

BS/MS in CIVIL ENGINEERING
CURRICULUM OUTLINE - CLASS OF 2018, 2019, 2020

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 GE1110 Eng'g. Design 4 GE1000 Intro. to Eng'g. 1 NU Core Arts OR Humanities Lvl. 1 4	MATH1342 Calculus 2 for Engrs. 4 PHYS1151 Physics 1 for Engrs. 3 PHYS1152 Physics 1 Lab 1 PHYS1153 ILS for PHYS1151 1 GE1111 Eng'g. Prob. Solv. & Comp. 4 ENGW1111 College Writing 4	Vacation	Vacation
Year 2 (AA)	MATH2321 Calculus 3 for Engrs. 4 PHYS1155 Physics 2 for Engrs. 3 PHYS1156 Physics 2 Lab 1 PHYS1157 ILS for PHYS1155 1 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 3 CIVE2261 Meas./Matls. Lab 2 CIVE2320 Struct. Analysis 1 4 CIVE2321 Recitation for CIVE2320 0 ECON1115 Macro or Micro Economics 4 or 1116 (Social Science Lvl. 1)	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 3 CIVE2261 Meas./Matls. Lab 2 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 UG Civil Tech. Elective 4 Elective Science Elective 4	CIVE2324 Concrete Design 4 Elective General Elective 1 4	Co-op
Year 3 (BB)	PHYS1155 Physics 2 for Engrs. 3 PHYS1156 Physics 2 Lab 1 PHYS1157 ILS for PHYS1155 1 CIVE2320 Struct. Analysis 1 4 CIVE2321 Recitation for CIVE2320 0 CIVE2331 Fluid Mechanics 4 ECON1115 Macro or Micro Economics 4 or 1116 (Social Science Lvl. 1)	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 Grad. Civil Tech. Elective 1 4 Elective Grad. Civil Tech. Elective 2 4 Elective Grad. Course 3 4	*ENGW3302 Adv. Writing for Prof. 4 Elective General Elective 2 4	Vacation
Year 4 (ZC)	CIVE2324 Concrete Design 4 CIVE3000 Prof. Issues in Eng'g. 1 Elective UG Civil Tech. Elective 4 Elective Grad. Civil Tech. Elective 1 4 *ENGW3302 Adv. Writing for Prof. 4	Elective Grad. Civil Tech. Elective 2 4 Elective Grad. Course 3 4 Elective Grad. Course 4 4 Elective Science Elective 4	Vacation	Elective General Elective 1 4 Elective General Elective 2 4
Year 5 (YB)	Elective Grad. Course 4 4 Elective Grad. Course 5 4 Elective Grad. Course 6 4 Elective General Elective 3 4	CIVE476x Sr. Design Project 5 Elective Grad. Course 7 4 Elective Grad. Course 8 4 Elective General Elective 4 4		
Year 5 (ZC)	CIVE3464 Prob./Eng'g. Econ. 4 Elective Grad. Course 5 4 Elective Grad. Course 6 4 Elective General Elective 3 4	CIVE476x Sr. Design Project 5 Elective Grad. Course 7 4 Elective Grad. Course 8 4 Elective General Elective 4 4		

[* ENGW3315](#) is an acceptable substitution for engineering majors.

Revised 3/30/2015

English course prefixes have changed from ENGL to ENGW. ENGW1111 is equivalent to ENGL1111. ENGW3302 is equivalent to ENGL3302. Effective Fall 2014, the ENGW 3301 course number will be retired. Students may take ENGW 3302 or ENGW 3315 to fulfill their Advanced Writing in the Technical Professions requirement. ENGW 3301 will still count towards the Advanced Writing in the Technical Professions requirement if the course was taken prior to Fall 2014.

There are five (5) disciplines within the Civil Engineering BS/MS program that will follow this curriculum scheme. Notes generic to all disciplines:

NU Core Elective Requirements: 2 required - (One Arts Lvl. 1 **OR** Humanities Lvl. 1) **AND** (One Social Science Lvl. 1 (Social Science Lvl. 1 fulfilled by either ECON1115 or ECON1116))

General Elective Requirements: 4 required - Any 4 SH course that is not remedial or repetitive

Science Elective: 1 required - See approved Science elective list.

UG Civil Engineering Technical Elective: 1 required - Each discipline has one (1) undergraduate technical elective, specified by discipline, that may not duplicate a Graduate Technical Elective.

Graduate Technical Electives: Each discipline has two (2), specified by discipline. They are graduate classes that fulfill the undergraduate technical elective requirement.

Graduate Courses: Each discipline has six (6), specified in the M.S. program for that discipline. These are in addition to the two Graduate Technical Electives, and may include substitutions on the next page.

Capstones (Senior Design Project):
 CIVE4765 - Environmental capstone
 CIVE4767 - Structural capstone
 CIVE4768 - Transportation capstone

Electives may be interchanged. Please consult with your academic and faculty advisors.

Program Notes:

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.

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