

**EXECUTIVE COMMITTEE  
BOURNS COLLEGE OF ENGINEERING  
REPORT TO THE RIVERSIDE DIVISION  
MAY 29, 2018**

To be adopted:

PROPOSED CHANGE TO CHEMICAL ENGINEERING UNDERGRADUATE REQUIREMENTS

**PRESENT:**

**Major Requirements  
Chemical Engineering**

Students must choose either a Biochemical Engineering, Chemical Engineering or Nanotechnology option.

1. Lower-division requirements (~~75~~ units)
  - a) BIOL 005A, BIOL 05LA
  - b) CHEM 001A, CHEM 001B, CHEM 001C, CHEM 01LA, CHEM 01LB, CHEM 01LC, CHEM 008A, CHEM 008B, CHEM 008C, CHEM 08LA, CHEM 08LB, CHEM 08LC
  - c) CS 010
  - d) MATH 008B or MATH 009A, MATH 009B, MATH 009C, MATH 010A, MATH 010B, MATH 046
  - e) PHYS 040A, PHYS 040B, PHYS 040C
2. Upper-division requirements (63 units)
  - a) CEE 158
  - b) CHE 100, CHE 110A, CHE 110B, CHE 114, CHE 116, CHE 117, CHE 118, CHE 120, CHE 122, CHE 160B, CHE 160C, CHE 175A, CHE 175B
  - c) CHE 130/ENVE 130, CHE 160A/ENVE 160A
  - d) ENGR 118
3. Option requirements: choose one option
  - a) Biochemical Engineering option (~~49~~ units)
    - (1) ~~CEE 010~~
    - (2) ~~BCH110A/BCH 100~~
    - (3) ~~CHE 124, CHE 124L, CHE140~~
    - (4) ~~Four (4) units of technical electives chosen from BIEN 125, BIEN 140A/CEE 140A, BIEN~~

**PROPOSED:**

**Major Requirements  
Chemical Engineering**

Students must choose either a Biochemical Engineering, Chemical Engineering or Nanotechnology option.

1. Lower-division requirements (76 units)
  - a) No change
  - b) No change
  - c) No change
  - d) No change
  - e) No change
  - f) CEE 010
2. Upper-division requirements (63 units)
  - a) No change
  - b) No change
  - c) No change
  - d) No change
3. Option requirements: choose one option
  - a) Biochemical Engineering option (18 units)
    - (1) BCH110A/BCH 100
    - (2) CHE 124, CHE 124L, CHE140
    - (3) Four (4) units of technical electives chosen from BIEN 125, BIEN 140A/CEE 140A, BIEN 159/CEE 159, BIOL 121/MCBL

~~159/CEE 159, BIOL 121/MCBL 121, CEE 125,  
CEE 132, CEE 135, CHE 102, CHE 150~~

121, CEE 125, CEE 132, CEE 135, CHE  
102, CHE 150

b) Chemical Engineering option (~~17~~ units)

b) Chemical Engineering option (16 units)

(1) ~~CEE 010~~

(1) Sixteen (16) units of technical electives  
chosen from CEE 125, CEE 132, CEE 135,  
CHE 102, CHE 131, CHE 136, CHE 171,  
ENVE 120, ENVE 133, ENVE 134, ENVE  
138

(2) ~~Sixteen (16) units of technical electives  
chosen from CEE 125, CEE 132, CEE 135,  
CHE 102, CHE 131, CHE 136, CHE 171,  
ENVE 120, ENVE 133, ENVE 134, ENVE  
138~~

c) Nanotechnology option (~~20~~ units)

c) Nanotechnology option (19 units)

(1) ~~CEE 010~~

(1) CHE 105

(2) ~~CHE 105~~

(2) CHE 161

(3) ~~CHE 161~~

(3) CEE 135

(4) ~~CEE 135~~

(4) Eight (8) units of technical electives chosen  
from CHE 102, CHE 131, ENVE 133, ME  
114, MSE 160, MSE 161

(5) ~~Eight (8) units of technical electives chosen  
from CHE 102, CHE 131, ENVE 133, ME  
114, MSE 160, MSE 161~~

Visit the Student Affairs Office in the College  
of Engineering or [student.engr.ucr.edu](http://student.engr.ucr.edu) for a  
sample program.

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### **Justification:**

Housekeeping for CEE 010 (Intro to CEE) to be moved to the lower division section of the program instead of one of the option courses in the traditional CHE, Biochem option, and Nano option. The ENVE program already has CEE 010 listed as a lower division course.

### **Approvals:**

Approved by the faculty of the Department of Chemical and  
Environmental Engineering:

December 4, 2017

Approved by the Executive Committee of Bourns College of  
Engineering:

January 30, 2018

Approved by the Committee on Educational Policy:

April 11, 2018