

**BS/MS IN INDUSTRIAL ENGINEERING
CURRICULUM OUTLINE - CLASS OF 2020**

Sample Only – Actual Curriculum Sequence May Deviate from Sample

	FALL			SPRING			SUMMER 1	SUMMER 2		
Freshman Year 1	CHEM1151	General Chem. for Engrs.	4	MATH1342	Calculus 2 for Engrs.	4	Vacation	Vacation		
	CHEM1153	Recitation for CHEM1151	0	ENGW1111	College Writing	4				
	GE1000	Intro to Eng'g.	1	GE1111	Eng'g. Prob. Solv. & Comp.	4				
	GE1110	Eng'g. Design	4	PHYS1151	Physics 1 Engrs.	3				
	MATH1341	Calculus 1 for Engrs.	4	PHYS1152	Physics 1 Lab	1				
	NU Core	Arts or Humanities Lvl. 1	4	PHYS1153	ILS for PHYS1151	1				
Year 2 AA	IE2310	Intro Ind. Eng'g	4	IE3412	Eng'g Prob. Stat.	4	Vacation	Co-op		
	IE2311	Recitation for IE2310	0	IE4512	Eng'g Economy	4				
	IE3425	Eng'g Database	4	MATH2341	Diff. Eq./ Lin. Alg.	4				
	IE3426	Recitation for IE3425	0	MEIE2000	Intro to Eng'g, Co-op	1				
	MATH2321	Calculus 3 for Engrs.	4	NU Core	Social Science Lvl. 1	4				
	***Elective	Science Elective	5							
Year 2 BA	IE2310	Intro Ind. Eng'g	4				Co-op	Vacation		
	IE2311	Recitation for IE2310	0							
	IE3425	Eng'g Database	4							
	IE3426	Recitation for IE3425	0							
	MATH2321	Calculus 3 for Engrs.	4							
	MEIE2000	Intro to Eng'g, Co-op	1							
	***Elective	Science Elective	5							
Year 3 AA		Co-op		IE4510	Simulation Mod. & An.	4	Vacation	Co-op		
				IE4515	Operations Research	4				
				IE4516	Quality Assurance	4				
				Elective	Technical Elective 1	4				
Year 3 BA	*IE3412	Eng'g Prob. Stat.	4				Co-op	**ENGW330 ; Adv. Writing for Prof. Elective General Elective		
	IE4512	Eng'g Economy	4							
	MATH2341	Diff. Eq./ Lin. Alg.	4							
	Elective	Technical Elective 1	4							
Year 4 AA		Co-op		IE4520	Stochastic Modeling	4	MEIE4701	Capstone Design 1	1	**ENGW330 ; Adv. Writing for Prof. Graduate Course
				IE4525	Logistics & Supply Chain	4		Graduate Course	4	
				MEIE3000	Prof. Issues In Eng'g,	1	Elective	General Elective	4	
				2-Graduate Course	Graduate Course	4			4	
Year 4 BA	IE4510	Simulation Mod. & An.	4	2-Graduate Course	Graduate Course	4	*Graduate Course	4	*Graduate Course	4
	IE4515	Operations Research	4	Graduate Course	Graduate Course	4				
	IE4516	Quality Assurance	4	Elective	Social Science Lvl. 1	4				
	MEIE3000	Prof. Issues in Eng'g,	1	IE4530	Mfg. Sys. & Techniques	4				
	Elective	Technical Elective 2	4	IE4531	Lab for IE4530	1				
Year 5 AA	MEIE6850	Research Seminar	0	IE4522	Human Machine Systems	4				
	Elective	Technical Elective 2	4	IE4523	Lab for IE4522	1				
	IE4530	Mfg. Sys. & Techniques	4	MEIE4702	Capstone Design 2	5				
	IE4531	Lab for IE4530	1	3-Graduate Course	Graduate Course	4				
		Graduate Course	4			4				
	Graduate Course	4			4					
Year 5 BA	IE4520	Stochastic Modeling	4	IE4522	Human Machine Systems	4				
	IE4525	Logistics & Supply Chain	4	IE4523	Lab for IE4522	1				
	MEIE4701	Capstone Design 1	1	MEIE4702	Capstone Design 2	5				
	MEIE6850	Research Seminar	0	3-Graduate Course	Graduate Course	4				
		Graduate Course	4			4				
	Graduate Course	4			4					

3/10/2015
2/8/2017
4/10/2017

**** ENG3315 is an acceptable substitution for engineering majors.**

2- Students who received a grade less than B+ in IE3412 must take IE6200 instead of a graduate elective.

3- Students may replace 8 SH of graduate coursework in the senior year with a Thesis, or 4 SH with a Project.

NU Core Elective Requirements: 2 required - (one Arts or Humanities Lvl. 1 Elective AND one Social Science Lvl. 1 Elective)

General Elective: 1 required - any 4 SH course that is not remedial or repetitive.

Engineering Technical Electives: 2 required - any course from the following disciplines that is not a required course in the IE curriculum: IE, ME, MEIE, EMGT, OR, EECE, CIVE, CHME or CSYE

Electives may be interchanged. Please consult with your advisor : Joy Erb - 220 Snell, 617-373-2154, j.erb@neu.edu

Notes:

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.

*Students can submit "Petition for a Reduced Course Load" to be billed per credit.

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

*****Science Elective**

Complete one of the following:

PHYS 1155 Physics for Engineering 1 and PHYS 1156 Lab for PHYS 1155 and PHYS 1157 Interactive Learning Seminar for PHYS 1155
CHEM 1214 General Chemistry 2 and CHEM 1215 Lab for CHEM 1214 and CHEM 1216 Recitation for CHEM 1214
CHEM 2311 Organic Chemistry 1 and CHEM 2312 Lab for CHEM 2311 and CHEM 2319 Recitation for CHEM 2311
BIOL 1115 General Biology 1 for Engineers and BIOL 1116 Lab for BIOL 1115
BIOL 1117 Integrated Anatomy and Physiology 1 and BIOL 1118 Lab for BIOL 1117