

**BACHELOR OF SCIENCE IN INDUSTRIAL ENGINEERING
PATTERN OF ATTENDANCE - CLASS OF 2024**

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 ENCP2000 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 ENCP2000 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 ** ENGW3302 Adv. Writing for Prof. 4	Elective General Elective 4 Elective General Elective 4	Co-op
Year 3 BA	MATH2341 Diff. Eq./ Lin. Alg. 4 *IE3412 Eng'g Prob. Stat. 4 IE4512 Eng'g Economy 4 ** ENGW3303 Adv. Writing for Prof. 4	Co-op	Co-op	Elective General Elective 4 Elective General Elective 4
Year 4 AA	Co-op	IE4525 Logistics & Supply Chain 4 IE4520 Stochastic Modeling 4 IE4530 Mfg. Sys. & Techniques 4 IE4531 Lab for IE4530 1 Elective Technical Elective 1 4 ENCP3000 Prof. Issues In Eng'g, 1	MEIE4701 Capstone Design 1 1 Elective General Elective 4 Elective General Elective 4	Co-op
Year 4 BA	IE4516 Quality Assurance 4 IE4515 Operations Research 4 IE4510 Simulation Mod. & An. 4 IE4530 Mfg. Sys. & Techniques 4 IE4531 Lab for IE4530 1 ENCP3000 Prof. Issues in Eng'g, 1	Co-op	Co-op	Elective General Elective 4 Elective General Elective 4
Year 5 AA	Co-op	MEIE4702 Capstone Design 2 5 IE4522 Human Machine Systems 4 IE4523 Lab for IE4522 1 Elective Technical Elective 2 4 Elective General Elective 4		
Year 5 BA	IE4525 Logistics & Supply Chain 4 IE4520 Stochastic Modeling 4 Elective Technical Elective 1 4 Elective General Elective 4 MEIE4701 Capstone Design 1 1	MEIE4702 Capstone Design 2 5 IE4522 Human Machine Systems 4 IE4523 Lab for IE4522 1 Elective Technical Elective 2 4 Elective General Elective 4		

*[MATH3081](#) is an acceptable substitution for IE3412. The substitution is recommended for students minoring in Mathematics.

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

1/3/2017 7/13/2017
2/3/2017 2/28/2018
4/10/2017 4/2/2019

NUpath 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 Elective - 2 required - Any IE, ME, MEIE, EMGT, OR, EECE, CIVE, or CHME that is not part of the Industrial Engineering core curriculum.

Electives may be interchanged. [Please consult with your Academic Advisor, found here.](#)

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 2 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