

**BS/MS with BS in Civil Engineering and MS in Energy Systems
CURRICULUM OUTLINE - CLASS OF 2023**

Sample Only – Actual Curriculum Sequence May Deviate from Sample

	FALL	SPRING	SUMMER 1	SUMMER 2
Year 1	MATH1341 Calculus 1 for Engrs. 4 CHEM1151 General Chem. for Engrs. 4 CHEM1153 Recitation for CHEM1151 0 GE 1501 Cornerstone of Eng'g. 1 4 GE 1000 Intro. to Eng'g. 1 ENGW1111 College Writing 4	MATH1342 Calculus 2 for Engrs. 4 PHYS1151 Physics 1 for Engrs. 3 PHYS1152 Physics 1 Lab 1 PHYS1153 ILS for PHYS1151 1 GE 1502 Cornerstone of Eng'g. 2 4 Elective General Elective 4	Vacation	Vacation
Year 2 (AA)	MATH2321 Calculus 3 for Engrs. 4 ECON1115 Macro- or Microeconomics .or 1116 4 CIVE2221 Statics & Strength 4 CIVE2222 Recitation for CIVE2221 0 CIVE2334 Environ. Eng'g. 1 4	MATH2341 Diff. Eq./Lin. Alg. 4 CIVE2000 Intro. to Eng'g. Co-op 1 CIVE2260 Materials 4 CIVE2261 Meas./Mats. Lab 1 CIVE2320 Struct. Analysis 1 4 CIVE2321 Recitation for CIVE2320 0 GE 3300 Energy Systems: Science, Tech., & Sustainability 4	Vacation	Co-op
Year 2 (BB)	MATH2321 Calculus 3 for Engrs. 4 CIVE2000 Intro. to Eng'g. Co-op 1 CIVE2221 Statics & Strength 4 CIVE2222 Recitation for CIVE2221 0 CIVE2260 Materials 4 CIVE2261 Meas./Mats. Lab 1 CIVE2334 Environ. Eng'g. 1 4	Co-op	Co-op	Vacation
Year 3 (AA)	Co-op	CIVE2331 Fluid Mechanics 4 CIVE2340 Soil Mechanics 4 CIVE2341 Soil Mechanics Lab 1 Elective Technical Elective 4 Elective Science Elective 4	CIVE2324 Concrete Design** 4 Elective General Elective 4	Co-op
Year 3 (BB)	GE 3300 Energy Systems: Science, Tech., & Sustainability 4 CIVE2320 Struct. Analysis 1 4 CIVE2321 Recitation for CIVE2320 0 CIVE2331 Fluid Mechanics 4 ECON1115 Macro- or Microeconomics .or 1116 4	Co-op	Co-op	MATH2341 Diff. Eq./Lin. Alg. 4 CIVE2340 Soil Mechanics 4 CIVE2341 Soil Mechanics Lab 1
Year 4 (YB)	Co-op	CIVE3000 Prof. Issues in Eng'g. 1 CIVE3464 Prob./Eng'g. Econ. 4 Elective Project Elective 4 Elective Technical Elective 4 FINA 6309 <i>Found. of Acct. and Finance</i> 4 (General Elective)	Vacation	ENGW3302 Adv. Writing for Prof.* 4 ME 6200 <i>Math Methods</i> 4 (General Elective)
Year 4 (ZC)	CIVE2324 Concrete Design** 4 CIVE3000 Prof. Issues in Eng'g. 1 Elective Technical Elective 4 ENGW3302 Adv. Writing for Prof.* 4 Elective <i>Grad Course #1</i> 4 (General Elective)	Elective Science Elective 4 Elective Project Elective 4 FINA 6309 <i>Found. of Acct. and Finance</i> 4 (General Elective) Elective Technical Elective 4	Vacation	Elective General Elective 4 ME 6200 <i>Math Methods</i> 4 (General Elective)
Year 5 (YB)	Elective <i>Grad Course #3</i> 4 (General Elective) Elective <i>Grad Course #4</i> 4 (Technical Elective) ENSY 5000 <i>Energy System Integration</i> 4 Elective <i>Grad Course #6</i> 4	CIVE476x Sr. Design Project 5 Elective <i>Grad Course #7</i> 4		
Year 5 (ZC)	CIVE3464 Prob./Eng'g. Econ. 4 ENSY 5000 <i>Energy System Integration</i> 4 Elective <i>Grad Course #5</i> 4 (Technical Elective) Elective <i>Grad Course #6</i> 4	CIVE476x Sr. Design Project 5 Elective <i>Grad Course #7</i> 4 EMGT 6225 <i>Econ Decision Making</i> 4		
	Elective General Elective 4	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 Energy Systems - 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

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