### BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING - 4 Year 2 Co-op Plan

**CURRICULUM OUTLINE - CLASS OF 2021, 2022**

Sample Only – Actual Curriculum Sequence May Deviate from Sample

#### FALL | SPRING | SUMMER 1 | SUMMER 2
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**Freshman Year 1** | | | |
MATH1342 Calculus 2 for Engrs. 4 | MATH2321 Calculus 3 for Engrs. 4 | ME3350 Eng Mech & Design Eng 4 | 
CHEM1151 General Chem. for Engrs. 4 | PHYS1151 Physics 1 Engrs. 4 | Elective General Elective 4 |
CHEM1153 Recitation for CHEM1151 | PHYS1152 Physics 1 Lab 1 | | |
GE 1000 Intro to Eng'g. 1 | PHYS1153 ILS for PHYS1151 1 | | |
GE 1501 Cornerstone Eng. 1 4 | GE 1502 Cornerstone Eng. 2 4 | | |
ENGW2111 College Writing 4 | Elective General Elective 4 | | |
**Year 2 (MC)** | | | |
MATH2341 Diff. Eq./Lin. Alg. 4 | ME2380 Thermodynamics 4 | ME3375 Fluid Mech. 4 | 
PHYS1155 Physics 2 for Engrs. 3 | ME3455 Dynamics & Vib. 4 | Elective General Elective 4 |
PHYS1156 Physics 2 Lab 1 | ME3456 Lab for ME3455 1 | | |
PHYS1157 ILS for PHYS1155 1 | ME2340 Material Science 3 | | |
ME2335 Mech. of Materials 4 | ME2341 Lab for ME2340 1 | | |
ME2336 Lab for ME2335 1 | ME3300 Intro to Eng'g. Co-op 1 | | |
Elective General Elective 4 | Elective General Elective 4 | | |
**Year 2 (MD)** | | | |
MATH2341 | | ME4375 Fluid Mech. 4 | 
PHYS1155 | | Elective General Elective 4 |
PHYS1156 | | Co-op |
PHYS1157 | | |
ME2355 | | |
ME2356 | | |
ME3356 | | |
ME3358 | | |
**Year 3 (MC)** | | | |
ENGW3302 Adv Writing in the Tech Prof (to be taken online) 4 | ME4505 Meas. Anal. Thermal 4 | ME4550 ME Design 4 | 
ENGW3302 | ME4506 Lab for ME4505 1 | ME4701 Capstone Design 4 |
ENGW3302 | ME4521 Elect. Engineering 4 | Elective General Elective 4 |
ENGW3302 | ME4521 Lab for EECE2210 1 | | |
ME4555 | ME4555 Ther. Sys. Anal. Design 4 | | |
ME4555 | ME3300 Syst. Analysis & Control 4 | | |
ME4555 | ME3300 Prof. Issues in Eng'g. 1 | | |
**Year 3 (MD)** | | | |
ME4505 | | Elective General Elective 4 |
ME4506 | | ME4500 ME Design 4 |
ME4555 | | ME4701 Capstone 1 1 |
ME3456 | | |
ME3456 | | |
ME4570 | | |
ME4570 | | |
ME2300 | | |
ME2300 | | |
**Year 4 (MC)** | | | |
ENGW3302 | | Elective General Elective 4 |
ENGW3302 | | Co-op |
ENGW3302 | | |
ME4508 | | |
ME4508 | | |
ME4508 | | |
**Year 4 (MD)** | | | |
EECE2210 | | ME Computation 4 |
EECE2210 | | ME Technical Elective 4 |
ME4555 | | **Science/Math Elective** 4 |
ME4572 | | Capstone Design 2 5 |
ME4572 | | MIE Technical Elective 4 |
ME4572 | | |
ME4572 | | |
ME4572 | | |
ME3300 | | |
**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.

*** 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.

* ENGW3302 is an acceptable substitution for engineering majors.

### Notes

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

- Please consult with your academic advisor for the complete list of acceptable 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.

- The registrar’s website provides a listing of degree requirements and the DARS system provides a degree audit utility for students.