

**BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING - 4 Year 2 Co-op Plan**  
**CURRICULUM OUTLINE - CLASS OF 2021, 2022, 2023**

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

	FALL	SPRING	SUMMER 1	SUMMER 2
<b>Freshman Year 1</b>	<a href="#">MATH1342</a> Calculus 2 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="#">GE 1501</a> Cornerstone Eng. 1 4 <a href="#">ENGW1111</a> College Writing 4	<a href="#">MATH2321</a> Calculus 3 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="#">GE 1502</a> Cornerstone Eng. 2 4 Elective General Elective 4	<a href="#">ME2350</a> Statics 4 Elective General Elective 4	Vacation
<b>Year 2 (MC)</b>	<a href="#">MATH2341</a> Diff. Eq./ Lin. Alg. 4 <a href="#">PHYS1155</a> Physics 2 for Engrs. 3 <a href="#">PHYS1156</a> Physics 2 Lab 1 <a href="#">PHYS1157</a> ILS for PHYS1155 1 <a href="#">ME2355</a> Mech. of Materials 4 <a href="#">ME2356</a> Lab for ME2355 1 Elective General Elective 4	<a href="#">ME2380</a> Thermodynamics 4 <a href="#">ME2381</a> Recitation for ME 2380 0 <a href="#">ME3455</a> Dynamics 4 <a href="#">ME3456</a> Lab for ME3455 1 <a href="#">ME2340</a> Material Science 4 <a href="#">ME2341</a> Lab for ME2340 1 <a href="#">ENCP2000</a> Intro to Eng'g, Co-op Elective General Elective 4	<a href="#">ME3475</a> Fluid Mech. 4 Elective General Elective 4	Co-op
<b>Year 2 (MD)</b>	<a href="#">MATH2341</a> Diff. Eq./ Lin. Alg. 4 <a href="#">PHYS1155</a> Physics 2 for Engrs. 3 <a href="#">PHYS1156</a> Physics 2 Lab 1 <a href="#">PHYS1157</a> ILS for PHYS1155 1 <a href="#">ME2355</a> Mech. of Materials 4 <a href="#">ME2356</a> Lab for ME2355 1 <a href="#">ME2380</a> Thermodynamics 4 <a href="#">ME2381</a> Recitation for ME 2380 0 <a href="#">ENCP2000</a> Intro to Eng'g, Co-op 1	Co-op	Co-op	<a href="#">ME3475</a> Fluid Mech. 4 Elective General Elective 4
<b>Year 3 (MC)</b>	<a href="#">ENGW3302</a> Adv Writing in the Tech Prof (to be taken online) 4  Co-op	<a href="#">ME4505</a> Meas. Anal. Thermal 4 <a href="#">ME4506</a> Lab for ME4505 1 <a href="#">EECE2210</a> Elect. Engineering 4 <a href="#">EECE2211</a> Lab for EECE2210 1 <a href="#">ME4570</a> Ther. Sys. Anal. Design 4 <a href="#">ME4555</a> Syst. Analysis & Control 4 <a href="#">ENCP3000</a> Prof. Issues In Eng'g, 1	<a href="#">ME4550</a> ME Design 4 <a href="#">MEIE4701</a> Capstone Design 1 Elective General Elective 4	Co-op
<b>Year 3 (MD)</b>	<a href="#">ME4505</a> Meas. Anal. Thermal 4 <a href="#">ME4506</a> Lab for ME4505 1 <a href="#">ME3455</a> Dynamics 4 <a href="#">ME3456</a> Lab for ME3455 1 <a href="#">ME4570</a> Ther. Sys. Anal. Design 4 Elective General Elective 4	<a href="#">ENGW3302</a> Adv Writing in the Tech Prof (to be taken online) 4  Co-op	Co-op	Elective General Elective 4 <a href="#">ME4550</a> ME Design 4 <a href="#">MEIE4701</a> Capstone 1 1
<b>Year 4 (MC)</b>	Co-op	<a href="#">ME4508</a> ME Computation 4 Elective **Science/Math Elective 4 <a href="#">MEIE4702</a> Capstone Design 2 5 Elective MIE Technical Elective 4		
<b>Year 4 (MD)</b>	<a href="#">EECE2210</a> Elect. Engineering 4 <a href="#">EECE2211</a> Lab for EECE2210 1 <a href="#">ME4555</a> Syst. Analysis & Control 4 <a href="#">MEIE4702</a> Capstone Design 2 5 Elective General Elective 4 <a href="#">ENCP3000</a> Prof. Issues in Eng'g, 1	<a href="#">ME4508</a> ME Computation 4 Elective MIE Technical Elective 4 Elective **Science/Math Elective 4 <a href="#">ME2340</a> Material Science 4 <a href="#">ME2341</a> Lab for ME2340 1		

Revised 4/1/2019

You will need to have AP credit for Calc. AB (MATH1341 - Calculus 1 - 4 SH) - see advisor

\*\*\* Course selection will be determined in consultation with your first-year advisor. Students are encouraged to use AP credit and transfer credits obtained prior to coming to Northeastern to take advantage of the 4-year, 2-coop program.

\*\* Science/Math Elective - Please consult with your academic advisor for the complete list of acceptable courses.

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

**NUpath Requirements through General Electives-** 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.

**MIE Technical Elective** - 1 required - Any ME, IE or EMGT class that is not part of the Mechanical 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.