

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

Sample Only – Actual Curriculum Sequence May Deviate from Sample

	FALL	SPRING	SUMMER 1	SUMMER 2
Freshman Year 1	MATH1341 Calculus 1 for Engrs. 4 CHEM1151 General Chem. for Engrs. 4 CHEM1153 Recitation for CHEM1151 0 GE1000 Intro to Eng'g. 1 GE1501 Cornerstone Eng. 1 4 ENGW1111 College Writing 4	MATH1342 Calculus 2 for Engrs. 4 PHYS1151 Physics 1 Engrs. 3 PHYS1152 Physics 1 Lab 1 PHYS1153 ILS for PHYS1151 1 GE1502 Cornerstone Eng. 2 4 Elective General Elective 4	Vacation	Vacation
Year 2 AA	MATH2321 Calculus 3 for Engrs. 4 IE2310 Intro Ind. Eng'g 4 IE2311 Recitation for IE2310 0 IE3425 Eng'g Database 4 IE3426 Recitation for IE3425 0 ***Elective Science Elective 5	MATH2341 Diff. Eq./ Lin. Alg. 4 * IE3412 Eng'g Prob. Stat. 4 IE4512 Eng'g Economy 4 Elective General Elective 4 MEIE2000 Intro to Eng'g, Co-op 1	Vacation	Co-op
Year 2 BA	MATH2321 Calculus 3 for Engrs. 4 IE2310 Intro Ind. Eng'g 4 IE2311 Recitation for IE2310 0 IE3425 Eng'g Database 4 IE3426 Recitation for IE3425 0 ***Elective Science Elective 5 MEIE2000 Intro to Eng'g, Co-op 1	Co-op	Co-op	Vacation
Year 3 AA	Co-op	IE4516 Quality Assurance 4 IE4515 Operations Research 4 IE4510 Simulation Mod. & An. 4 Elective Technical Elective 1 4	Vacation	Co-op
Year 3 BA	MATH2341 Diff. Eq./ Lin. Alg. 4 * IE3412 Eng'g Prob. Stat. 4 IE4512 Eng'g Economy 4 Elective Technical Elective 1 4	Co-op	Co-op	** ENGW3302 Adv. Writing for Prof. 4 Elective General Elective 4
Year 4 AA	Co-op	IE4525 Logistics & Supply Chain 4 IE4520 Stochastic Modeling 4 EMGT6225 Economic Dec. Making 4 z-Graduate Course 4 MEIE3000 Prof. Issues In Eng'g, 1	MEIE4701 Capstone Design 1 1 Elective General Elective 4	** ENGW3302 Adv. Writing for Prof. 4 Graduate Course 4
Year 4 BA	IE4516 Quality Assurance 4 IE4515 Operations Research 4 IE4510 Simulation Mod. & An. 4 Elective Technical Elective 2 4 MEIE3000 Prof. Issues in Eng'g, 1	EMGT6225 Economic Dec. Making 4 Elective General Elective 4 IE4530 Mfg. Sys. & Techniques 4 IE4531 Lab for IE4530 1	*Graduate Course 4	*Graduate Course 4
Year 5 AA	OR 6205 Deterministic Oper. Res. 4 Elective Technical Elective 2 4 IE4530 Mfg. Sys. & Techniques 4 IE4531 Lab for IE4530 1	MEIE4702 Capstone Design 2 5 IE4522 Human Machine Systems 4 IE4523 Lab for IE4522 1 EMGT5220 Eng'g. Project Mgmt. 4 Graduate Course 4		
Year 5 BA	IE4525 Logistics & Supply Chain 4 IE4520 Stochastic Modeling 4 OR 6205 Deterministic Oper. Res. 4 z-Graduate Course 4 MEIE4701 Capstone Design 1 1	MEIE4702 Capstone Design 2 5 IE4522 Human Machine Systems 4 IE4523 Lab for IE4522 1 EMGT5220 Eng'g. Project Mgmt. 4 Graduate Course 4		

5/24/2016
6/3/2016
2/8/2017
4/10/2017

** [ENGW3315](#) is an acceptable substitution for engineering majors.

2- Students who received a grade less than B+ in [IE3412](#) must take [IE6200](#) instead of a graduate elective.

3- Students may replace 8 SH of graduate coursework in the senior year with [EMGT7990](#) Thesis, or 4 SH with [EMGT7945](#) Project.

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.

*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:

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