

**BS/MS in CIVIL ENGINEERING/ENGINEERING MANAGEMENT  
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)	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 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 4 or 1116 (Social Science Lvl. 1)	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 Elective UG Civ Tech Elec #2 4 IE6200 Eng'g Prob & Statistics 4 Elective Grad. Course 5 4 Elective Grad. Course 6 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 *ENGW3302 Adv. Writing for Prof. 4 EMGT5220 Engineering Project Mgmt 4 CIVE7220 *or* Construction Mgmt 4 OR6205 Deterministic Op. Research 4	CIVE476x Sr. Design Project 5 Elective UG Civ Tech Elec #2 4 Elective Science Elective 4 IE6200 Eng'g Prob & Statistics 4 Elective Grad. Course 5 4	Vacation	Elective General Elective 1 4 Elective General Elective 2 4
Year 5 (YB)	Elective UG Civ Tech Elec #3 4 EMGT5220 Engineering Project Mgmt 4 CIVE7220 *or* Construction Mgmt 4 OR6205 Deterministic Op. Research 4 Elective Grad. Course 7 4	CIVE476x Sr. Design Project 5 Elective UG Civ Tech Elec #4 4 EMGT6225 Economic Decision Making 4 Elective Grad. Course 8 4		
Year 5 (ZC)	Elective UG Civ Tech Elec #2 4 Elective UG Civ Tech Elec #3 4 Elective Grad. Course 6 4 Elective Grad. Course 7 4	CIVE476x Sr. Design Project 5 Elective UG Civ Tech Elec #4 4 EMGT6225 Economic Decision Making 4 Elective Grad. Course 8 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: 2 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 course electives:** must conform to the MS Engineering Management requirements.

Scheduling is flexible. 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.

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