

## 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="#">CHEM1151</a> General Chem. for Engrs. 4 <a href="#">CHEM1153</a> Recitation for CHEM1151 0 <a href="#">GE1000</a> Intro to Eng'g. 1 <a href="#">GE1501</a> Cornerstone Eng. 1 4 <a href="#">ENGW1111</a> College Writing 4	<a href="#">MATH2321</a> Calculus 3 for Engrs. 4 <a href="#">PHYS1151</a> Physics 1 Engrs. 3 <a href="#">PHYS1152</a> Physics 1 Lab 1 <a href="#">PHYS1153</a> ILS for PHYS1151 1 <a href="#">GE1502</a> Cornerstone Eng. 2 4 Elective General Elective 4	Elective General Elective 4 <a href="#">IE3425</a> Eng'g Database 4	Vacation
Year 2 MC	<a href="#">MATH2341</a> Diff. Eq./ Lin. Alg. 4 <a href="#">IE2310</a> Intro Ind. Eng'g 4 <a href="#">IE2311</a> Recitation for IE2310 0 <a href="#">*IE3412</a> Eng'g Prob. Stat. 4 ***Elective Science Elective 5	<a href="#">IE4516</a> Quality Assurance 4 <a href="#">IE4512</a> Eng'g Economy 4 <a href="#">MEIE2000</a> Intro to Eng'g, Co-op 1 <a href="#">IE4515</a> Operations Research 4 <a href="#">IE4530</a> Mfg. Sys. & Techniques 4 <a href="#">IE4531</a> Lab for IE4530 1	Elective Technical Elective 4 Elective General Elective 4	Co-op
Year 2 MD	<a href="#">MATH2341</a> Diff. Eq./ Lin. Alg. 4 <a href="#">IE2310</a> Intro Ind. Eng'g 4 <a href="#">IE2311</a> Recitation for IE2310 0 <a href="#">IE3425</a> Eng'g Database 4 Elective General Elective 4 ***Elective Science Elective 5 <a href="#">MEIE2000</a> Intro to Eng'g, Co-op 1	Co-op	Co-op	Elective Technical Elective 4 <a href="#">*MATH3081</a> Prob. And Stat. 4
Year 3 MC	<a href="#">ENGW3302</a> Adv Writing in the Tech Prof (to be taken online) 4 Co-op	Elective Graduate Course #1 4 <a href="#">IE4510</a> Simulation Mod. & An. 4 Elective Graduate Course #2 4 <a href="#">IE4520</a> Stochastic Modeling 4 <a href="#">MEIE3000</a> Prof. Issues In Eng'g, 1	Elective Graduate Course #3 4 Elective Technical Elective 4 <a href="#">MEIE4701</a> Capstone Design 1 1	Co-op
Year 3 MD	<a href="#">IE4516</a> Quality Assurance 4 <a href="#">IE4515</a> Operations Research 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	<a href="#">ENGW3302</a> Adv Writing in the Tech Prof (to be taken online) 4 Co-op	Co-op	Elective Technical Elective 4 Elective Graduate Course #1 4
Year 4 MC	Co-op	<a href="#">MEIE4702</a> Capstone Design 2 5 Elective Graduate Course Elect. #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="#">IE4520</a> Stochastic Modeling 4 <a href="#">IE4525</a> Logistics & Supply Chain 4 Elective Graduate Course #2 4 <a href="#">MEIE4701</a> Capstone Design 1 4	<a href="#">MEIE4702</a> Capstone Design 2 5 <a href="#">IE4522</a> Human Machine Systems 4 <a href="#">IE4523</a> Lab for IE4522 1 Elective Graduate Course #3 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 Engineering Technical Elective - 2 required - Any IE, ME, MEIE, EMGT, OR, EECE, CIVE, or CHME that is not part of the Industrial Engineering core  
 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> and <a href="#">BIOL 1117 Integrated Anatomy and Physiology 1</a> and <a href="#">BIOL 1118 Lab for BIOL 1117</a>

### MASTER OF SCIENCE IN INDUSTRIAL ENGINEERING CURRICULUM

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