### BACHELOR OF SCIENCE IN CIVIL ENGINEERING
#### CURRICULUM OUTLINE - CLASS OF 2022

Sample Only – Actual Curriculum Sequence May Deviate from Sample

<table>
<thead>
<tr>
<th>FALL</th>
<th>SPRING</th>
<th>SUMMER 1</th>
<th>SUMMER 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year 1</strong></td>
<td></td>
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<tr>
<td>MATH1342 Calculus 2 for Engrs.</td>
<td>MATH2321 Calculus 3 for Engrs.</td>
<td>4</td>
<td>Elective General Elective</td>
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<tr>
<td>MATH1315 General Chem. for Engrs.</td>
<td>PHYS1152 Physics 1 for Engrs.</td>
<td>3</td>
<td>Elective General Elective</td>
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<tr>
<td>CHEM1152 Restitution for CHEM1151</td>
<td>PHYS1153 ILS for PHYS1151</td>
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<tr>
<td>GE 1501 Cornerstone Eng'g. 1</td>
<td>PHYS1151 Cornerstone of Eng'g. 2</td>
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<tr>
<td>GE 3000 Intro. to Eng.</td>
<td>GE 1002</td>
<td>4</td>
<td>Elective General Elective</td>
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<tr>
<td>ENGW1111 First Year Writing</td>
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<tr>
<td><strong>Year 2 (MC)</strong></td>
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<tr>
<td>MATH2341 Diff. Eq./Lin. Alg.</td>
<td>CIVE2200 Intro. to Eng'g. Co-op</td>
<td>4</td>
<td>Elective Concrete Design**</td>
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<tr>
<td>ECON1115 Macro or Micro Economics</td>
<td>CIVE2260 Materials</td>
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<td>Elective General Elective</td>
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<tr>
<td>GE 1516 Statics &amp; Strength</td>
<td>CIVE2261 Meas./Matls. Lab</td>
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<tr>
<td>CIVE2222 Restimation for CIVE2221</td>
<td>CIVE2292 Struct. Analysis 1</td>
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<tr>
<td>CIVE2234 Environ. Eng'g. 1</td>
<td>CIVE2239 Energy Systems: Science, Tech., &amp; Sustainability</td>
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<td>GE 1301</td>
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<td><strong>Year 2 (MD)</strong></td>
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<tr>
<td>MATH2341 Diff. Eq./Lin. Alg.</td>
<td>CIVE2331 Fluid Mechanics</td>
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<td>Elective Technical Elective</td>
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<tr>
<td>CIVE2000 Intro. to Eng'g. Co-op</td>
<td>CIVE2340 Soil Mechanics</td>
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<td>Science Elective</td>
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<tr>
<td>CIVE2222 Statics &amp; Strength</td>
<td>CIVE2341 Soil Mechanics Lab</td>
<td>1</td>
<td>Co-op</td>
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<tr>
<td>CIVE2234 Environ. Eng'g. 1</td>
<td>Elective Technical Elective</td>
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<td>GE 1300 Energy Systems: Science, Tech., &amp; Sustainability</td>
<td>Elective</td>
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<td>CIVE2320 Struct. Analysis 1</td>
<td>CIVE2329 Project Elective</td>
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<td>CIVE2322 Restimation for CIVE2320</td>
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<tr>
<td>CIVE2331 Fluid Mechanics</td>
<td>CIVE2342 Fluid Mechanics</td>
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<tr>
<td>ECON1115 Macro- or Microeconomics</td>
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<td>or 1116</td>
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| **Year 3 (MC)** | | | |
| Co-op | CIVE2340 Soil Mechanics | 4 | |
| CIVE2300 Prof. Issues in Eng'g. | CIVE2341 Soil Mechanics Lab | 1 | Co-op |
| CIVE3464 Prob./Eng'g. Econ. | Elective Technical Elective | 4 | |
| Elective Project Elective | Elective General Elective | 4 | |
| Elective Science Elective | Elective | 4 | |

| **Year 4 (MC)** | | | |
| CIVE2324 Concrete Design** | CIVE476x Sr. Design Project | 5 | |
| CIVE3000 Prof. Issues in Eng'g. | Elective Technical Elective | 4 | |
| CIVE586 Elective Project Elective | Elective General Elective | 4 | |
| | Elective | 4 | |

| **Year 4 (MD)** | | | |
| CIVE2300 Prof. Issues in Eng'g. | | 1 | |
| CIVE476x Sr. Design Project | | 5 | |
| Elective Project Elective | | 4 | |
| Elective Science Elective | | 4 | |

**Year 3 (MD)**

- CIVE2332 Energy Systems: Science, Tech., & Sustainability
- CIVE2342 Fluid Mechanics
- CIVE2341 Soil Mechanics Lab
- CIVE2329 Project Elective
- Elective Technical Elective
- Elective General Elective
- Elective Science Elective

**Year 4 (MD)**

- CIVE2324 Concrete Design**
- CIVE476x Sr. Design Project
BS in Civil Engineering - Requirements:

** General Electives:** Six (6) courses are required.

* General electives are academic, non-remedial, non-repetitive courses.

* Nupath requirements: Interpreting Culture (IC) 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.

* Science Elective: One (1) course is required.

* See the undergraduate catalog for the list of approved Science Electives.

* Technical Electives: Three (3) courses are required.

* See the undergraduate catalog for the list of Technical Electives.

* Project Elective: One (1) course required.

* See the undergraduate catalog for the list of Project Electives.

* Senior Design Project (Capstone elective): One (1) course required, either CIVE 4765 (Environmental), CIVE 4767 (Structural), or CIVE 4768 (Transportation)

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* Students will need to have AP credit for Calc. AB (MATH1341: Calculus 1–4 SH)

**CIVE3425 Steel Design may be substituted for CIVE2324 Concrete Design.

** Students will need to take Advanced Writing in the Professions online during this co-op. ENGW3315 Interdisciplinary Advanced Writing is an acceptable substitution for engineering majors.

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Course sequence may be changed, subject to prerequisites. Consult with your advisor: Russ Rakouskas - 220 SN, 617-373-5503, r.rakouskas@northeastern.edu

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