

COMBINED MAJOR--BACHELOR OF SCIENCE IN CIVIL ENGINEERING AND ARCHITECTURAL STUDIES

Curriculum Outline - 2024

Sample Only – Actual Curriculum Sequence May Deviate from Sample

	FALL	SPRING	SUMMER 1	SUMMER 2
Year 1	MATH1341 Calculus 1 for Science and Engineering 4	MATH1342 Calculus 2 for Science and Engineering 4	PHYS1151 Physics for Engineering 1 3	Vacation
	CHEM1151 General Chemistry for Engineers 4	GE 1502 Cornerstone of Engineering 2 4	PHYS1152 Lab for PHYS 1151 1	
	CHEM1153 Recitation for CHEM 1151 0	ARCH1110 Fundamental Architectural Representation 4	PHYS1153 ILS for PHYS 1151 1	
	GE 1501 Cornerstone of Engineering 1 4	ARCH1120 Fundamental Architectural Design 6	MATH2321 Calculus 3 for Science and Eng 4	
	GE 1000 Introduction to the Study of Engineering 1			
	ENGW1111 First-Year Writing 4			
Year 2 (AA)	CIVE2221 Statics and Solid Mechanics 4	CIVE2334 Environmental Engineering: Principles, Technology, and Sustainability 4	Vacation	Co-op
	CIVE2222 Recitation for CIVE 2221 0	ENCP2000 Intro to Engineering Co-op 1		
	MATH2341 Differential Equations and Linear Algebra for Engineering 4	CIVE2260 Materials for the Built Environment 4		
	ARCH2130 Site, Space and Program 6	CIVE2261 Lab for 2260 1		
	ARCH1310 Buildings and Cities, A Global History 4	CIVE2320 Structural Analysis 4		
	ARCH1311 recitation for ARCH1310 0	CIVE2321 Recitation for CIVE2320 0		
Year 3 (AA)	Co-op	CIVE2331 Fluid Mechanics and Hydraulics 4	CIVE2324 Concrete Structure Design* 4	Co-op
		CIVE2340 Geotechnical Engineering 4	Elective Science Elective 4	
		CIVE2341 Lab for CIVE 2340 1		
		Elective Technical Elective 1 of 2 4		
		ARCH2340 Architecture, Modernity, and the City, 1910 to 1980 4		
		ARCH2341 recitation for ARCH2340 4		
Year 4 (AA)	Co-op	ENCP 3000 Professional Issues in Engineering 1	Vacation	ENGW3302 Advanced Writing Tech Prof** (ONLINE) 4
		CIVE3464 Probability and Engineering Economy for Civil Engineering 4		Co-op
		Elective Project Elective 4		
		ARCH3210 Environmental Systems 4		
		ARCH3211 recitation for ARCH3210 4		
		ARCH2140 Urban Institutions 6		
Year 5 (AA)	Co-op	CIVE4767 Sr. Design Project - Structural 5	Vacation	
		Elective Technical Elective 2 of 2 3		
		Arch Elective 1 of 2* 4		
		Arch Elective 2 of 2* 4		

Revised version, 02/14/2019

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

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

BS in Civil Engineering - Requirements:

Nupath requirements: For this combined major, NUPath requirements are satisfied in several courses across the program and by required courses in the combined major.

Science Elective: One (1) course is required.

See the undergraduate catalog for the list of approved Science Electives.

Technical Electives: Two (2) courses are required.

See the undergraduate catalog for the list of approved Technical Electives.

Project Elective: One (1) course is required.

See the undergraduate catalog for the list of Project Electives.

Senior Design Project (Capstone): CIVE 4767 (Structural)

Architectural Studies - Requirements:

Arch Electives: Two (2) courses are required.

ARCH 3450	Advanced Architectural Representation
ARCH 3370	Topics in Architectural History
ARCH 5115	Options Studio
ARCH 5220	Integrated Building Systems
ARCH 5310	Design Tactics

Note:

1. Students who wish to be considered for the two-year Master of Architecture Program at Northeastern SHOULD take ARCH 3450 as an elective and SHOULD NOT take ARCH 5115 or ARCH 5220

2. Also students MUST have satisfied the Structural Systems (ARCH 5230) requirement. At Northeastern's CEE this can be achieved by taking three courses, as follows:

Required analysis courses (including their corresponding recitations):

CIVE2221	Statics and Solid Mechanics
CIVE2320	Structural Analysis

At least one design course from the following:

CIVE2324	Concrete Structure Design*
CIVE3425	Steel Structure Design

Course sequence may be changed, subject to prerequisite requirements.

[Please consult with your Academic Advisor, found here.](#)

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