

Depth & Electives (12 credits)

CEEV Electives x 2 chosen from specified elective list, of which at least 1 course from Restricted electives:

Restricted electives:

CENG4140 Energy Resources, Conversions and Technologies
 CIVL4450 Carbon Footprint Analysis and Reduction
 ENEG4320 Energy Storage Technology
 ENVR3110 Sustainable Development
 ENVR3220 Energy Sources and Usage

Others

CENG4130 Plant Design and Economics
 CENG4950 Chem-E-Car
 CIVL4470 Air Quality Control and Management
 ENEG3220 Energy Initiatives Forging Future Engineers
 ENVR3210 Environmental Technology

Environmental Control
 [3] CENG4710

Environmental Impact
 Assessment [3]
 CENG4720

Final Year Project (6 credits)

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

Lab (4 credits)

Chemical & Environmental
 Engineering Lab [4]
 CENG3950

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: 87-91

Common Core: 36

(9 credits of double-counting allowed)

Pre-requisite →

Co-requisite - - - - - →

Fall Offering

Spring Offering

Offering in both semester

Year Long

Introduction (6 credits)

Intro. to CBE
 [3] CENG1000

Or

Materials
 [3] CENG1500

Intro to
 Environmental
 Engineering
 [3] CENG1700

ChE Design (14 credits)

Integrated Process and Product Design
 [5] CENG3150

Process Dyn. & Control
 [3] CENG3110

Process & Product Design Principles
 [3] CENG2110

Modeling for Chemical & Biological
 Engineering [3] CENG2310

Separation
 Process
 [3] CENG3210

Transport II
 [3] CENG3220

Transport I
 [3] CENG2220

ChE Science (15 credits)

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
 & CENG4020

Engineering
 Seminars
 [0] ENGG1010
 & ENGG2010

Tech. Comm.
 II [3]
 LANG4035

Tech. Comm.
 I [3]
 LANG2030

Math. & Science (24-28 credits)

Intro to Comp [3-4]
 COMP1021 or
 COMP1022P or
 COMP2011 or
 COMP2012H

Analytical Chem. Or
 Biology [3]
 BIEN2610/LIFS1901
 Or CHEM2311

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]
 CHEM1010/1020

Organic
 Chem. [3]
 CHEM2111

Org Chem.
 Lab [1]
 CHEM2155

General Chem. Lab [1]
 CHEM1050

This program is eligible for HKIE Scheme "A" Training in Environmental Discipline on condition that graduates must have completed one of the following courses as an elective:
 CENG 4140/
 CIVL 4450/
 ENVR 3110/
 ENVR 3220/ENEG4320