

**BS IN INDUSTRIAL ENG'G./MS IN ENERGY SYSTEMS  
CURRICULUM OUTLINE - CLASS OF 2021**

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

	FALL	SPRING	SUMMER 1	SUMMER 2
Freshman Year 1	<a href="#">CHEM1151</a> General Chem. for Engrs. 4	<a href="#">MATH1342</a> Calculus 2 for Engrs. 4	Vacation	Vacation
	<a href="#">CHEM1153</a> Recitation for CHEM1151 0	<a href="#">GE1502</a> Cornerstone Eng'g. 2 4		
	<a href="#">GE1000</a> Intro to Eng'g. 1	<a href="#">PHYS1151</a> Physics 1 Engrs. 3		
	<a href="#">GE1501</a> Cornerstone Eng'g. 1 4	<a href="#">PHYS1152</a> Physics 1 Lab 1		
	<a href="#">MATH1341</a> Calculus 1 for Engrs. 4	<a href="#">PHYS1153</a> ILS for PHYS1151 1		
<a href="#">ENGW1111</a> College Writing 4	Elective General Elective 4			
Year 2 AA	<a href="#">IE2310</a> Intro Ind. Eng'g 4	<a href="#">*IE3412</a> Eng'g Prob. Stat. 4	Vacation	Co-op
	<a href="#">IE2311</a> Recitation for IE2310 0	<a href="#">IE4512</a> Eng'g Economy 4		
	<a href="#">IE3425</a> Eng'g Database 4	<a href="#">MATH2341</a> Diff. Eq./ Lin. Alg. 4		
	<a href="#">IE3426</a> Recitation for IE3425 0	<a href="#">MEIE2000</a> Intro to Eng'g, Co-op 1		
	<a href="#">MATH2321</a> Calculus 3 for Engrs. 4	Elective General Elective 4		
***Elective Science Elective 5				
Year 2 BA	<a href="#">IE2310</a> Intro Ind. Eng'g 4	Co-op	Co-op	Vacation
	<a href="#">IE2311</a> Recitation for IE2310 0			
	<a href="#">IE3425</a> Eng'g Database 4			
	<a href="#">IE3426</a> Recitation for IE3425 0			
	<a href="#">MATH2321</a> Calculus 3 for Engrs. 4			
<a href="#">MEIE2000</a> Intro to Eng'g, Co-op 1				
***Elective Science Elective 5				
Year 3 AA	Co-op	<a href="#">IE4510</a> Simulation Mod. & An. 4	Elective General Elective 4	Co-op
		<a href="#">IE4515</a> Operations Research 4		
		<a href="#">IE4516</a> Quality Assurance 4		
		Elective Technical Elective 1 4		
Year 3 BA	<a href="#">*IE3412</a> Eng'g Prob. Stat. 4	Co-op	Co-op	<a href="#">**ENGW3302</a> Adv. Writing for Prof. 4
	<a href="#">IE4512</a> Eng'g Economy 4			Elective General Elective 4
	<a href="#">MATH2341</a> Diff. Eq./ Lin. Alg. 4			
	Elective Technical Elective 1 4			
Year 4 AA	Co-op	<a href="#">ACCT6200</a> Financial Reporting 1 3	<a href="#">EMGT6225</a> Economic Dec. Making 4	<a href="#">**ENGW3302</a> Adv. Writing for Prof. 4 Graduate Elective 4
		<a href="#">IE4520</a> Stochastic Modeling 4	Graduate Elective 4	
		<a href="#">IE4525</a> Logistics & Supply Chain 4	<a href="#">MEIE4701</a> Capstone Design 1 1	
		<a href="#">MEIE3000</a> Prof. Issues In Eng'g, 1		
		<a href="#">ME6200</a> Math Methods for Eng. 1 4		
Year 4 BA	<a href="#">IE4510</a> Simulation Mod. & An. 4	<a href="#">ACCT6200</a> Financial Reporting 1 3	<a href="#">EMGT6225</a> Economic Dec. Making 4	Graduate Elective 4 Elective General Elective 4
	<a href="#">IE4515</a> Operations Research 4	<a href="#">ME6200</a> Math Methods for Eng. 1 4	Graduate Elective 4	
	<a href="#">IE4516</a> Quality Assurance 4	Elective Technical Elective 2 4		
	<a href="#">MEIE3000</a> Prof. Issues in Eng'g, 1	<a href="#">IE4530</a> Mfg. Sys. & Techniques 4		
	<a href="#">ENSY5000</a> Fund Energy Systems Int 4	<a href="#">IE4531</a> Lab for IE4530 1		
Year 5 AA	<a href="#">ENSY5000</a> Fund Energy Systems Int 4	Graduate Elective 4		
	<a href="#">ACCT6201</a> Financial Reporting 2 1.5	Graduate Elective 4		
	<a href="#">FINA6200</a> Val. Crtn thru Fin. Dec. 3	<a href="#">IE4522</a> Human Machine Systems 4		
	<a href="#">IE4530</a> Mfg. Sys. & Techniques 4	<a href="#">IE4523</a> Lab for IE4522 1		
	<a href="#">IE4531</a> Lab for IE4530 1	<a href="#">MEIE4702</a> Capstone Design 2 5		
Elective Technical Elective 2 4				
Year 5 BA	<a href="#">IE4520</a> Stochastic Modeling 4	Graduate Elective 4		
	<a href="#">IE4525</a> Logistics & Supply Chain 4	Graduate Elective 4		
	<a href="#">MEIE4701</a> Capstone Design 1 1	<a href="#">IE4522</a> Human Machine Systems 4		
	<a href="#">ACCT6201</a> Financial Reporting 2 1.5	<a href="#">IE4523</a> Lab for IE4522 1		
	<a href="#">FINA6200</a> Val. Crtn thru Fin. Dec. 3	<a href="#">MEIE4702</a> Capstone Design 2 5		

5/27/2016

2/8/2017

3/8/2017

4/10/2017

[\\*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 path 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 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.

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\*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:

<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>