## BACHELOR OF SCIENCE IN COMPUTER ENGINEERING  
### MASTER OF SCIENCE IN ELECTRICAL AND COMPUTER ENGINEERING  
### B5/MS CURRICULUM OUTLINE - CLASS OF 2021, 2022, 2023  
### Sample Only – Actual Curriculum Sequence May Deviate from Sample  

### FALL  

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2 AA Plan 1</th>
<th>Year 2 BB Plan 2</th>
<th>Year 3 AA Plan 1</th>
<th>Year 3 BB Plan 2</th>
<th>Year 4 AA (to BB) Plan 1</th>
<th>Year 4 BB (to ZH) Plan 2</th>
<th>Year 5 AA (to BB) Plan 1</th>
<th>Year 5 2H Plan 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM113 Recitation for CHEM111</td>
<td>CS1800 Discrete Structures</td>
<td>PHYS1155 ILS for PHYS1155</td>
<td>ECE3150 Embedded Design Enabling Robotic</td>
<td>Elective ECE2540 - Fundamentals Networks</td>
<td>Elective ECE5000 - EECE Technical Elective 4</td>
<td>Elective ECE5000 - EECE Technical Elective 4</td>
<td>Elective General Elective 5</td>
<td></td>
</tr>
<tr>
<td>GE1000 Intro to Engg.</td>
<td>PHYS1155 ILS for PHYS1155</td>
<td>PHYS1157 ILS for PHYS1155</td>
<td>ECE3160 Embedded Design Enabling Robotic</td>
<td>Elective ECE2540 - Fundamentals Networks</td>
<td>Elective ECE5000 - EECE Technical Elective 4</td>
<td>Elective ECE5000 - EECE Technical Elective 4</td>
<td>Elective General Elective 5</td>
<td></td>
</tr>
</tbody>
</table>

### SPRING  

<table>
<thead>
<tr>
<th>SUMMER 1</th>
<th>SUMMER 2</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>MATH342 Calculus 2 for Engrs.</th>
<th>MATH3081 Probability &amp; Stats.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS1151 Physics 1 for Engrs.</td>
<td>Elective General Elective 2</td>
</tr>
<tr>
<td>PHYS1152 Physics 1 Lab</td>
<td></td>
</tr>
<tr>
<td>PHYS1151 Physics 1 for Engrs.</td>
<td></td>
</tr>
<tr>
<td>PHYS1152 Physics 1 Lab</td>
<td></td>
</tr>
</tbody>
</table>

### Notes:  

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

### Requirements:  

- 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  

### 3 Required CE Fundamentals  

- EECE2132/2332: Fundamentals Digital Design & Lab  
- EECE2540: Fundamentals Networks  
- EECE2560: Fundamentals Algorithms  

### 1 Required EE Fundamental  

- EECE2412/2413: Fundamentals Electronics  
- OR EECE2520: Fundamentals Linear Systems  
- EECE2130/2131: Fundamentals Electromagnetics & Lab.  

### Technical Elective Requirements:  

- EECE technical electives:  
  - EECE2412-2530, EECE2750, EECE3154, EECE324-EECE4698, EECE4991-EECE4993, EECE515-EECE5698, GE4608, ENGR5670  
- 2 CS courses from the following approved list may be taken toward the EECE technical elective requirement:  
  - Approved List: CS2550, (CS3200-CS3500), (CS3540-CS3800), (CS4100-CS4770), CS4850, (IS4200- IS5700)  

Note: AP credit for MATH2280 will substitute for MATH3081 requirement.  

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

- Last Name A-L: Ellen Zierk - e.zierk@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.  

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

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

Note: ENGW3302 is an acceptable substitution for engineering majors.  

MUPath 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.