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TO:	The Faculty of the College of Engineering
FROM:	The Davidson School of Chemical Engineering
RE:	Curriculum Change for the B.S. Degree in Chemical Engineering

The faculty of the Davidson School of Chemical Engineering has approved the following new changes in the curriculum for the B.S. degree in Chemical Engineering effective for students entering the School in the Fall Semester 2018. This action is now submitted to the Engineering Faculty with a recommendation for approval.

New Requirements: A new honors course number has been established in First Year Engineering, ENGR 16200.

**Reason:** Incorporated ENGR 16200 into the CHE curriculum as acceptable for PHYS 17200.

David S. Corti

David Corti, Executive Officer

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

## **Current:**

Program Requirements:

### Fall 1st Year

(4cr) MA 16500 Analytic Geometry & Calculus I
(4cr) CHM 11500 General Chemistry I
(4cr) ENGL 10600 English Composition
(2cr) ENGR 13100 Transforming Ideas to Innovation I
14 Credits

### Spring 1st Year

(4cr) MA 16600 Analytic Geometry & Calculus II(4cr) CHM 11600 General Chemistry II(4cr) PHYS 17200 Modern Mechanics

(3cr) COM 11400 Fundamentals of Speech (2cr) ENGR 13200 Transforming Ideas to Innovation II 17 Credits

### Fall 2<sup>nd</sup> Year

(0cr) CHE 20000 ChE Sophomore Seminar
(4cr) CHE 20500 <sup>CC</sup> ChE Calculations
(3cr) CHM 26100 Organic Chemistry I
(1cr) CHM 26300 Organic Chemistry Laboratory I
(3cr) MA 26100 Multivariate Calculus
(3cr) PHYS 24100 Electricity & Optics
(3cr) General Education Elective I: Humanities
18 Credits

## Spring 2<sup>nd</sup> Year

 (4cr) CHE 21100 <sup>CC</sup> Intro to ChE Thermodynamics
 (3cr) CHE 32000 <sup>CC</sup> Statistical Modeling & Quality Enhancement
 (3cr) CHM 26200 Organic Chemistry II
 (1cr) CHM 26400 Organic Chemistry Laboratory II
 (4cr) Math Selective I
 (3cr) General Education Elective II: BSS
 18 Credits

# Fall 3rd Year

 (3cr) CHE 30600<sup>CC</sup>Design of Staged Separation Processes
 (4cr) CHE 37700 <sup>CC</sup> Momentum Transfer
 (3cr) CHM 37000 Physical Chemistry
 (3cr) Math Selective II
 (3cr) Biology Selective
 16 Credits

### Spring 3rd Year

(0cr) ChE Junior Seminar
(4cr) CHE 37800 <sup>CC</sup> Heat & Mass Transfer
(4cr) CHE 34800 <sup>CC</sup> Chemical Reaction Engineering
(3cr) Technical Selective
(3cr) Engineering Selective
(3cr) General Education Selective III: STS
17 Credits

### **Proposed:**

#### Program Requirements:

#### Fall 1<sup>st</sup> Year

Same Same Same Same Same

### Spring 1st Year

Same Same (4cr) PHYS 17200 Modern Mechanics OR ENGR 16200 Honors Creativity and Innovation in Engineering Design II Same Same Same

#### Fall 2<sup>nd</sup> Year

Same Same Same Same Same Same Same

## Spring 2<sup>nd</sup> Year

Same Same

Same Same Same Same Same

# Fall 3rd Year

Same

Same Same Same Same Same

### Spring 3<sup>rd</sup> Year

Same Same Same Same Same Same Same

#### Fall 4th Year

(1cr) CHE 40000 ChE Senior Seminar
(3cr) CHE 45600 Process Dynamics & Control
(4cr) CHE 43500 ChE Laboratory
(3cr) CHE 42000 Process Safety Management
(3cr) General Education Elective IV
14 Credits

## Spring 4<sup>th</sup> Year

 (4cr) CHE 45000 Design & Analysis of Processing Systems
 (3cr) Chemical Engineering Selective
 (3cr) General Education Elective V
 (3cr) General Education Elective VI
 16 Credits

### Note

2.0 Graduation GPA required for Bachelor of Science degree.

Students must earn a "C" or better in CHE 20500 to enroll in any other CHE course.

Students must earn a "C-" or better in CHE 21100, 30600, 32000, 34800, 37700, 37800 to enroll in upper level CHE courses.

130 semester credits required for Bachelor of Science degree in Chemical Engineering.

Students may take General Education Elective IV, V, and VI for a letter grade or pass/no pass option.

3 credits of CHE 41100, 41200, 49800 or 49900 may be used to complete the Chemical Engineering Selective.

3 credits of CHE 41100, 41200, 49800, or 49900 may be used to complete the Engineering or Technical Selective.

#### **Degree Requirement**

The student is ultimately responsible for knowing and completing all degree requirements.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

## **Critical Course**

The <sup>CC</sup> course is considered critical. A Critical Course is one that a student must be able to pass to persist and succeed in a particular major.

# Fall 4<sup>th</sup> Year

Same Same Same Same Same Same

# Spring 4th Year

Same (4cr)

Same	
Same	
Same	
Same	
Same	

Note Same

**Degree Requirement** Same

Critical Course Same