Chemical Engineering Suggested 4 Year Curriculum University of Notre Dame

(Entering FA21, Pre-med curriculum, no AP/transfer credit, Gap year)

**Year 1**
- **Fall**
  - Intro to Chem
    - CHEM 10171 (3)
  - Chem Lab
    - CHEM 11171 (1)
  - Calculus I
    - MATH 10550 (4)
  - Eng. Design
    - EG 10117 (3)
  - Moreau 1st year
    - (1)
  - UCore 1 + USem
    - (3)

- **Spring**
  - O Chem 1
    - CHEM 10172 (3)
  - Chem Lab
    - CHEM 11172 (1)
  - Calculus II
    - MATH 10560 (4)
    - EG 10118 (3)
  - Moreau 1st year
    - (1)
  - UCore 2
    - (3)

**Year 2**
- **Fall**
  - Physics 1
    - PHYS 10310 (3)
  - O Chem Lab
    - CHEM 21273 (1)
  - Biology 1
    - BIOS 10171 (3)
  - Bio 1 Lab
    - BIOS 11173 (1)
  - Introduction to ChemE
    - CBE 20255 (3)
  - Careers in CBE
    - CBE 20290 (1)+
  - UCore 1 + USem
    - (3)

- **Spring**
  - Calculus III
    - MATH 20550 (3.5)
  - Phys 1 Lab
    - PHYS 11310 (1)
  - Linear ODE
    - MATH 20580 (3.5)
  - O Chem 2
    - CHEM 20273 (3)
  - Phys 1 Lab
    - CHEM 12173 (1)
  - Writing 2
    - (3)
  - UCore 2
    - (3)

**Year 3**
- **Fall**
  - Calculus III
    - MATH 20550 (3.5)
  - Phys 2 Lab
    - PHYS 11320 (1)
  - Linear ODE
    - MATH 20580 (3.5)
  - Bio 2 Lab
    - PHYS 11320 (1)
  - Writing 2
    - (3)

- **Spring**
  - Diff Eq
    - MATH 30650 (3)
  - Biotransport
    - CBE 20260 (3)
  - Phase Eq Sep
    - CBE 20260 (3)
  - Thermodynamics
    - CBE 20290 (1)+
  - UCore 4
    - (3)

**Year 4**
- **Fall**
  - Transport 2
    - CBE 30356 (3)
  - Reactor Eng
    - CBE 40445 (3)
  - Materials
    - CBE 20261 (3)
  - Biochemistry
    - CHEM 40420 (3)
  - App. to H.P.
    - SCPP 40001 (1)+

- **Spring**
  - Design
    - CBE 40448 (3)
  - Immuo Eng
    - CBE 40325 (3)
  - Materials
    - CBE 20261 (3)
  - Biochemistry
    - CHEM 40420 (3)
  - App. to H.P.
    - SCPP 40001 (1)+

**COE Requirements**
- Calculus I
  - MATH 10550 (4)
- Calculus II
  - MATH 10560 (4)
- Calculus III
  - MATH 20550 (3.5)
- Linear ODE
  - MATH 20580 (3.5)
- Intro to ChE
  - CBE 20255 (3)
- Thermo
  - CBE 20260 (3)
- Biotransport
  - CBE 20260 (3)
- Transport 2
  - CBE 30356 (3)
- Reactor Eng
  - CBE 40445 (3)
- Design
  - CBE 40448 (3)

+Recommended

- UCore 1 + USem
  - (3)
- Writing 2
  - (3)

**Moreau 1st year**
- (1)

**UCore 2**
- (3)

**UCore 4**
- (3)

**UCore 5**
- (3)

**UCore 6**
- (3)

**UCore 7**
- (3)

**UniCore Core Curriculum**

**COE elective**
- Technical elective
  - (3)
- Technical elective
  - (3)
- Technical elective
  - (3)

**Free elective**
- (3)

**Intro to Psych**
- PSY 1/20000 (3)

**Pathways to Pre-Med**
- Premed Bio 1
  - (3)
- Premed Bio 2
  - (3)
- Premed Chem 1
  - (3)
- Premed Chem 2
  - (3)
- Premed Phys 1
  - (3)
- Premed Phys 2
  - (3)
- Premed Psych
  - (3)

**Course Description**
- DEPT Course# (Credits)
- Prerequisite
- Concurrent prerequisite

- = course only offered in semester shown
- = course offered both spring and fall semesters

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Last updated: 7/2021 tjv