

**BACHELOR OF SCIENCE IN INDUSTRIAL ENGINEERING  
PATTERN OF ATTENDANCE - CLASS OF 2021**

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

	FALL	SPRING	SUMMER 1	SUMMER 2
<b>Freshman Year 1</b>	<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="#">GE1501</a> Cornerstone Eng. 1 4 <a href="#">ENGW1111</a> College Writing 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="#">GE1502</a> Cornerstone Eng. 2 4 Elective General Elective 4	Vacation	Vacation
<b>Year 2 AA</b>	<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 4 <a href="#">ENCP2000</a> Intro to Eng'g, Co-op 1	Vacation	Co-op
<b>Year 2 BA</b>	<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="#">ENCP2000</a> Intro to Eng'g, Co-op 1	Co-op	Co-op	Vacation
<b>Year 3 AA</b>	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="#">ENGW3302</a> Adv. Writing for Prof. 4	Elective General Elective 4 Elective General Elective 4	Co-op
<b>Year 3 BA</b>	<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 ** <a href="#">ENGW3303</a> Adv. Writing for Prof. 4	Co-op	Co-op	Elective General Elective 4 Elective General Elective 4
<b>Year 4 AA</b>	Co-op	<a href="#">IE4525</a> Logistics & Supply Chain 4 <a href="#">IE4520</a> Stochastic Modeling 4 <a href="#">IE4530</a> Mfg. Sys. & Techniques 4 <a href="#">IE4531</a> Lab for IE4530 1 Elective Technical Elective 1 4 <a href="#">ENCP3000</a> Prof. Issues In Eng'g, 1	<a href="#">MEIE4701</a> Capstone Design 1 1 Elective General Elective 4 Elective General Elective 4	Co-op
<b>Year 4 BA</b>	<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="#">ENCP3000</a> Prof. Issues in Eng'g, 1	Co-op	Co-op	Elective General Elective 4 Elective General Elective 4
<b>Year 5 AA</b>	Co-op	<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 4		
<b>Year 5 BA</b>	<a href="#">IE4525</a> Logistics & Supply Chain 4 <a href="#">IE4520</a> Stochastic Modeling 4 Elective Technical Elective 1 4 Elective General Elective 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 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

2/3/2017

4/10/2017

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:

<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>