

**BACHELOR OF SCIENCE IN INDUSTRIAL ENGINEERING - 4 YEAR 2 CO-OP PROGRAM**  
**PATTERN OF ATTENDANCE - CLASS OF 2019**

*Sample Only – Actual Curriculum Sequence May Deviate from Sample*

	FALL	SPRING	SUMMER 1	SUMMER 2
Freshman Year 1	<a href="#">MATH1341</a> Calculus 1 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="#">GE1110</a> Eng'g. Design 4 <a href="#">NU CORE</a> Arts or Humanities Lvl. 1 4	<a href="#">MATH1342</a> Calculus 2 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="#">GE1111</a> Eng'g. Prob. Solv.& Comp. 4 <a href="#">ENGW1111</a> College Writing 4	School *	Vacation
Year 2 AA	<a href="#">MATH2321</a> Calculus 3 for Engrs. 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 <a href="#">IE3426</a> Recitation for IE3425 0 ***Elective Science Elective 5	<a href="#">MATH2341</a> Diff. Eq./ Lin. Alg. 4 * <a href="#">IE3412</a> Eng'g Prob. Stat. 4 <a href="#">IE4512</a> Eng'g Economy 4 Elective General Elective 1 4 <a href="#">MEIE2000</a> Intro to Eng'g, Co-op 1	Elective General Elective 2 4 Elective General Elective 3 4	Co-op
Year 2 BA	<a href="#">MATH2321</a> Calculus 3 for Engrs. 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 <a href="#">IE3426</a> Recitation for IE3425 0 ***Elective Science Elective 5 <a href="#">MEIE2000</a> Intro to Eng'g, Co-op 1	Co-op	Co-op	<a href="#">MATH2341</a> Diff. Eq./ Lin. Alg. 4 <a href="#">MATH3081</a> Prob. And Stat. 4
Year 3 AA	Co-op	<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	Elective Technical Elective 1 4 Elective Technical Elective 2 4 <a href="#">MEIE4701</a> Capstone Design 1 1	Co-op
Year 3 BA	<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	Co-op	Co-op	Elective General Elective 1 4 Elective General Elective 2 4
Year 4 AA	Co-op	<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="#">IE4523</a> Lab for IE4522 1 <a href="#">IE4525</a> Logistics & Supply Chain 4		
Year 4 BA	<a href="#">IE4512</a> Eng'g Economy 4 <a href="#">IE4525</a> Logistics & Supply Chain 4 <a href="#">IE4520</a> Stochastic Modeling 4 Elective Technical Elective 1 4 <a href="#">MEIE4701</a> Capstone Design 1 1	<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 Technical Elective 2 4 Elective General Elective 3 4		

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

You will meet with an academic advisor to determine scheduling of these required classes:

General Elective 4	4
Social Science Lvl.1	4
<a href="#">ENGW3302</a> Adv. Writing for Prof.	4
General Elective 5	4

\* 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.

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

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: 5 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>