

CBME

**Cohorts
admitted in
2016**

CBME Depth&Electives (9 credits)

CBME Electives x 1 [3] chosen from:
 CENG 4150 Product and Process Design in CBE
 CENG 4630 Food Processing Technology
 CENG 4660 Introduction to Biomicrosystem
 CENG 4670 Pharmaceutical Engineering
 LIFS 3010 Molecular and Cellular Biology I
 LIFS 3040 Animal Physiology
 LIFS 3060 Microbiology
 LIFS 3140 General Genetics
 LIFS 3150 Biostatistics

**Bioproducts and
Processing [3]
CENG4620**

**Biomolecular
Engineering [3]
CENG4640**

Final Year Project (6 credits)

[6] CENG4920 (Capsone)
 Or [6] CENG4930* (Research)
 Or [6] CENG4940 (Co-op)

Lab (4 credits)

**Bioengineering Lab [4]
BIEN3910**

Research Option (6 credits)

[6] CENG4980 x 2

Credit Requirement

CEEV Major: 88-92
(9 credits of double-counting allowed)
Common Core: 36

Pre-requisite →

Co-requisite - - - - - →

CBME-only requirement

Fall Offering **Year Long**

Spring Offering

Offering in both semester

Introduction (6 credits)

**Biotechnology and its Business
Opportunities
[3] CENG1600**

**Intro. to BME
[3] BIEN1010**

Or

**Intro. to CBE
[3] CENG1000**

Also satisfies engineering intro course requirement

ChE Design (12 credits)

**Process Dyn. & Control
[3] CENG3110/4120**

**Process Int. and Design
[3] CENG3120**

**Process & Product Design
Principles [3] CENG2110**

ChE Science (15 credits)

**Separation
Process
[3] CENG3210**

**Heat and Mass
Transfer
[3] CENG3220**

**Fluid Mech.
[3] CENG2220**

**Reaction and
Reactor Engg.
[3] CENG3230**

**CBE Thermo.
[3] CENG2210**

Others (6 credits)

**Industrial Training
(modules throughout 4 years)
[0] CENG1980**

**Academic &
Professional
Development
[0] CENG1010**

**Tech. Comm.
II [3]
LANG4035**

**Engineering
Seminars
[0] ENGG1010
& ENGG2010**

**Tech. Comm.
I [3]
LANG2030**

Math. & Science (30-34 credits)

**Intro to Comp [3-4]
COMP1021 or
COMP1022P or
COMP1022Q or
COMP2011**

**Biology [3]
LIFS1901/1902/2040
/2210 or BIEN2610**

**Linear Algebra & ODE
[3] MATH2350**

**Multivariable
Calculus
[3] MATH2011**

**General Phys. I [3]
PHYS1112**

**Calculus I [3-4]
MATH1012/1013
/1023**

**Calculus II [3]
MATH1014/1024**

Or **Acc. Calculus
[4] MATH1020**

**General Chemistry I +
lab [3+1]
CHEM1010/1020 +
CHEM1050**

**Organic
Chem. [3]
CHEM2111**

**Analytical
Chem. [3]
CHEM2311**

**Chem.
Lab. [1]
CHEM2155/
2355**

Updated on: 17-Jul-2019