# BS/MS IN INDUSTRIAL ENGINEERING CURRICULUM OUTLINE - CLASS OF 2018

#### PATTERN: YD

Sample Only – Actual Curriculum Sequence May Deviate from Sample

	FALL			SPRING		SUMMER 1		SUMMER 2
	MATH1341 Calculus 1 for Engrs.	4 <u>MA</u>	TH1342	Calculus 2 for Engrs.	4			
Year 1	CHEM1151 General Chem for Engrs.	4 PHY	YS1151	Physics 1 for Engrs.	3	Vacation		
	CHEM1153 Recitation for CHEM1151	0 PHY	YS1152	Physics 1 Lab	1			Vacation
	GE1000 Intro. to Eng'g.	1 PHY	YS1153	ILS for PHYS1151	1			Vacation
	GE1110 Eng'g. Design	4 <u>GE1</u>	1111	Eng'g. Prob. Solv. & Comp.	4			
	NU Core Arts or Humanities Lvl. 1	4 ENG	GW1111	College Writing	4			
	IE2310 Intro. Ind. Eng'g.	4 <u>MA</u>	TH2341	Diff. Eq./Lin. Alg.	4			
	IE3425 Eng'g. Database	4 <u>IE34</u>	412	Eng'g. Prob. & Stat.	4			
Year 2	MATH2321 Calculus 3 for Engrs.	4 <u>IE45</u>	512	Eng'g. Economy	4	Vacation		Со-ор
	***Elective Science Elective	5 <u>NU (</u>	Core	Social Science Lvl. 1	4			
		MEI	IE2000	Intro. to Eng'g. Co-op	1			
Year 3	Со-ор	IE45	<u>515</u>	Operations Research	4	*ENGW3302 Adv. Writing for Prof	f. 4	
		IE45	<u>516</u>	Quality Assurance	4	Elective Technical Elective 1	4	
		IE45	<u>522</u>	Human Machine Sys.	4			Со-ор
	·		<u>523</u>	Lab for IE4522	1			со ор
			<u>530</u>	Mfg. Sys. & Techniques	4			
			<u>531</u>	Lab for IE4530	1			
		IE45	<u>510</u>	Simulation Modeling & Analy	s 4	Grad Course	4	Grad Course
Year 4			<u>525</u>	Logistic Supply Chain	4	MEIE4701 Capstone Design 1	1	
	Со-ор	MEI	IE3000	Prof. Issues in Eng'g.	1			
				Grad Course	4			
				Grad Course	4			
	Elective Technical Elective 2	4 MEI	IE4702	Capstone Design 2	5			
Year 5	Elective General Elective 1	4 <u>IE45</u>	<u>520</u>	Stochastic Modeling	4			
	MEIE6850 Research Seminar	0		Grad Course	4			
	Grad Course Grad Course	4		Grad Course	4			

3/10/2015 4/10/2017

## \* ENGW3315 is an acceptable substitution for engineering majors.

English course prefixes have changed from ENGL to ENGW. ENGW1111 is equivalent to ENGL1111. ENGW3302 is equivalent to ENGL3302. Effective Fall 2014, the ENGW 3301 course number will be retired. Students may take ENGW 3302 or ENGW 3315 to fulfill their Advanced Writing in the Technical Professions requirement. ENGW 3301 will still count towards the Advanced Writing in the Technical Professions requirement if the course was taken prior to Fall 2014.

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

General Elective: 1 required - any 4 SH course that is not remedial or repetitive

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 or CHME or CSYE

Electives may be interchanged. Please consult with your advisor: Joy Erb, 220SN, 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.

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 1
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

<sup>\*</sup> Students can submit "Petition for a Reduced Course Load" to be billed per credit.