PlusOne Curriculum for CHEMICAL ENGINEERING/CHEMICAL ENGINEERING

Sample Only – Actual Curriculum Sequence May Deviate from Sample

BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING CURRICULUM - CLASS OF 2022, 2023

	FALL			SPRING			SUMMER 1			SUMMER 2		
Year 1	MATH1342	Calculus 2 for Engrs.	4	MATH2321	Calculus 3 for Engrs.	4	CHME2308	ChE Conservation Princ.	4	Vacation		
	CHEM1151	General Chem for Engrs.	4	PHYS1151	Physics 1 for Engrs.	4	Elective	General Elective 2	4			
	CHEM1153	Recitation for CHEM1151	0	PHYS1152	Physics 1 Lab	1						
	GE1000	Intro. to Eng'g.	1	PHYS1153	ILS for PHYS1151	0						
	GE1501	Cornerstone Eng'g 1	4	GE1502	Cornerstone Eng'g 2	4						
	ENGW1111	College Writing	4	Elective	General Elective 1	4						
Year 2 MC	MATH2341	Diff. Eq./Lin. Alg.	4	CHEM2313	Organic Chem. 2	4	Elective	General Elective 3	4	Co-op		
	CHEM2311	Organic Chemistry 1	4	CHEM2314	Lab for CHEM2313	1	Elective	Advanced Science Electi	4			
	CHEM2312	Lab for CHEM2311	1	CHME3312	Transport Processes 2	4						
	ENCP2000	Intro. to Eng'g. Co-op	1	CHME3322	ChE Thermodynamics 2	4						
	CHME2310	Transport Processes 1	4	[BIOL 1115 **or**	[General Biology 1 for Engrs. (	4/5						
	CHME2320	ChE Thermodynamics 1	4	PHYS 1155	Physics for Engrs. 2,							
				PHYS 1156	Lab for PHYS1155, and							
				PHYS 1157	ILS for PHYS1155							
Year 2 MD	MATH2341	Diff. Eq./Lin. Alg.	4	ENGW3302	Adv Writing in the Tech Prof	4	Co-op			CHEM2313	Organic Chem. 2	4
	CHEM2311	Organic Chemistry 1	4		*(to be taken online)*					CHEM2314	Lab for CHEM2313	1
	CHEM2312	Lab for CHEM2311	1							CHME2320	ChE Thermo. 1	4
	ENCP2000	Intro. to Eng'g. Co-op	1									
	CHME2310	Transport Processes 1	4									
	[BIOL 1115 **or**	[General Biology 1 for Engrs. **OR**	4/5									
	PHYS 1155	Physics for Engrs. 2,										
	PHYS 1156	Lab for PHYS1155, and										
	PHYS 1157	Interactive Learn Sem. for PHYS1155										
Year 3 MC	ENGW3302	Adv Writing in the Tech Prof	4	ENCP3000	Prof. Issues in Eng'g.	1	Elective	Graduate Course #2	4	Co-op		
		(to be taken online)		CHME3315/6	Chem. Eng. Lab 1 w Recit.	4	Elective	Graduate Course #3	4			
				CHME4510	ChE Kinetics	4						
		Co-op		CHME4701	Cpstn 1: Sep. & Proc. Anlys.	4						
				Elective	Graduate Course #1	4						
Year 3 MD	ENCP3000	Prof. Issues in Eng'g.	1	Co-op			Co-op			Elective	General Elective 3	4
	CHME3312	Transport Processes 2	4							Elective	Graduate Course #2	4
	CHME3315/6	Chem. Eng. Lab 1 w recitation	4									
	CHME3322	ChE Thermodynamics 2	4									
	Elective	Graduate Course #1	4									
Year 4 MC	Co-op			CHME4315	Chem. Eng. Lab 2	4						
				CHME4512	ChE Process Control	4						
				CHME4703/5	Cpstn 2: Proc. Desig with recitation	4						
				Elective	Graduate Course# 4	4						
Year 4 MD	CHME4315/6	Chem. Eng. Lab 2 w recitation	4	CHME4512	ChE Process Control	4						
	CHME4510	ChE Kinetics	4	CHME4703/5	Cpstn 2: Proc. Des. with recitation	4						
	CHME4701	Cpstn 1: Sep. & Proc. Anlys.	4	Elective	Graduate Course #3	4						
	Elective	Advanced Science Elective	4	Elective	Graduate Course #4	4						

Revised 11/14/2019

You will need to have AP credit for Calc. AB (MATH1341 - Calculus 1 - 4 SH) - see advisor
Students are required to meet with their academic advisor to petition into the PlusOne program.
Students are encouraged to meet with their Financial Aid counselor to review any financial questions.
Graduate electives outside the department curriculum may be applied to the degree requirements by petitioning the department's graduate committee.
* ENGW3315 is an acceptable substitution for engineering majors.
Electives may be interchanged. Please consult with your advisor in 220SN, 617-373-2154.
NUpath Requirements: Interpreting Culture (IC), Societies and Institutions (SI), Differences and Diversity (DD) and Integration Experience (EX) are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements and should use General Electives to do so.

Advanced Science Elective Requirements: Students can choose between BIOL2301, BIOL2321/22, BIOL2327, BIOL3603, BIOL 3611/12, CHEM2331/2332, CHEM3403/04, CHEM 3501, CHEM4621/4622, CHEM4628/29, EEMB2302/2303, PHYS2303, PHYS3601. Students must meet all prerequisite requirements to enroll in these courses and enroll in co-requisite labs if applicable.

Advanced Engineering Elective Requirements: Must be 4000-5999 level engineering course; may be within BIOE, CHME, CIVE, EECE, ME, IE, MEIE, ENGR. Students must meet all course resitrictions and prerequisite requirements to enroll in these courses. A faculty approved undergraduate research project can be substituted for this requirement. Research must be 4 semester hours and the Chemical Engineering Undergraduate Education Commitee must approve project prior to registration. Proper registration form will be required; please see advisor for more details.

Please consult with your Academic Advisor:
Last Names A-K Meghan Severance m.severance@northeastern.edu
Last Names L-Z Caitlin Goldblum, c.goldblum@northeastern.edu
The registrar's website provides a listing of degree requirements and DARS provides a degree audit utility for students.

MASTER OF SCIENCE IN CHEMICAL ENGINEERING CURRICULUM

	FALL		SPRING	
PlusOne Year	Graduate Course #5	4	Graduate Course #7	4
	Graduate Course #6	4	Graduate Course #8	4

For more information about the PlusOne program or for assistance with applying to the program, please contact the Graduate Student Services Team at support@husky.desk-mail.com