

Bachelor of Science/Master of Science Chemical Engineering

CURRICULUM OUTLINE Class of 2019, 2020

Sample Only – Actual Curriculum Sequence May Deviate from Sample

	FALL			SPRING			SUMMER 1		SUMMER 2						
Year 1	MATH1341	Calculus 1 for Engrs.	4	MATH1342	Calculus 2 for Engrs.	4	Vacation	Vacation							
	CHEM1151	General Chem for Engrs.	4	PHYS1151	Physics 1 for Engrs.	3									
	CHEM1153	Recitation for CHEM1151	0	PHYS1152	Physics 1 Lab	1									
	GE1000	Intro to Eng'g.	1	PHYS1153	ILS for PHYS1151	1									
	GE1110	Eng'g. Design	4	GE1111	Eng'g. Probl. Solv. & Comp.	4									
	NU CORE	Arts or Humanities Lvl. 1	4	ENGW1111	College Writing	4									
Year 2 AA	MATH2321	Calculus 3 for Engrs.	4	MATH2341	Diff. Eq./Lin. Alg.	4	Vacation	Co-op							
	CHEM2311	Organic Chemistry 1	4	CHEM2313	Organic Chem. 2	4									
	CHEM2312	Lab for CHEM2311	1	CHEM2314	Lab for CHEM2313	1									
	CHEM2319	Recitation for CHEM2311	0	CHEM2320	Recitation for CHEM2313	0									
	PHYS1155	Physics 2 for Engrs.	3	CHME2000	Intro. to Eng'g. Co-op	1									
	PHYS1156	Physics 2 Lab	1	CHME2310	Transport Processes 1	4									
	PHYS1157	ILS for PHYS1155	1	CHME2311	Lab for CHME2310	2									
	CHME2308	ChE Conservation Princ.	4	CHME2320	ChE Thermodynamics 1	4									
Year 2 BA	MATH2321	Calculus 3 for Engrs.	4	Co-op	Co-op					CHEM2313	Organic Chemistry 2	4			
	CHEM2311	Organic Chemistry 1	4							CHEM2314	Lab for CHEM2314	1			
	CHEM2312	Lab for CHEM2311	1							CHEM2320	Rec'tion for CHEM2313	0			
	CHEM2319	Recitation for CHEM2311	0							CHME2320	ChE Thermo. 1	4			
	PHYS1155	Physics 2 for Engrs.	3												
	PHYS1156	Physics 2 Lab	1												
	PHYS1157	ILS PHYS1155	1												
	CHME2000	Intro to Eng'g. Co-op	1												
Year 3 AG	Co-op			BIOL1115	Biology	4	ENGW3302*	Adv. Writing for Prof.	4	Co-op					
				CHME3312	Transport Processes 2	4	NU CORE	Social Science Lvl. 1	4						
				CHME3313	Lab for CHME3312	2									
				CHME3322	ChE Thermodynamics 2	4									
Year 3 BG				Co-op			Co-op			ENGW3302*	Adv. Writing for Prof.	4			
										BIOL1115	Biology	4	NU CORE	Social Science Lvl. 1	4
										CHME2310	Transport Processes 1	4			
										CHME2311	Lab for CHME2310	2			
										CHME3322	ChE Thermodynamics 2	4			
Year 4 AG	Co-op			CHEM3403	Quantum Chem & Spec.	4	CHME5xxx	Senior/Grad Elective 1	4	Vacation					
				CHEM3404	Lab for CHEM3403	1	Grad. Elect	Grad. Elective 2	4						
				CHME3000	Prof. Issues in Eng'g.	1									
				CHME4510	ChE Kinetics	4									
				CHME4701	Cpstrn 1: Sep. & Proc. Anlys.	4									
				CHME7350	Transport Phenomena	4									
Year 4 BG				CHEM3403	Quantum Chem & Spec	4	CHME4510	ChE Kinetics	4	Vacation					
				CHEM3404	Lab for CHEM3403	1	CHME5xxx	Senior/Grad Elective 1	4						
				CHME3000	Prof. Issues in Eng'g.	1	Grad. Elect	Grad. Elective 2	4						
				CHME3312	Transport Processes 2	4	CHME7350	Transport Phenomena	4						
				CHME3313	Lab for CHME3312	2									
				CHME7320	ChE Math	4									
Year 5 AA				CHME4512	ChE Process Control	4	Vacation								
				CHME7320	ChE Math	4					CHME4703	Cpstrn 2: Chem. Proc. Design	4		
				CHME7330	ChE Thermodynamics	4					CHME7340	ChE Kinetics	4		
				Grad. Elect	Grad. Elective 3	4					CHMExxxx	Grad. Special Topics	4		
Year 5 BG				CHME4512	Process Control	4	Vacation								
				CHME4701	Cpstrn 1: Sep. & Proc. Anlys.	4					CHME4703	Cpstrn 2: Chem. Proc. Design	4		
				CHME7330	ChE Thermodynamics	4					CHME7340	ChE Kinetics	4		
				Grad. Elect	Grad. Elective 3	4					CHMExxxx	Grad. Special Topics	4		

Revised 09/11/15

* [ENGW3315](#) is an acceptable substitution for engineering majors.

English course prefixes have changed from ENGL to ENGW. ENGW1111 is equivalent to ENGL1111. ENGW3302 is equivalent to ENGL3302.

NU Core Elective Requirements: 2 required - (One Arts Lvl 1 **OR** Humanities Lvl. 1) **AND** (1 Social Science Lvl. 1)

Electives may be interchanged. Please consult with your advisor in 220SN 617-373-2154

Students interested in following for the BS/MS program should plan on following the BA pattern of attendance.

Students will be required to meet with an undergraduate advisor to petition to enter the program.

Students are encouraged to meet with their financial aid counselor to review any financial questions.

4 semesters of coursework at Northeastern University must be completed with a minimum GPA of 3.2 to join the BS/MS program.

16SH (4 Courses) from Graduate Program are used towards requirements in Undergraduate Program as general or major requirements.

Graduate electives outside the department curriculum may be applied to the degree requirements by petitioning the department's graduate committee.

The registrar's website provides a listing of degree requirements and the DARS system provides a degree audit utility for students.