

**BS/MS with BS in Civil Engineering and MS in Environmental Engineering**

**CURRICULUM OUTLINE - CLASS OF 2022**

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

|                    | FALL   |       | SPRING   |       | SUMMER 1  |          | SUMMER 2 |  |
|--------------------|--|-------|--|-------|---|----------|----------|--|
| <b>Year 1</b>      | <a href="#">MATH1341</a> Calculus 1 for Engrs. 4<br><a href="#">CHEM1151</a> General Chem. for Engrs. 0<br><a href="#">CHEM1153</a> Recitation for CHEM1151 0<br><a href="#">GE 1501</a> Cornerstone of Eng'g. 1<br><a href="#">GE 1000</a> Intro. to Eng'g. 1<br><a href="#">ENGW1111</a> First-Year Writing 4                                    |       | <a href="#">MATH1342</a> Calculus 2 for Engrs. 4<br><a href="#">PHYS1151</a> Physics 1 for Engrs. 3<br><a href="#">PHYS1152</a> Physics 1 Lab 1<br><a href="#">PHYS1153</a> ILS for PHYS1151 1<br><a href="#">GE 1502</a> Cornerstone of Eng'g. 2 4<br>Elective General Elective 4   |       |   | Vacation |          | Vacation   |
| <b>Year 2 (AA)</b> | <a href="#">MATH2321</a> Calculus 3 for Engrs. 4<br><a href="#">ECON1115</a> Macro- or Microeconomics 4<br><a href="#">or 1116</a> Statics & Strength 4<br><a href="#">CIVE2221</a> Recitation for CIVE2221 0<br><a href="#">CIVE2222</a> Recitation for CIVE2221 0<br><a href="#">CIVE2334</a> Environ. Eng'g. 1 4                                |       | <a href="#">MATH2341</a> Diff. Eq./Lin. Alg. 4<br><a href="#">CIVE2000</a> Intro. to Eng'g. Co-op 1<br><a href="#">CIVE2260</a> Materials 4<br><a href="#">CIVE2261</a> Meas./Mats. Lab 1<br><a href="#">CIVE2320</a> Struct. Analysis 1 4<br><a href="#">CIVE2321</a> Recitation for CIVE2320 0<br><a href="#">GE 3300</a> Energy Systems: Science, Tech., & Sustainability 4 |       |   | Vacation |          | Co-op  |
| <b>Year 2 (BB)</b> | <a href="#">MATH2321</a> Calculus 3 for Engrs. 4<br><a href="#">CIVE2000</a> Intro. to Eng'g. Co-op 1<br><a href="#">CIVE2221</a> Statics & Strength 4<br><a href="#">CIVE2222</a> Recitation for CIVE2221 0<br><a href="#">CIVE2260</a> Materials 4<br><a href="#">CIVE2261</a> Meas./Mats. Lab 1<br><a href="#">CIVE2334</a> Environ. Eng'g. 1 4 |       |  | Co-op |   | Co-op    |          | Vacation   |
| <b>Year 3 (AA)</b> |  | Co-op | <a href="#">CIVE2331</a> Fluid Mechanics 4<br><a href="#">CIVE2340</a> Soil Mechanics 4<br><a href="#">CIVE2341</a> Soil Mechanics Lab 1<br>Elective Technical Elective 4<br>Elective Science Elective 4   |       | <a href="#">CIVE2324</a> Concrete Design** 4<br>Elective General Elective 4       |          |          | Co-op  |
| <b>Year 3 (BB)</b> | <a href="#">GE 3300</a> Energy Systems: Science, Tech., & Sustainability 4<br><a href="#">CIVE2320</a> Struct. Analysis 1 4<br><a href="#">CIVE2321</a> Recitation for CIVE2320 0<br><a href="#">CIVE2331</a> Fluid Mechanics 4<br><a href="#">ECON1115</a> Macro- or Microeconomics 4<br><a href="#">or 1116</a>                                  |       |  | Co-op |   | Co-op    |          | <a href="#">MATH2341</a> Diff. Eq./Lin. Alg. 4<br><a href="#">CIVE2340</a> Soil Mechanics 4<br><a href="#">CIVE2341</a> Soil Mechanics Lab 1 |
| <b>Year 4 (YB)</b> |  | Co-op | <a href="#">CIVE3000</a> Prof. Issues in Eng'g. 1<br><a href="#">CIVE3464</a> Prob./Eng'g. Econ. 4<br>Elective <i>Grad Course #1</i> (General Elective) 4<br>Elective <i>Grad Course #2</i> (General Elective) 4<br><a href="#">CIVE 5536</a> <i>Hydrologic Eng'g</i> (Project Elective) 4   |       | <a href="#">ENGW3302</a> Adv. Writing for Prof.* 4<br>Elective General Elective 4 |          |          | Vacation   |
| <b>Year 4 (ZC)</b> | <a href="#">CIVE2324</a> Concrete Design** 4<br><a href="#">CIVE3000</a> Prof. Issues in Eng'g. 1<br>Elective <i>Grad Course #1</i> (Technical Elective) 4<br>Elective Technical Elective 4<br><a href="#">ENGW3302</a> Adv. Writing for Prof.* 4  |       | Elective <i>Grad Course #2</i> (General Elective) 4<br><a href="#">CIVE 5536</a> <i>Hydrologic Eng'g</i> (Project Elective) 4<br>Elective <i>Grad Course #4</i> (General Elective) 4<br>Elective Science Elective 4  |       |   | Vacation |          | Elective General Elective 4<br>Elective General Elective 4   |
| <b>Year 5 (YB)</b> | Elective <i>Grad Course #4</i> (General Elective) 4<br>Elective Technical Elective 4<br>Elective <i>Grad. Course #5</i> 4<br>Elective <i>Grad. Course #6</i> 4   |       | <a href="#">CIVE4765</a> Sr. Design Proj - Env'l 5<br>Elective General Elective 4<br>Elective <i>Grad. Course #7</i> 4<br>Elective <i>Grad. Course #8</i> 4  |       |   |          |          |  |
| <b>Year 5 (ZC)</b> | <a href="#">CIVE3464</a> Prob./Eng'g. Econ. 4<br>Elective <i>Grad. Course #5</i> 4<br>Elective <i>Grad. Course #6</i> 4<br>Elective Technical Elective 4   |       | <a href="#">CIVE4765</a> Sr. Design Proj - Env'l 5<br>Elective <i>Grad. Course #7</i> 4<br>Elective <i>Grad. Course #8</i> 4<br>Elective General Elective 4  |       |   |          |          |  |

Revised 1/12/2018

\*ENGW3315 Interdisciplinary Advanced Writing is an acceptable substitution for engineering majors.

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

**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)

**MS in Environmental Engineering - Requirements:**

Students must take 32 credits of graduate coursework that satisfy MS requirements found in the Graduate Catalog

**BS/MS Admission Requirements and Academic Policies** can be found via the following URL - <http://www.coe.neu.edu/sites/default/files/pdfs/coe/advising/BSMSPolicies.pdf>

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.

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