### 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
---|---|---|---
**Freshman Year 1**
MATH1342 | Calculus 2 for Engrs. | 4 | MATH2321 | Calculus 3 for Engrs. | 4 | ME2550 | States | 4
CHEM1153 | General Chem. for Engrs. | 4 | PHYS1151 | Physics 1 Engrs. | 3 | Elective | General Elective | 4
CS1000 | Intro to Engg. | 3 | PHYS1152 | Physics 1 Lab | 1 | | | Vacation
GE 1501 | Cornerstone Eng. 1 | 4 | GE 1502 | Cornerstone Eng. 2 | 4 | |
ENG3211 | College Writing | 4 | Elective | General Elective | 4 | |
**Year 2 (MC)**
MATH2341 | Diff. Eq. / Lin. Alg. | 4 | ME2380 | Thermodynamics | 4 | ME3475 | Fluid Mech. | 4
PHYS1155 | Physics 2 Engrs. | 3 | ME3455 | Dynamics | 4 | Elective | General Elective | 4
PHYS1156 | Physics 2 Lab | 1 | ME3456 | Lab for ME3455 | 1 | | | Co-op
PHYS1157 | ILS for PHYS1155 | 1 | ME2340 | Material Science | 4 | |
ME2355 | Mech. of Materials | 4 | ME2341 | Lab for ME2340 | 1 | |
ME2356 | Lab for ME2355 | 1 | ME2E2000 | Intro to Engg. Co-op | 1 | | |
Elective | General Elective | 4 | Elective | General Elective | 4 | | |
**Year 2 (MD)**
ENGW3302 | Adv Writing in the Tech Prof | (to be taken online) | ME4505 | Meas. Anal. Thermal | 4 | ME4550 | ME Design | 4
| | | | ME4506 | Lab for ME4505 | 1 | ME4501 | Capstone Design | 1
| | | | EECE2210 | Elect. Engineering | 1 | ME4571 | Capstone Design | 4
| | | | EECE2211 | Lab for EECE2210 | 1 | Elective | General Elective | 4
| | | | ME4570 | Ther. Sys. Anal. Design | 4 | | | Co-op
| | | | ME4555 | Syst. Analysis & Control | 4
| | | | MEIE2000 | Prof. Issues in Engg. | 1 | | |
| | | | | | | | | |
**Year 3 (MC)**
ME4505 | Meas. Anal. Thermal | 4 | ENGW3302 | Adv Writing in the Tech Prof | (to be taken online) | 4 | | |
ME3455 | Dynamics | 4 | | | | | |
ME3456 | Lab for ME3455 | 1 | | | | |
ME4570 | Thet. Sys. Anal. Design | 4 | | | | |
Elective | General Elective | 4 | | | | |
| | | | ME4508 | ME Computation | 4 | | |
| | | | | | **Science/Math Elective** | 4
| | | | | | Capstone Design 2 | 5
| | | | | | MEIE Technical Elective | 4
**Year 4 (MC)**
EECE2210 | Elect. Engineering | 4 | ME4508 | ME Computation | 4 | | |
EECE2211 | Lab for EECE2210 | 3 | Elective | MIE Technical Elective | 4 |
ME4555 | Syst. Analysis & Control | 4 | **Science/Math Elective** | 4 |
ME4702 | Capstone Design 2 | 5 |
ME4570 | Material Science | 4 |
Elective | General Elective | 4 |
ME2E3000 | Prof. Issues in Engg. | 1 |
**Year 4 (MD)**
| | | | ME4508 | ME Computation | 4 |
| | | | | | **Science/Math Elective** | 4 |
| | | | | | Capstone Design 2 | 5 |
| | | | | | MIE Technical Elective | 4 |

**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.

*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:

**Academic Advisors:**

Last Names A-G, S-Z: Roy Dalshem - r.dalshem@northeastern.edu

Last Names H-R: Katherine Bradley - k.bradley@northeastern.edu

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

Revised 4/1/2019