ☐ No ☐

COURSE ATTRIBUTES: Check All That Apply
1. Pass/Not Pass Only ☐
2. Satisfactory/Unsatisfactory Only ☐
3. Repeatable ☐
Maximum Repeatable Credit: ☐
4. Credit by Examination ☐
5. Fees ☐Coop ☐Lab ☐Rate Request
Include comment to explain fee
6 Registration Approval Type
Department ☐ Instructor ☐
7 Variable Title ☐
8 Honors ☐
9 Full Time Privilege ☐
10 Off Campus Experience ☐

| Schedule Type | Minutes Per Mtg | Meetings Per Week | Weeks Offered | % of Credit Allocated |
|---|---|---|---|---|
| Lecture | | | | |
| Recitation | | | | |
| Presentation | | | | |
| Laboratory | | | | |
| Lab Prep | | | | |
| Studio | | | | |
| Distance | | | | |
| Clinic | | | | |
| Experiential | | | | |
| Research | | | | |
| Ind. Study | | | | |
| Pract/Observ | | | | |

Cross-Listed Courses

COURSE DESCRIPTION (INCLUDE REQUISITES/RESTRICTIONS):

**Prerequisites**: CHE 30600 Minimum Grade of C-, CHE 37800 Minimum Grade of C-, CHE 42000 Minimum Grade of D-, CHE 45600 Minimum Grade of D- . **Co-requisties:** CHE 43500 Minimum Grade of D-.

*COURSE LEARNING OUTCOMES

| | | | |
|---|---|---|---|
| Calumet Department Head | Date | Calumet School Dean | Date |
| Fort Wayne Department Head | Date | Fort Wayne School Dean | Date |
| Indianapolis Department Head | Date | Indianapolis School Dean | Date |
| North Central Faculty Senate Chair | Date | Vice Chancellor for Academic Affairs | Date |
| David S. Corti | 9/22/2016 | | 12/2/16 |
| West Lafayette Department Head | Date | West Lafayette College/School Dean | Date |

West Lafayette Registrar Date

OFFICE OF THE REGISTRAR