### BS/MS CURRICULUM OUTLINE - CLASS OF 2021, 2022, 2023, 2024

#### BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

#### MASTER OF SCIENCE IN ELECTRICAL AND COMPUTER ENGINEERING

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

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**Fall**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Spring</th>
<th>Summer 1</th>
<th>Summer 2</th>
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<tbody>
<tr>
<td>MATH1421 - Calculus 1 for Engrs.</td>
<td>MATH1422 - Calculus 2 for Engrs.</td>
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<tr>
<td>CHEM1511 - General Chem for Engrs.</td>
<td>PHYS1151 - Physics 1 for Engrs.</td>
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<tr>
<td>CHEM1521 - Recitation for CHEM1511</td>
<td>PHYS1152 - Physics 1 Lab</td>
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<tr>
<td>GE1000 - Intro to Eng'g.</td>
<td>PHYS1153 - ILS for PHYS1151</td>
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<tr>
<td>GE1502 - Cornerstone of Engineering 1</td>
<td>PHYS1154 - Intro to Eng'g. Coop</td>
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<tr>
<td>EGC1101 - College Writing</td>
<td>EGC1301 - Cornerstone of Engineering 2</td>
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<tr>
<td>MATH2341 - Diff. Eq./Lin. Alg.</td>
<td>EGC1302 - Calculus 3 for Engrs.</td>
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<td>PHYS1155 - Physics 2 for Engrs.</td>
<td>EGC1303 - EE Fundamentals</td>
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<tr>
<td>PHYS1156 - Physics 2 Lab</td>
<td>EECE1157 - EE Fundamentals</td>
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<tr>
<td>EGC1200 - Intro to Eng'g. Coop</td>
<td>EGC1202 - Intro to Eng'g. Coop</td>
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<td>EGC1206 - Embedded Design: Enabling Robotic</td>
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<td>EGC1210 - Embedded Design: Enabling Robotic</td>
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**Year 2 AA Plan 1**

- **Year 2 BB Plan 2**
  - MATH2341 - Diff. Eq./Lin. Alg.  
  - PHYS1155 - Physics 2 for Engrs.  
  - PHYS1156 - Physics 2 Lab  
  - PHYS1157 - ILS for PHYS1155  
  - EGC1200 - Intro to Eng'g. Coop  

**Year 3 BB Plan 1**

- MATH2321 - Calculus 3 for Engrs.  
- EGC1300 - Prof. Issues in Eng'g.  
- EGC1302 - EE Fundamentals  
- EGC1303 - Graduate Course  

**Year 3 AA Plan 1**

- MATH2321 - Calculus 3 for Engrs.  
- EGC1300 - Prof. Issues in Eng'g.  
- EGC1302 - EE Fundamentals  
- EGC1303 - Graduate Course  

**Year 4 AA (to BB) Plan 1**

- EGC1300 - Prof. Issues in Eng'g.  
- EGC1302 - EE Fundamentals  
- EGC1303 - Graduate Course  

**Year 4 BB (to ZH) Plan 2**

- EGC1300 - Prof. Issues in Eng'g.  
- EGC1302 - EE Fundamentals  
- EGC1303 - Graduate Course  

**Year 5 AA (to BB) Plan 2**

- EGC1300 - Prof. Issues in Eng'g.  
- EGC1302 - EE Fundamentals  
- EGC1303 - Graduate Course  

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The Capstone Design Courses are taken as follows: (EECE4790 - Summer 1 and EECE4792 - Spring) OR (EECE4790 - Summer 2 and EECE4792 - Fall)

* ENGW3315, ENGW3302 is an acceptable substitution for engineering majors.

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.

7 Required General Electives (A maximum of 2 Graduate Courses can be used to fulfill this requirement)


1 Required EE Fundamentals: EECE2412/2413 - Fundamentals Electronics 1 & lab OR EECE2520 - Fundamentals Linear Systems OR EECE2530/2531 - Fundamentals Electromagnetics & lab (EE Fundamentals not taken to meet the above requirement may also be taken as a technical elective.)

Technical Elective Requirements: 4 EECE technical electives: EECE2322, (EECE2540-EECE2750), EECE3154, (EECE3224-EECE3410), (EECE4512-EECE4698), EECE4991-EECE4993, EECE5515-EECE5698, GE4608, ENGR6570

Please check with your advisor when taking a general elective in overlapping disciplines:

- Last Name A-J: Jose Roman - j.roman@northeastern.edu
- Last Name A-J: Krysta Ristaino - k.ristaino@northeastern.edu
- Last Name M-Z: Nicole Diamond - n.diamond@northeastern.edu

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

Requirements:

- Students will be required to meet with an undergraduate advisor to petition to enter the program.
- Students are encouraged to meet with their financial aid counselor to review any financial questions.
- 4 semesters of coursework at Northeastern University must be completed with a minimum GPA of 3.2 to join the BS/MS program.
- BS/MSECE program is 9.5 semesters of coursework.

Notes:

- Students who opt out of the MSECE part of the program will still need to complete the Spring semester of the fifth year to finish the capstone design project.

Revised March, 2018