

CENG

**Cohort Year 2022
(For Direct Entry
students admitted
to Year 2 in 2023)**

Electives (9 credits)

CENG Electives x 3 chosen from:

Area 1: Chemical Process Design

BIEN 4110 Regulatory Science and Engineering
CENG 4130 Plant Design and Economics
CENG 4140 Energy Resources, Conversions and Technologies
CENG 4620 Bioproducts and Processing
CENG 4630 Food Processing Technology
CENG 4670 Pharmaceutical Engineering
CENG 4710 Environmental Control

Area 2: Chemical Product Design

CENG 4160 Prototype Development for Chemical Processes and Products
CENG 4540 Nanomaterials and Applications in ChE
CENG 4640 Biomolecular Engineering
CENG 4650 Biomaterials, Drug Delivery and Tissue Engineering
CENG 4950 CHEM-E-CAR (Pre-approved elective)
CHEM 2311 Analytical Chemistry

Final Year Project (6 credits)

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

Research Option (6 credits)

[3] CENG4980 and
[3] CENG4980 or any
5000-level course in
CENG or BIEN)

*Students taking the
Research Option must
take CENG4930

Credit Requirement

CENG Major: 95-101

Common Core: 30

(9 credits of double-counting allowed)

Pre-requisite →

Co-requisite - - - - - →

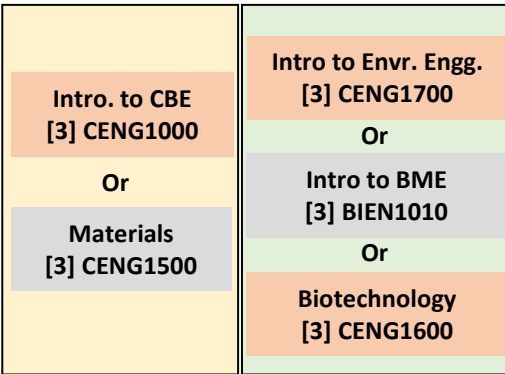
Fall Offering

Spring Offering

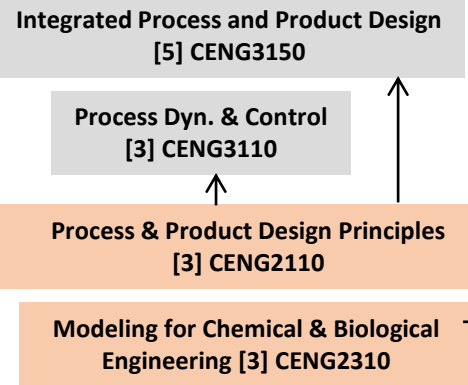
Year Long

Offering in both semester

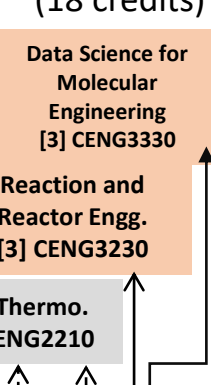
Introduction (6 credits)



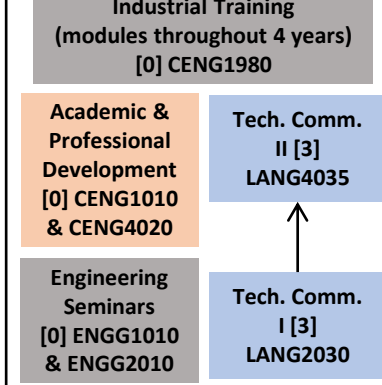
ChE Design (14 credits)



ChE Science (18 credits)



Others (6 credits)



Math. & Science (24-28 credits)

Updated on: 29-June-2023

Intro to Comp [3-5]
COMP1021 or
COMP1022P or
COMP2011 or
COMP2012H

Biology [3]
BIEN2410/BIEN2610
/LIFS1901

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

Calculus II [3]
MATH1014/1024

Or
Acc. Calculus
[4] MATH1020

Multivariable
Calculus
[3] MATH2011

General Phys. I [3]
PHYS1112/PHYS1312

General Chem. I [3]
CHEM1020

Organic
Chem. [3]
CHEM2111

Org Chem.
Lab [1]
CHEM2155

General Chem. Lab [1]
CHEM1050