

## 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 2022

		FALL		SPRING		SUMMER 1		SUMMER 2		
Freshman Year 1	<a href="#">MATH1342</a>	Calculus 2 for Engrs.	4	<a href="#">MATH2321</a>	Calculus 3 for Engrs.	4	Elective	General Elective	4	
	<a href="#">CHEM1151</a>	General Chem. for Engrs.	4	<a href="#">PHYS1151</a>	Physics 1 Engrs.	3	<a href="#">IE3425</a>	Eng'g Database	4	
	<a href="#">CHEM1153</a>	Recitation for CHEM1151	0	<a href="#">PHYS1152</a>	Physics 1 Lab	1	Vacation			
	<a href="#">GE1000</a>	Intro to Eng'g.	1	<a href="#">PHYS1153</a>	ILS for PHYS1151	1				
	<a href="#">GE1501</a>	Cornerstone Eng. 1	4	<a href="#">GE1502</a>	Cornerstone Eng. 2	4				
<a href="#">ENGW1111</a>	College Writing	4	Elective	General Elective	4					
Year 2 MC	<a href="#">MATH2341</a>	Diff. Eq./ Lin. Alg.	4	<a href="#">IE4516</a>	Quality Assurance	4	Elective	Technical Elective	4	
	<a href="#">IE2310</a>	Intro Ind. Eng'g	4	<a href="#">IE4512</a>	Eng'g Economy	4	Elective	General Elective	4	
	<a href="#">IE2311</a>	Recitation for IE2310	0	<a href="#">MEIE2000</a>	Intro to Eng'g, Co-op	1	Co-op			
	<a href="#">*IE3412</a>	Eng'g Prob. Stat.	4	<a href="#">IE4515</a>	Operations Research	4				
	***Elective	Science Elective	5	<a href="#">IE4530</a>	Mfg. Sys. & Techniques	4				
<a href="#">IE4531</a>	Lab for IE4530	1			1					
Year 2 MD	<a href="#">MATH2341</a>	Diff. Eq./ Lin. Alg.	4	Co-op		Co-op		Elective	Technical Elective	4
	<a href="#">IE2310</a>	Intro Ind. Eng'g	4					<a href="#">*MATH3081</a>	Prob. And Stat.	4
	<a href="#">IE2311</a>	Recitation for IE2310	0							
	Elective	General Elective	4							
	***Elective	Science Elective	5							
<a href="#">MEIE2000</a>	Intro to Eng'g, Co-op	1								
Year 3 MC	<a href="#">ENGW3302</a>	Adv Writing in the Tech Prof <i>(to be taken online)</i>	4	Elective	Graduate Course #1	4	Elective	Graduate Course #3	4	
	Co-op			<a href="#">IE4510</a>	Simulation Mod. & An.	4	Elective	Technical Elective	4	
			Elective	Graduate Course #2	4	<a href="#">MEIE4701</a>	Capstone Design 1	1	Co-op	
			<a href="#">IE4520</a>	Stochastic Modeling	4					
			<a href="#">MEIE3000</a>	Prof. Issues In Eng'g.	1					
<a href="#">IE4516</a>			Quality Assurance	4	<a href="#">ENGW3302</a>	Adv Writing in the Tech Prof <i>(to be taken online)</i>	4	Elective	Technical Elective	4
<a href="#">IE4515</a>	Operations Research	4	Co-op		Elective	Graduate Course #1	4			
<a href="#">IE4510</a>	Simulation Mod. & An.	4								
<a href="#">IE4530</a>	Mfg. Sys. & Techniques	4								
<a href="#">IE4531</a>	Lab for IE4530	1								
<a href="#">MEIE3000</a>	Prof. Issues in Eng'g.	1								
Year 4 MC	Co-op			<a href="#">MEIE4702</a>	Capstone Design 2	5				
			Elective	Graduate Course #4	4					
			<a href="#">IE4522</a>	Human Machine Systems	4					
			<a href="#">IE4523</a>	Lab for IE4522	1					
			<a href="#">IE4525</a>	Logistics & Supply Chain	4					
Year 4 MD	<a href="#">IE4512</a>	Eng'g Economy	4	<a href="#">MEIE4702</a>	Capstone Design 2	5				
	<a href="#">IE4520</a>	Stochastic Modeling	4	<a href="#">IE4522</a>	Human Machine Systems	4				
	<a href="#">IE4525</a>	Logistics & Supply Chain	4	<a href="#">IE4523</a>	Lab for IE4522	1				
	Elective	Graduate Course #2	4	Elective	Graduate Course #3	4				
	<a href="#">MEIE4701</a>	Capstone Design 1	4	Elective	Graduate Course #4	4				

5/24/2016  
11/1/2016  
2/3/2017  
4/10/2017  
7/13/2017  
1/19/2018

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:

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

### MASTER OF SCIENCE IN OPERATIONS RESEARCH CURRICULUM

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