

**BS/MS in CIVIL ENGINEERING (B.S.) and SUSTAINABLE BUILDING SYSTEMS (M.S.)
CURRICULUM OUTLINE - CLASS OF 2018, 2019, 2020**

Sample Only – Sample shows course requirements accurately, but actual course 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 4 CIVE2261 Meas./Matis. Lab 1 CIVE2320 Struct. Analysis 1 4 CIVE2321 Recitation for CIVE2320 0 ECON1115 Macro or Micro Economics (Social Science Lvl. 1) 4 or 1116	Vacation	Co-op
Year 2 (BB)	CIVE2000 Intro. to Eng'g. Co-op 1 CIVE2221 Statics & Strength 4 CIVE2222 Recitation for CIVE2221 0 CIVE2260 Materials 3 CIVE2261 Meas./Matis. Lab 2 CIVE2334 Environ. Eng'g. 1 4 MATH2321 Calculus 3 for Engrs. 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 Civ Tech/Project Elec 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 (Social Science Lvl. 1) 4 or 1116	Co-op	Co-op	CIVE2340 Soil Mechanics 4 CIVE2341 Soil Mechanics Lab 1 MATH2341 Diff. Eq./Lin. Alg. 4
Year 4 (YB)	Co-op	CIVE3000 Prof. Issues in Eng'g. 1 CIVE3464 Prob./Eng'g. Econ. 4 Elective Grad. Elective 1 4 Elective Grad. Elective 2 4 Elective General Elective 2 4	*ENGW3302 Adv. Writing for Prof. 4 Elective General Elective 3 4	Vacation
Year 4 (ZC)	CIVE2324 Concrete Design 4 CIVE3000 Prof. Issues in Eng'g. 1 SBSY5100 Sust Design & Technology 4 Elective UG Project Elective 4 Elective Grad. Elective 1 4	*ENGW3302 Adv. Writing for Prof. 4 SBSY5200 Sust Eng'g Sys for Bdgs 4 Elective Grad. Elective 2 4 Elective Science Elective 4	Vacation	Elective General Elective 1 4 Elective General Elective 2 4
Year 5 (YB)	ARCH5210 Environmental Systems 4 SBSY5100 Sust Design & Technology 4 Elective Grad Elective 3 4 Elective Grad Elective 4 4	CIVE476x Sr. Design Project 5 SBSY5200 Sust Eng'g Sys for Bdgs 4 Elective Grad Elective 5 4 Elective General Elective 4 4		
Year 5 (ZC)	ARCH5210 Environmental Systems 4 CIVE3464 Prob./Eng'g. Econ. 4 Elective Grad. Elective 3 4 Elective Grad. Elective 4 4	CIVE476x Sr. Design Project 5 Elective Grad. Elective 5 4 Elective General Elective 3 4 Elective General Elective 4 4		

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

**CIVE3425 Steel Design is an acceptable substitution for CIVE2324 Concrete Design.

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 (Please see the undergraduate catalog for the list of approved Science Electives)

Civil Engineering Technical Electives (TE): 3 required (Please see the undergraduate catalog for the list of Technical Electives)

Civil Engineering Project Elective: 1 required (Either CIVE4542 Foundation Engineering, CIVE5536 Hydrologic Engineering, or CIVE4554 Highway Engineering)

Capstones (Senior Design Project):

CIVE4765 - Environmental capstone

CIVE4767 - Structural capstone

CIVE4768 - Transportation capstone

Course sequence may be changed, subject to prerequisite requirements. Please consult with your advisor: Russ Rakouskas - 220 Snell, 617-373-5503, r.rakouskas@neu.edu

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

Graduate Electives: Four graduate courses from the approved list of the MS Sustainable Building Systems program

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.

A GPA of 3.0 in graduate courses is required to earn an M.S.

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

This program directly satisfies all the requirements of the B.S. Civil Engineering curriculum and the M.S. Sustainable Building Systems curriculum.