

PLUS ONE CURRICULUM OUTLINE

Sample Only – Actual Curriculum Sequence May Deviate from Sample

BACHELOR OF SCIENCE IN INDUSTRIAL ENGINEERING CURRICULUM - 4 YEAR 2 COOP OPTION - CLASS OF 2023

		FALL		SPRING		SUMMER 1		SUMMER 2	
Freshman Year 1	MATH1342	Calculus 2 for Engrs.	4	MATH2321	Calculus 3 for Engrs.	4	Elective	General Elective	4
	CHEM1151	General Chem. for Engrs.	4	PHYS1151	Physics 1 Engrs.	3	IE3425	Eng'g Database	4
	CHEM1153	Recitation for CHEM1151	0	PHYS1152	Physics 1 Lab	1			4
	GE1000	Intro to Eng'g.	1	PHYS1153	ILS for PHYS1151	1			4
	GE1501	Cornerstone Eng. 1	4	GE1502	Cornerstone Eng. 2	4			4
	ENGW1111	College Writing	4	Elective	General Elective	4			4
Year 2 MC	MATH2341	Diff. Eq./ Lin. Alg.	4	IE4516	Quality Assurance	4	Elective	Technical Elective	4
	IE2310	Intro Ind. Eng'g	4	IE4512	Eng'g Economy	4	Elective	General Elective	4
	IE2311	Recitation for IE2310	0	MEIE2000	Intro to Eng'g, Co-op	1			4
	IE3412	Eng'g Prob. Stat.	4	IE4515	Operations Research	4			4
	***Elective	Science Elective	5	IE4530	Mfg. Sys. & Techniques	4			4
			IE4531	Lab for IE4530	1			4	
Year 2 MD	MATH2341	Diff. Eq./ Lin. Alg.	4						4
	IE2310	Intro Ind. Eng'g	4						4
	IE2311	Recitation for IE2310	0						4
	Elective	General Elective	4						4
	***Elective	Science Elective	5						4
	MEIE2000	Intro to Eng'g, Co-op	1					4	
Year 3 MC	ENGW3302	Adv Writing in the Tech Prof <i>(to be taken online)</i>	4	Elective	Graduate Course #1	4	Elective	Graduate Course #3	4
				IE4510	Simulation Mod. & An.	4	Elective	Technical Elective	4
		Co-op		Elective	Graduate Course #2	4	MEIE4701	Capstone Design 1	1
				IE4520	Stochastic Modeling	4			4
				MEIE3000	Prof. Issues In Eng'g.	1			4
Year 3 MD	IE4516	Quality Assurance	4	ENGW3302	Adv Writing in the Tech Prof <i>(to be taken online)</i>	4			4
	IE4515	Operations Research	4				Elective	Technical Elective	4
	IE4510	Simulation Mod. & An.	4				Elective	Graduate Course #1	4
	IE4530	Mfg. Sys. & Techniques	4						4
	IE4531	Lab for IE4530	1						4
	MEIE3000	Prof. Issues in Eng'g.	1						4
Year 4 MC		Co-op		MEIE4702	Capstone Design 2	5			4
				Elective	Graduate Course #4	4			4
				IE4522	Human Machine Systems	4			4
				IE4523	Lab for IE4522	1			4
				IE4525	Logistics & Supply Chain	4			4
Year 4 MD	IE4512	Eng'g Economy	4	MEIE4702	Capstone Design 2	5			4
	IE4520	Stochastic Modeling	4	IE4522	Human Machine Systems	4			4
	IE4525	Logistics & Supply Chain	4	IE4523	Lab for IE4522	1			4
	Elective	Graduate Course #2	4	Elective	Graduate Course #3	4			4
	MEIE4701	Capstone Design 1	1	Elective	Graduate Course #4	4			4

5/24/2016
11/1/2016
2/3/2017
4/10/2017

7/13/2017
1/19/2018
6/11/2019

You will need to have AP credit for Calc. AB (MATH1341 - Calculus 1 - 4 SH) - see advisor

* Course selection will be determined in consultation with your first-year advisor. Students are encouraged to use AP credit and transfer credits obtained prior to coming to Northeastern to take advantage of the 4-year, 2-coop program.

*[MATH3081](#) is an acceptable substitution for IE3412. The substitution is recommended for students minoring in Mathematics.

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

NUpath Requirements through General Electives- NUpath requirements, **Interpreting Culture (IC), Societies and Institutions (SI) and Differences and Diversity (DD)** are not explicitly satisfied by required engineering courses. Students are responsible for satisfying these requirements, and if these are not fulfilled in engineering courses, should use General Electives to do so. General Electives are academic, non-remedial, non-repetitive courses.

Engineering Technical Elective - 2 required - Any IE, ME, MEIE, EMGT, OR, EECE, CIVE, or CHME that is not part of the Industrial Engineering core curriculum.

General Electives: 3 required - Any 4 SH course that is not remedial or repetitive.

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

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 2 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

MASTER OF SCIENCE IN OPERATIONS RESEARCH CURRICULUM

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

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